

ENTREPRENEURSHIP

Senior

4

Teacher's Guide

ACCOUNTING PROFESSION

Experimental version

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FOREWORD

Dear Teachers,

Rwanda Basic Education Board is honoured to present the teacher's guide for Entrepreneurship in the Accounting Profession Option. This book serves as a guide to competence-based teaching and learning to ensure consistency and coherence in the learning of the Entrepreneurship Subject. The Rwandan educational philosophy is to ensure that students achieve full potential at every level of education which will prepare them to be well integrated in society and exploit employment opportunities.

Specifically, the curriculum for Accounting Profession Option was reviewed to train quality Accountant Technicians who are qualified, confident and efficient for job opportunities and further studies in Higher Education in different programs under accounting career advancement.

In line with efforts to improve the quality of education, the government of Rwanda emphasizes the importance of aligning teaching and learning materials with the syllabus to facilitate their learning process. Many factors influence what students learn, how well they learn and the competences they acquire. Those factors include the relevance of the specific content, the quality of teachers' pedagogical approaches, the assessment strategies and the instructional materials.

High Quality Technician Accounting program is an important component of Finance and Economic development of the Rwanda Vision 2050, "*The Rwanda We Want*" that aims at transforming the country's socioeconomic status. The qualified Technicians accountant will significantly play a major role in the mentioned socioeconomic transformation journey. Entrepreneurship subject equips students with productive entrepreneurial mindsets, hence being able to address challenges faced by their communities.

The ambition to develop a knowledge-based society and the growth of regional and global competition in the jobs market has necessitated the shift to a competence-based curriculum.

The Entrepreneurship teacher's guide provides active teaching and learning techniques that engage students to develop competences. In view of this, your role as an Entrepreneurship teacher is to:

- Plan your lessons and prepare appropriate teaching materials.
- Organize group discussions for students considering the importance of social constructivism suggesting that learning occurs more effectively

when the students work collaboratively with more knowledgeable and experienced people.

- Engage students through active learning methods such as inquiry methods, group discussions, research, investigative activities and group or individual work activities.
- Provide supervised opportunities for students to develop different competences by giving tasks which enhance critical thinking, problem solving, research, creativity and innovation, communication and cooperation.
- Support and facilitate the learning process by valuing students' contributions in the class activities.
- Guide students towards the harmonization of their findings.
- Encourage individual, pair and group evaluation of the work done in the classroom and use appropriate competence-based assessment approaches and methods.

To facilitate you in your teaching activities, the content of this book is self-explanatory so that you can easily use it. It is divided in 3 parts:

The part I explains the structure of this book and gives you the methodological guidance.

The part II gives a sample lesson plan.

The part III details the teaching guidance for each concept given in the student book.

Even though this teacher's guide contains the guidance on solutions for all activities given in the student's book, you are requested to work through each question before judging student's findings.

I wish to sincerely express my appreciation to the people who contributed towards the development of this book, particularly, REB staff, University Lecturers, Teachers and experts from different Education partners for their technical support. A word of gratitude goes also to the administration of Universities and Head Teachers who availed their staff for various activities.

Dr. MBARUSHIMANA Nelson

Director General, REB.

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PART I. GENERAL INTRODUCTION

1.1. The structure of the guide

The teacher's guide of Entrepreneurship is composed of three parts:

- The Part I concerns general introduction that discusses methodological guidance on how best to teach and learn Entrepreneurship, developing competences in teaching and learning, addressing cross-cutting issues in teaching, and learning and Guidance on assessment.
- Part II presents a sample lesson plan. This lesson plan serves to guide the teacher on how to prepare a lesson in Entrepreneurship.
- The Part III is about the structure of a unit and the structure of a lesson. This includes information related to the different components of the unit and these components are the same for all units. This part provides information and guidelines on how to facilitate students while working on learning activities. More other, all application activities from the textbook have answers in this part.

1.2. Methodological guidance

1.2.1 Developing competences

Since 2015 Rwanda shifted from a knowledge based to a competence-based curriculum for pre-primary, primary, secondary education and recently the curriculum for profession options such as TTC, Associate Nurse and Accounting programs. This called for changing the way of learning by shifting from teacher centred to a learner centred approach. Teachers are not only responsible for knowledge transfer but also for fostering students' learning achievement and creating safe and supportive learning environment. It implies also that students have to demonstrate what they are able to transfer the acquired knowledge, skills, values and attitude to new situations.

The competence-based curriculum employs an approach of teaching and learning based on discrete skills rather than dwelling on only knowledge or the cognitive domain of learning. It focuses on what learner can do rather than what learner knows. Students develop competences through subject unit with specific learning objectives broken down into knowledge, skills and attitudes/ values through learning activities.

In addition to the competences related to Entrepreneurship, students also develop generic competences which should promote the development of the higher order thinking skills and professional skills in Entrepreneurship teaching. Generic competences are developed throughout all units of Entrepreneurship as follows:

Generic competences	Ways of developing generic competences
Critical thinking	All activities that require students to calculate, convert, interpret, analyse, compare and contrast, etc. have a common factor of developing critical thinking into students
Creativity and innovation	All activities that require students to plot a graph of a given algebraic data, to organize and interpret statistical data collected and to apply skills in solving problems of production/ finance/ economic have a common character of developing creativity into students
Research and problem solving	All activities that require students to make research and apply their knowledge to solve problems from the real-life situation have a character of developing research and problem solving into students.
Communication	During Entrepreneurship class, all activities that require students to discuss either in groups or in the whole class, present findings, debate ...have a common character of developing communication skills into students.
Co-operation, interpersonal relations and life skills	All activities that require students to work in pairs or in groups have character of developing cooperation and life skills among students.
Lifelong learning	All activities that are connected with research have a common character of developing into students a curiosity of applying the knowledge learnt in a range of situations. The purpose of such kind of activities is for enabling students to become life-long students who can adapt to the fast-changing world and the uncertain future by taking initiative to update knowledge and skills with minimum external support.
Professional skills	Specific instructional activities and procedures that a teacher may use in the class room to facilitate, directly or indirectly, students to be engaged in learning activities. These include a range of teaching skills: the skill of questioning, reinforcement, probing, explaining, stimulus variation, introducing a lesson; illustrating with examples, using blackboard, silence and non-verbal cues, using audio – visual aids, recognizing attending behaviour and the skill of achieving closure.

The generic competences help students deepen their understanding of Entrepreneurship and apply their knowledge in a range of situations. As students develop generic competences they also acquire the set of skills that employers look for in their employees, and so the generic competences prepare students for the world of work.

1.2.2 Addressing cross cutting issues

Among the changes brought by the competence-based curriculum is the integration of cross cutting issues as an integral part of the teaching learning process-as they relate to and must be considered within all subjects to be appropriately addressed. The eight cross cutting issues identified in the national curriculum framework are: *Comprehensive Sexuality Education, Environment and Sustainability, Financial Education, Genocide studies, Gender, Inclusive Education, Peace and Values Education, and Standardization Culture.*

Some cross-cutting issues may seem specific to particular learning areas/subjects, but the teacher need to address all of them whenever an opportunity arises. In addition, students should always be given an opportunity during the learning process to address these cross-cutting issues both within and out of the classroom.

Below are examples of how crosscutting issues can be addressed:

Cross-Cutting Issue	Ways of addressing cross-cutting issues
<p>Comprehensive Sexuality Education: The primary goal of introducing Comprehensive Sexuality Education program in schools is to equip children, adolescents, and young people with knowledge, skills and values in an age appropriate and culturally gender sensitive manner so as to enable them to make responsible choices about their sexual and social relationships, explain and clarify feelings, values and attitudes, and promote and sustain risk reducing behaviour.</p>	<p>Using different charts and their interpretation, Entrepreneurship teacher should lead students to discuss the following situations: “Alcohol abuse and unwanted pregnancies” and advise students on how they can fight against them.</p> <p>Some examples can be given when learning basic principles of Economics, elasticity of demand and supply, and the related graphical interpretation.</p>

<p>Environment and Sustainability: Integration of Environment, Climate Change and Sustainability in the curriculum focuses on and advocates for the need to balance economic growth, society well-being and ecological systems. Students need basic knowledge from the natural sciences, social sciences, and humanities to understand to interpret principles of sustainability.</p>	<p>Using Real life models or students' experience, Entrepreneurship teachers should lead students to illustrate the situation of "population growth" and discuss its effects on the environment and sustainability.</p>
<p>Financial Education:</p> <p>The integration of Financial Education into the curriculum is aimed at a comprehensive Financial Education program as a precondition for achieving financial inclusion targets and improving the financial capability of Rwandans so that they can make appropriate financial decisions that best fit the circumstances of one's life.</p>	<p>Through different examples and calculations on opportunity cost, elasticity of demand and supply, total revenue functions and total cost functions, supply and demand functions Entrepreneurship Teachers can lead students to discuss how to make appropriate financial decisions.</p>
<p>Gender: At school, gender will be understood as family complementarities, gender roles and responsibilities, the need for gender equality and equity, gender stereotypes, gender sensitivity, etc.</p>	<p>Entrepreneurship Teachers should address gender as cross-cutting issue through assigning leading roles in the management of groups to both girls and boys and providing equal opportunity in the lesson participation and avoid any gender stereotype in the whole teaching and learning process.</p>
<p>Inclusive Education: Inclusion is based on the right of all students to a quality and equitable education that meets their basic learning needs and understands the diversity of backgrounds and abilities as a learning opportunity.</p>	<p>Firstly, Entrepreneurship Teachers need to identify/recognize students with special needs. Then by using adapted teaching and learning resources while conducting a lesson and setting appropriate tasks to the level of students, they can cater for students with special education needs. They must create opportunity where students can discuss how to cater for students with special educational needs.</p>

<p>Peace and Values Education: Peace and Values Education (PVE) is defined as education that promotes social cohesion, positive values, including pluralism and personal responsibility, empathy, critical thinking and action in order to build a more peaceful society.</p>	<p>Through a given lesson, a teacher should:</p> <p>Set a learning objective which is addressing positive attitudes and values,</p> <p>Encourage students to develop the culture of tolerance during discussion and to be able to instil it in colleagues and cohabitants.</p> <p>Encourage students to respect ideas from others.</p>
<p>Standardization Culture: Standardization Culture in Rwanda will be promoted through formal education and plays a vital role in terms of health improvement, economic growth, industrialization, trade and general welfare of the people through the effective implementation of Standardization, Quality Assurance, Metrology and Testing.</p>	<p>With different word problems related to the effective implementation of Standardization, Quality Assurance, Metrology and Testing, students can be motivated to be aware of health improvement, economic growth, industrialization, trade and general welfare of the people.</p>

1.2.3 Guidance on how to help students with special education needs in classroom

In the classroom, students learn in different way depending to their learning pace, needs or any other special problem they might have. However, the teacher has the responsibility to know how to adopt his/her methodologies and approaches in order to meet the learning need of each student in the classroom. Also, teachers need to understand that students with special needs, need to be taught differently or need some accommodations to enhance the learning environment. This will be done depending to the subject and the nature of the lesson.

In order to create a well-rounded learning atmosphere, teachers need to:

- Remember that students learn in different ways so they have to offer a variety of activities (e.g. role-play, music and singing, word games and quizzes, and outdoor activities);
- Maintain an organized classroom and limits distraction. This will help students with special needs to stay on track during lesson and follow instruction easily;
- Vary the pace of teaching to meet the needs of each student. Some students process information and learn more slowly than others.

- Break down instructions into smaller, manageable tasks. Students with special needs often have difficulty understanding long-winded or several instructions at once. It is better to use simple, concrete sentences to facilitate them understand what you are asking.
- Use clear consistent language to explain the meaning (and demonstrate or show pictures) if you introduce new words or concepts.
- Make full use of facial expressions, gestures, and body language.
- Pair a student who has a disability with a friend. Let them do things together and learn from each other. Make sure the friend is not overprotective and does not do everything for the one with disability. Both students will benefit from this strategy.
- Use multi-sensory strategies. As all students learn in different ways, it is important to make every lesson as multi-sensory as possible. Students with learning disabilities might have difficulty in one area, while they might excel in another. For example, use both visual and auditory cues.
- Below are general strategies related to each main category of disabilities and how to deal with every situation that may arise in the classroom. However, the list is not exhaustive because each student is unique with different needs and that should be handled differently.

Strategy to help students with developmental impairment:

- Use simple words and sentences when giving instructions;
- Use real objects that students can feel and handle. Rather than just working abstractly with pen and paper;
- Break a task down into small steps or learning objectives. The student should start with an activity that she/he can do already before moving on to something that is more difficult;
- Gradually give the student less help;
- Let the student with disability work in the same group with those without disability.

Strategy to help students with visual impairment:

- Help students to use their other senses (hearing, touch, smell and taste) and carry out activities that will promote their learning and development;
- Use simple, clear and consistent language.
- Use tactile objects to help explain a concept.
- If the student has some sight, ask him/her what he/she can see;

- Make sure the student has a group of friends who are helpful and who allow him/her to be as independent as possible;
- Plan activities so that students work in pairs or groups whenever possible;

Strategy to help students with hearing disabilities or communication difficulties

- Always get the student’s attention before you begin to speak;
- Encourage the student to look at your face;
- Use gestures, body language and facial expressions;
- Use pictures and objects as much as possible.
- Keep background noise to a minimum.

Strategies to help students with physical disabilities or mobility difficulties:

- Adapt activities so that students who use wheelchairs or other mobility aids, can participate.
- Ask parents/caregivers to assist with adapting furniture e.g. the height of a table may need to be changed to make it easier for a student to reach it or fit their legs or wheelchair under;
- Encourage peer support when needed;
- Get advice from parents or a health professional about assistive devices if the student has one.

Adaptation of assessment strategies:

At the end of each unit, the teacher is advised to provide additional activities to help students achieve the key unit competence. These assessment activities are for remedial, consolidation and extension designed to cater for the needs of all categories of students; slow, average and gifted students respectively. Therefore, the teacher is expected to do assessment that fits individual students.

Remedial activities	<p>After evaluation, slow students are provided with lower order thinking activities related to the concepts learnt to facilitate them in their learning.</p> <p>These activities can also be given to assist deepening knowledge acquired through the learning activities for slow students.</p>
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Consolidation activities	After introduction of any concept, a range number of activities can be provided to all students to enhance/ reinforce learning.
Extended activities	After evaluation, gifted and talented students can be provided with high order thinking activities related to the concepts learnt to make them think deeply and critically. These activities can be assigned to gifted and talented students to keep them working while other students are getting up to required level of knowledge and skills through the learning activity.

1.2.4. Guidance on assessment

Assessment is an integral part of teaching and learning process. The main purpose of assessment is for improvement of learning outcomes. Assessment for learning/ Continuous/ formative assessment intends to improve students' learning and teacher's teaching whereas assessment of learning/summative assessment intends to improve the entire school's performance and education system in general.

Continuous/ formative assessment

It is an on-going process that arises during the teaching and learning process. It includes lesson evaluation and end of sub unit assessment. This formative assessment should play a big role in teaching and learning process. The teacher should encourage individual, pair and group evaluation of the work done in the classroom and uses appropriate competence-based assessment approaches and methods.

Formative assessment is used to:

- Determine the extent to which learning objectives are being achieved and competences are being acquired and to identify which students need remedial interventions, reinforcement as well as extended activities. The application activities are developed in the student
- book and they are designed to be given as remedial, reinforcement, end lesson assessment, homework or assignment
- Motivate students to learn and succeed by encouraging students to read, or learn more, revise, etc.
- Check effectiveness of teaching methods in terms of variety, appropriateness, relevance, or need for new approaches and strategies. Entrepreneurship teachers need to consider various aspects of the instructional process including appropriate language levels, meaningful examples, suitable methods and teaching aids/ materials, etc.
- Help students to take control of their own learning.

In teaching Entrepreneurship, formative or continuous assessment should compare performance against instructional objectives. Formative assessment should measure the student's ability with respect to a criterion or standard. For this reason, it is used to determine what students can do, rather than how much they know.

Summative assessment

The assessment can serve as summative and informative depending to its purpose. The end unit assessment will be considered summative when it is done at end of unit and want to start a new one.

It will be formative assessment, when it is done in order to give information on the progress of students and from there decide what adjustments need to be done.

The assessment done at the end of the term, end of year, is considered as summative assessment so that the teacher, school and parents are informed of the achievement of educational objective and think of improvement strategies. There is also end of level/ cycle assessment in form of national examinations.

When carrying out assessment?

Assessment should be clearly visible in lesson, unit, term and yearly plans.

- Before learning (diagnostic): At the beginning of a new unit or a section of work; assessment can be organized to find out what students already know / can do, and to check whether the students are at the same level.
- During learning (formative/continuous): When students appear to be having difficulty with some of the work, by using on-going assessment (continuous). The assessment aims at giving students support and feedback.
- After learning (summative): At the end of a section of work or a learning unit, the Entrepreneurship Teacher has to assess after the learning. This is also known as Assessment of Learning to establish and record overall progress of students towards full achievement. Summative assessment in Rwandan schools mainly takes the form of written tests at the end of a learning unit or end of the month, and examinations at the end of a term, school year or cycle.

Instruments used in assessment.

- **Observation:** This is where the Entrepreneurship teacher gathers information by watching students interacting, conversing, working, playing, etc. A teacher can use observations to collect data on behaviours that are difficult to assess by other methods such as attitudes, values, and generic competences and intellectual skills. It is very important because it is used before the lesson begins and throughout the lesson since the teacher has to continue observing each and every activity.

- **Questioning**

- Oral questioning: a process which requires a student to respond verbally to questions
- Class activities/ exercise: tasks that are given during the learning/ teaching process
- Short and informal questions usually asked during a lesson
- Homework and assignments: tasks assigned to students by their teachers to be completed outside of class.

Homework assignments, portfolio, project work, interview, debate, science fair, Entrepreneurship projects and Entrepreneurship competitions are also the different forms/instruments of assessment.

1.2.5 Students' learning styles and strategies to conduct teaching and learning process

- How students learn
- What I hear I forget.
- What I hear and see I remember a little.
- What I hear, see and discuss I begin to understand.
- What I hear, see, discuss and do, I acquire knowledge and skills.
- What I teach to another, I master.

(Active Learning Credo statement by Silberman 1996)

In support of this are the findings that we remember:

- 20% of what we hear
- 40% of what we see
- 90% of what we see, hear, say, and do or what we discover for ourselves.

A student-centered approach to learning

Different students learn in different ways. Some students learn best by writing, others by talking and discussing, others by reading and others by listening. Most students learn by using a combination of those. All students learn skills through practicing and repetition. You need to use a variety of teaching strategies to cater for the different ways your students learn. The selection of teaching method should be done with the greatest care and some of the factors to be considered are:

The uniqueness of subjects; the type of lessons; the learning objectives to be achieved; the allocated time to achieve the objective; instructional materials available; the physical/sitting arrangement of the classroom, individual students' needs, abilities and learning styles.

Teaching and learning strategies

In order to cater for different students' learning styles and to assist and encourage students to learn, teachers need to perform certain tasks. These are teaching strategies.

You need to engage students directly in learning but there are times when you have to take charge of the learning in the class and teach particular concepts or ideas

Teaching strategies include:

- Group work
- Skills lab
- Research/inquiry
- Class discussions/debates
- Problem-solving activities
- Teacher talk, instructions, explanations, lectures or reading aloud
- Directed question and answer sessions
- Audio-visual presentations
- Textbooks or worksheets
- Directed assignments
- Demonstration and modeling
- Guest speakers
- Classroom displays.

1.2.6. Teaching methods and techniques that promote active learning

The different learning styles for students can be catered for, if the teacher uses active learning whereby students are really engaged in the learning process.

The main teaching methods used in Entrepreneurship are the following:

- **Dogmatic method** (the teacher tells the students what to do, what to observe, how to attempt, how to conclude)

- **Inductive-deductive method:** Inductive method is to move from specific examples to generalization and deductive method is to move from generalization to specific examples.
- **Analytic-synthetic method:** Analytic method proceeds from unknown to known, 'Analysis' means 'breaking up' of the problem in hand so that it ultimately gets connected with something obvious or already known. Synthetic method is the opposite of the analytic method. Here one proceeds from known to unknown.
- **Skills lab method:** Skills lab method is based on the maxim "learning by doing." It is a procedure for stimulating the activities of the students and to encourage them to make discoveries through practical activities.
- **Problem solving method, Project method and Seminar Method.**

The following are some active techniques to be used in Entrepreneurship:

- Group work
- Research
- Probing questions
- Practical activities (drawing, plotting, interpreting graphs)
- Modelling
- Brainstorming
- Quiz Technique
- Discussion Technique
- Scenario building Technique

What is Active learning?

Active learning is a pedagogical approach that engages students in doing things and thinking about the things they are doing. Students play the key role in the active learning process. They are not empty vessels to fill but people with ideas, capacity and skills to build on for effective learning. Thus, in active learning, students are encouraged to bring their own experience and knowledge into the learning process.

The role of the teacher in active learning	The role of students in active learning
<ul style="list-style-type: none"> • The teacher engages students through active learning methods such as inquiry methods, group discussions, research, investigative activities, group and individual work activities. • He/she encourages individual, peer and group evaluation of the work done in the classroom and uses appropriate competence-based assessment approaches and methods. • He provides supervised opportunities for students to develop different competences by giving tasks which enhance critical thinking, problem solving, research, creativity and innovation, communication and cooperation. • Teacher supports and facilitates the learning process by valuing students' contributions in the class activities. 	<ul style="list-style-type: none"> • A learner engaged in active learning: • Communicates and shares relevant information with fellow students through presentations, discussions, group work and other learner-centred activities (role play, case studies, project work, research and investigation); • Actively participates and takes responsibility for his/her own learning; • Develops knowledge and skills in active ways; • Carries out research/investigation by consulting print/online documents and resourceful people, and presents their findings; • Ensures the effective contribution of each group member in assigned tasks through clear explanation and arguments, critical thinking, responsibility and confidence in public speaking • Draws conclusions based on the findings from the learning activities.

Main steps for a lesson in active learning approach

All the principles and characteristics of the active learning process highlighted above are reflected in steps of a lesson as displayed below. Generally, the lesson is divided into three main parts whereby each one is divided into smaller steps to make sure that students are involved in the learning process. Below are those main part and their small steps:

1. Introduction

Introduction is a part where the teacher makes connection between the current and previous lesson through appropriate technique. The teacher opens short discussions to encourage students to think about the previous learning experience and connect it with the current instructional objective. The teacher reviews the prior knowledge, skills and attitudes which have a link with the new concepts to create good foundation and logical sequencings.

2. Development of the new lesson

The development of a lesson that introduces a new concept will go through the following small steps: discovery activities, presentation of students' findings, exploitation, synthesis/summary and exercises/application activities.

- **Discovery activity**

Step 1:

- The teacher discusses convincingly with students to take responsibility of their learning
- He/she distributes the task/activity and gives instructions related to the tasks (working in groups, pairs, or individual to prompt / instigate collaborative learning, to discover knowledge to be learned)

Step 2:

- The teacher lets students work collaboratively on the task;
- During this period the teacher refrains to intervene directly on the knowledge;
- He/she then monitors how the students are progressing towards the knowledge to be learned and boosts those who are still behind (but without communicating to them the knowledge).

- **Presentation of students' findings/productions**

- In this part, the teacher invites representatives of groups to present their productions/findings.
- After three/four or an acceptable number of presentations, the teacher decides to engage the class into exploitation of students' productions.

- **Exploitation of students' findings/ productions**

- The teacher asks students to evaluate the productions: which ones are correct, incomplete or false
- Then the teacher judges the logic of the students' products, corrects those which are false, completes those which are incomplete, and confirms those which are correct.

- **Institutionalization or harmonization (summary/conclusion/ and examples)**

- The teacher summarizes the learned knowledge and gives examples which illustrate the learned content.

- **Application activities**

- Exercises of applying processes and products/objects related to learned unit/sub-unit
- Exercises in real life contexts
- Teacher guides students to make the connection of what they learnt to real life situations.
- At this level, the role of teacher is to monitor the fixation of process and product/object being learned.

3. Assessment

In this step the teacher asks some questions to assess achievement of instructional objective. During assessment activity, students work individually on the task/activity. The teacher avoids intervening directly. In fact, results from this assessment inform the teacher on next steps for the whole class and individuals. In some cases, the teacher can end with a homework/ assignment. Doing this will allow students to relay their understanding on the concepts covered that day. Teacher leads them not to wait until the last minute for doing the homework as this often results in an incomplete homework set and/or an incomplete understanding of the concept.

1.2.7 Student Business Club and Skills lab

a) Student Business Clubs

What – Create Real Student Businesses

The student business club (SBC) is an extra-curricular activity to enhance student learning of entrepreneurial competencies.

It is a club in which students work in groups under the supervision of their teacher to raise money, create and sell products & services, and manage their businesses.

Why – Learning by Doing

Entrepreneurship is a practical subject. Students must have time to practice. By running a mini business enterprise called “projects”, students learn entrepreneurial competencies practically. Students need products and services to apply the entrepreneurial competences.

Student Business Club:

- Give learners the practical experience to do business.
- Enhance the learner's entrepreneurial competences.
- Apply the knowledge, skills, and attitudes learned.
- Inspire young people to succeed in the global economy.

Student business club exhibitions are a practical assessment tool where students publicly demonstrate their skills, attitudes, and competencies by exhibiting products and services done in business club.

Who – The Club is Open to All Students

A' level Entrepreneurship students typically lead the student business club. The Club runs multiple different business projects managed by small teams (Skills Lab teams). The club has student leaders and recruits club members from the total school population to join them.

How – Students Lead Business Projects

The club is student-led but is supervised by entrepreneurship teacher(s).

The Club should be student run. Students should be actively engaged in idea generation, planning, procurement, sales, record keeping, and decision making. Teachers should only guide them. Clubs should start small with what the students can afford. Clubs should start with or no capital and use recycled materials and seeds only! Teachers should not ask the administration to give the Club huge sums of money to start operating. The Club experiences should reflect the real business world. No one will just give them big capital for free when they graduate, so you should request only what is realistic. Club funds and profits should be kept in a safe and secure place. The best place is a club account with the school bursar. Students should not keep Club money in their suitcases as cases of theft and misuse of funds will arise. The patron should organize inter Club competitions / exhibitions at school to motivate students to work to succeed and to showcase the Club work to the rest of the stakeholders.

Skills Lab Teams meet during extracurricular time to create their business projects. The student business club holds regular club meetings to plan and coordinate activities. Student products & services are sold in and out of school.

Business club structure

Club Set Up	Club Management	Club Sales & Exhibition
Elect club leadership & write constitution	Create innovative products	Keep business records
Recruit club members	Fundraise during visitation day/parents' days	Invest income
Propose product ideas	Sell products & services	Prepare for student business exhibitions

When – Extra-curricular time

Student Business Clubs meet a time convenient for students, after classes. The Student Business Club is one of the best extra-curricular activities that strengthens both academic and practical competencies.

Where – In-school and back home

Student businesses club activities take place both in school and in the community. Club members can decide to sell their products and services to fellow students, teachers, the school administration, or community members. Both boarding and day students can participate in student business clubs. Day students typically set up projects back home that can grow into small businesses after graduation.

School Stakeholder Business Club Roles:

School Administration	<ul style="list-style-type: none"> • To perform advisory and supervisory roles in the school. • To link the business club to the community and other schools. • To provide the business club with required facilities to operate such as land, room. • To provide market for some students' products and services.
Club Patrons / Entrepreneurship Teacher	<ul style="list-style-type: none"> • Oversee the activities of the club. • Link students to the administration. • Keep records regarding student's performance in the business club • Find resources and opportunities for students.

Staff Members ·	<ul style="list-style-type: none"> • Support the club in its activities. • Offer expertise in the area of specialization when required. • Can invest in the business club. • Link the business club with other school clubs.
Parents and community	<ul style="list-style-type: none"> • Providing a favorable environment for students to develop and nurture their talents and skills. Community is the market to students' products or services. • Community members can also act as advisers to students' projects and clubs. • In case the students' project is in the community and requires land, the community members may offer land for students' project.
Students ·	<ul style="list-style-type: none"> • To be members of the business club. • To fundraise or find available resources to run the club. • To actively participate in the activities of the club. • To keep records of the business club.

b. Skills Lab

i. What is a skills lab

Skills lab is a method of teaching where students are required to complete learning activities working in manageable groups. Skills Labs are a no cost, easy method to change teacher's pedagogy from theory-based to competence-based instruction.

The basic characteristics of Skills Lab are:

- It takes place during a given period
- Students work in small groups (manageable teams)
- Assessment takes place through portfolio activities
- Students talk more than teachers (10% teacher talk time and the rest is for the students)
- Students receive constructive feedback on their work (Teacher gives quality feedback on student presentations).

- Skills lab consists of three components: build, practice and present.
- Link to student business club as a platform for practicing real life activities through making products.

Note

Skills lab as a methodology of teaching can be used at any time within a unit (i.e., at the start, during or at the end of the unit). It can be used as a method of teaching during teaching and learning of a given lesson NOT necessarily only at the end of the week. However, within this Teachers' Guide, you have been provided with skills lab model lesson which appears at the end of every lesson.

Skills Lab follows a 3-part format, which helps teachers plan for practical and Competence-based lessons. This format includes Build, Practice and Present, described below:

ii. Steps of skills lab lesson plan



iii. Use of Present Boards and Portfolios during Skills Lab

Present boards are boards made by learners using locally available resources that contain learners' work/achievements. When learners finish their work from presentations as a group, it's hang on the present board. This can be used by both the teacher and students for reference.

The biggest sign of a successful skills lab is the activities students complete. And how do we know whether students completed their group activity? It's through **Present Boards**. Each team has their own board to display all the work they completed during the Skills Lab. At the end of each Skills lab, each team makes a verbal presentation to the class and shows their Present Board.

	When?	How?	Where?
Present Boards	Last activity of each Skills Lab. Each lab team/group has their own Present Board.	Made by students. Boards have cool designs to showcase the notes and work product for each lab	Boards are hung on the walls of classroom and kept there for others to see

iv. Relationship between Portfolios and Present Boards

What is a Student Portfolio?

A portfolio is a collection of student work for individual assessment. Learners fill their portfolios by completing a series of assignments. These individual assignments are the evidence that students have mastered a learning objective. Each assignment requires learners to apply the skill they learned in that unit practically.

Portfolios are the basis for Skills Lab. First, teachers create the portfolio assessment for students to complete.

Skills Lab is when students will work upon group activities to prepare for completing the portfolio assessment individually. Skills Lab is one of your teacher's normal lessons (no extra time is needed) that are especially designated for the purpose of students working in groups to complete their activities. Skills Lab prepares students to complete portfolio assignments on their own after classes. So, the classroom activity should connect directly to the portfolio assignment.

For example, they set goals as a group in class, and set individual goals as portfolio assignment.

	Done by?	When?	Where?
Present boards	Groups	During Skills Lab	On Present Boards
Portfolios	An Individual	As an Assignment	In Portfolio Folder

v. Relationship between Portfolios and Back Home Projects (BHPs)

Back Home Projects (BHP) refer to projects of business activities that are started up by students in their communities. These projects can be started during school or after school. The teacher has a role of encouraging and supporting students to start up BHP during school.

BHPs are meant to help learners apply skills and attitudes acquired during skills lab and business club activities. However, they still require support and mentoring from the teacher on how to start and maintain BHPs. The portfolio assignments given to students should be able to challenge them to start BHPs. For example, preparing a journal template for the businesses they intend to start.

vi. Other components of student portfolio

Teachers should also guide learners about the use of K-W-L (what learners already know, what they want to know, what they have learnt). This should be done after the introductory activity of each unit to help assess how much the students already know and what they would be interested in learning about the unit. Learners write under (K-what I know, what I want to know)

At the end of the unit, the teacher comes back to K-W-L and asks the learners to complete the last column which is (What they have learnt). The students should keep that sheet in their student portfolio.

K-W-L chart

UNIT:		
What I know	What I want to know	What I learned

PART II: SAMPLE LESSON PLAN

School:.....

Teacher's Names:.....

Term	Date	Subject	Class	Unit N°	Lesson N°	Duration	Class size
-----	----/-- ----/--	ENTREPRENEURSHIP	S4	8	2 of 2	40 minutes	30 students
Type of Special Educational Needs to be catered for in this lesson and number of students in each category				2 students with hearing impairment will sit in front of the classroom and the use of gestures will be improved in the lesson.			
Unit title		Elasticity of demand and supply					
Key Unit Competence:		Apply elasticity of demand and supply in making rational economic and entrepreneurial decisions					
Title of the lesson		Price elasticity of demand					
Instructional Objective		Through the given activities on a printed paper, students should be able to compute elasticity of demand accurately.					
Plan for this Class (location: in / outside)		Inside the classroom					
Learning Materials (for all students)		Printed paper, papers, Pens, Exercise Books, other supporting teaching aids such as Chalks, chalkboard, etc...					
References		S4 Student's book and Teacher's guide of Entrepreneurship for Accounting profession program					

Steps and Timing	Description of teaching and learning activities		Competences and Cross-Cutting Issues to be addressed.
	<p>Students are organized into small groups and provided with clear instructions to discuss and work out the activity 8.2 The group members present their findings. The teacher facilitates students to capture the key concepts of the lesson through harmonization.</p> <p>Teacher uses various probing questions to guide students to explore examples and content related to elasticity of demand.</p> <p>Finally, the Students are assigned individual tasks /application activity 8.2 (1) and the correction is done on the chalk board.</p>		
	Teacher's activities	Student's activities	
Introduction 5 min <ul style="list-style-type: none"> Discovery activity (Question 1) 	Indices/powers/exponents <ul style="list-style-type: none"> The teacher distributes the activity (on a printed paper) to students in their small group and invites them to brainstorm on the activity 8.2 The teacher moves around to help those who are struggling and guides towards right answers to their activities. The teacher invites students to present their findings. The teacher harmonizes the answers from presentation. 	<ul style="list-style-type: none"> Students receive activities on printed paper, discuss and brainstorm on the activity 8.2 They try to get the definitions of elasticity of demand. Group representatives present findings from groups and other students participate actively in the presentation by providing comments or asking questions. 	<ul style="list-style-type: none"> Gender Environment and sustainability Peace and values education Standardization culture Inclusive education Financial education Cooperation is addressed through group work where team working spirit is developed while students are working together and in small group discussions. Communication skills are developed through group discussions and presentation of findings.

<p>Development of the lesson: 25min</p> <ul style="list-style-type: none"> • Discovery activity (Question 2) • Presentation of findings • Application activities 	<ul style="list-style-type: none"> – Teacher gives instructions, invites students to do the activity 8.2.1 in their small groups. Help the understand the formula they going to use. – Teacher moves around to each group, ask probing questions in order to help struggling students. – Teacher invites students to present their findings. If students have failed to get the right answers, do this activity to help them understand it better. – Teacher harmonizes the students' findings and help them to summarize the learned knowledge & skills and give examples which explain elasticity of demand better. – Teacher asks students to individually work out the application activity 8.2 (1) and then request them to do a collective correction on the chalk board 	<ul style="list-style-type: none"> – In their respective groups, Students do activity 8.2.1 using the formula explained to them by the teacher. – Students present their findings. – Guided by the teacher, students summarize the lesson by interpreting elasticity of demand clearly and take notes. – Individually, Students work out the application activity 8.2 (1) from their textbook. 	<ul style="list-style-type: none"> – Critical thinking, problem solving skills are developed through analysing and solving elasticity of demand related questions. – Cooperation and communication skills are developed during presentations and group discussions. – Inclusive education is addressed by providing the remediation activities and tasks to struggling students.
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<p>Conclusion 10 min</p> <ul style="list-style-type: none"> • Assessment 	<p>Teacher asks students to individually work out the assessment activity (the teacher sets an application activity on price elasticity of demand)</p>	<p>Students work out independently the activity given to them by the teacher</p>	<ul style="list-style-type: none"> – Critical thinking is developed through analysing and solving elasticity of demand related questions.
<ul style="list-style-type: none"> • Homework 	<p>Teacher gives the homework to students.</p>	<p>Individually, students work out the homework given by the teacher</p>	<p>Problem solving skills is developed through giving real life examples of application of elasticity of demand.</p> <p>Financial Education is developed while students are connecting elasticity of demand with the real-life problems related to production, finance, and economics.</p>
<ul style="list-style-type: none"> • Teacher self-evaluation 	<p>To be completed after receiving the feed-back from the students.</p>		

PART III: UNIT DEVELOPMENT

UNIT 1

CAREER OPPORTUNITY CHOICE AND ENTREPRENEURIAL PATHWAY

1.1. Key Unit Competence:

To be able to make rational career choices

1.2. prerequisite (knowledge, skills, attitudes and values)

In S1, Unit 1 and 2 (Meaning, roles and characteristics of an entrepreneur and Personal values, skills, and characteristics of an entrepreneur respectively), S3 Unit 2 (Career opportunities),

students studied personal qualities in relation to entrepreneurship, characteristics of a good entrepreneur as well as different fields of career opportunities. Given this background, learners should be able to appreciate that doing business requires possession of essential qualities to succeed. Learners should also realize that there are different careers they can pursue. In this unit, they will be able to embrace testimonies of local entrepreneurs' journeys which may encourage them to identify the business idea they intend to start in their communities.

1.3. Cross-cutting issues to be addressed

Note: The examples below are just to guide you on how to address cross-cutting issues throughout the unit but this does not mean that these are the only ones. You can address and give learners opportunities to discuss all the crosscutting issues where possible taking into consideration of their environment or community around them.

- **Inclusive education...** Emphasis has to be put on how all learners irrespective of their backgrounds, economic or social setup have the right to participate in business activities that benefit their communities. Learners need to appreciate that irrespective of their backgrounds, they have to set business projects that conform to the right quality and measurements.
- **Environment and sustainability:** Environment is the most important thing to consider when one wants to take the entrepreneurial journey. It is therefore very crucial to take great care of the environment.

- **Gender education:** The teacher should bear in mind that all students (girls and boys) have equal opportunities and rights to study. When forming group activities, assigning tasks and responsibilities, asking questions, and giving feedback a teacher should include both girls and boys.
- **Financial education:** Being financially responsible partly means resources are used appropriately and productively. Through this unit, learners will be able to appreciate the need to take care of available scarce resources and therefore, note to them that utilizing resources efficiently is one way of succeeding in entrepreneurship. For example, when entrepreneurs produce what customers don't need, there will be low demand leading to overstocking. This stock can go bad hence wastage of both physical and financial resources, and entrepreneurial failure.

Refer to other crosscutting issues as identified in the preliminary pages of the teacher's guide and curriculum framework.

1.4. Guidance on the introductory activity

- Form manageable groups of 4 or 5 students. (The number of group members may change according to class situations)
- Invite students to read the scenarios from student book, share ideas and then answer related questions
- Guide students' discussions
- Ask students to present their discussion findings
- Supplement students' presentations and link students' answers to the new lesson

Possible answers

1. The first slide of MUGWANEZA's presentation should include but is not limited to the following:
 - **Hotel night auditor** (S/he provides guest services at the front desk of hotels during the evening and overnight hours)
 - **Tour guide** (Tour guides are professionals who accompany tourists on guided visits to various locations such as historical sites and museums.)
 - **Valet** (A valet is responsible for parking guests' vehicles at places like hotels, restaurants, and other guest service facilities.)
 - **Hotel housekeeper** (A hotel housekeeper is responsible for maintaining cleanliness in all areas of a hotel including common areas such as the lobby and hallways as well as individual guest rooms.)

- **Flight attendant** (A flight attendant helps to maintain a smooth travel experience for passengers on flights, usually on commercial flights.)
 - **Concierge** (A concierge is a hotel professional who helps travelers handle an array of tasks during their stay including transportation, activities and services.)
 - **Event coordinator** (Event coordinators help plan and organize events and functions for their clients.)
 - **Travel agent** (Travel agents help clients arrange travel services for their upcoming trips and vacations.)
2. Taking into consideration the 3 entrepreneurial pathways in the scenario, the following are possible effects:
- Mahoro's business may not succeed because she started a business without clear business environment analysis, willingness, etc. she simply started it because parents instructed her to do so.
 - Kalisa's business may not be successful either. He just started it to simply imitate his colleague's friend. This may lead to failing to repay the loan obtained from Umurenge Sacco.
 - Berwa's business is most likely to succeed because She follows the basic recommended entrepreneurial pathway activities such assessing a business idea, planning, launching the business and proper post-business launch activities.

Note: Students may suggest other effects in addition to those suggested above. Consider each student's answer.

3. CPD has enormous benefits to both employees and employers. Refer to a lesson from the student's book titled "importance of training and development" to help students answer this question.

1.5. List of lessons/sub-heading

#	Lesson title/ Sub-heading	Learning objectives (from the syllabus or set according to the lesson title)	Number of periods
1	Introduction to career opportunity and entrepreneurial pathway	Explain the terms: career and career opportunity, and entrepreneurial pathway	2

2	Entrepreneurial pathways of some local successful entrepreneurs	<p>Explain the concept of entrepreneurial pathways</p> <p>Evaluate entrepreneurial pathways of some successful entrepreneurs.</p> <p>Embrace entrepreneurial pathways of successful entrepreneurs</p>	4
3	<p>Choosing work to do</p> <p>Fields of career opportunities</p> <p>Sources of career information</p>	<p>Identify work they are interested in</p> <p>Identify careers based on their own characteristics.</p> <p>Choose the right careers based on self-assessment.</p> <p>Develop plans for future careers</p> <p>Use various sources in order to get career information and guidance.</p>	3
4	Career guidance, maintaining and enriching one's career	<p>Prepare a career plan for the work they are interested in</p> <p>Describe the importance of CPD at workplace</p> <p>Draft own logical Individual Development Plan (IDP)</p> <p>Appreciate the role of personal development</p>	3
End of unit assessment & Remediation		Make rational career choices and decisions	3

LESSON 1: Introduction to career opportunity and entrepreneurial pathway

a) Learning objective:

Explain the terms: career and career opportunity, and entrepreneurial pathway

b) Teaching resources

Flip chart, chalkboard, markers, pens, magazines

c) Prerequisites/Revision/Introduction (guidance on how to start a lesson)

Students are familiar with different people doing businesses of different nature. Furthermore, they live in a society where they usually engage with people from different careers such as teachers, accountants, nurses, etc. you can bring students outside the school to visit and engage in conversation with business owners to know about their entrepreneurial pathways. The information from these situations which will facilitate them to understand what career opportunities and entrepreneurial pathways are.

d) Learning activities

Activity 1.1

- Invite students to analyze the pictures and read the question individually from the student book and work in pairs to share with the classmates.
- Call some pairs to make presentations (if time allows, you can let all pairs present where possible)
- Provide constructive feedback in terms of supplements (here, you share with them the expert view.)

Possible answers

- The possible career fields in the illustration are Education, security, business, health science, economic science and management, aviation
- The possible career opportunities in each area/field identified in (i) are: Teaching, becoming a soldier, trading, becoming a medical doctor, becoming an accountant, becoming a pilot.
- All students will not be interested in the same career fields. Consider each student's interest and reason(s).

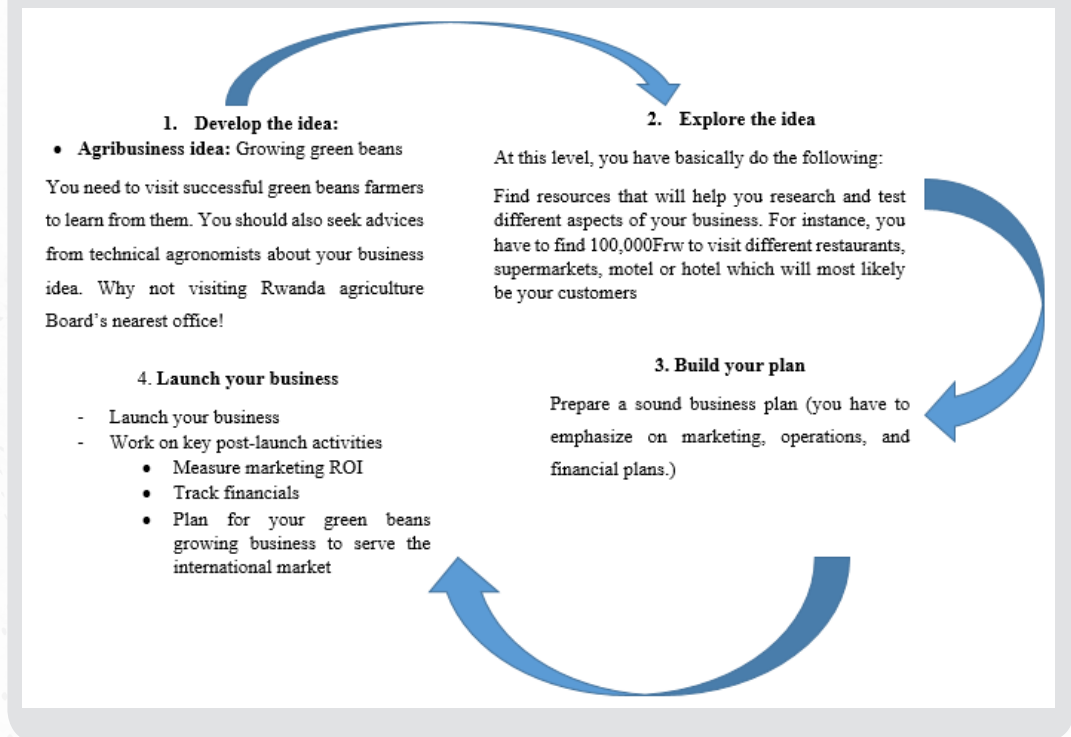
Link the students' answer with the new lesson.

a) Application activity 1.1

- Invite students to read, discuss in pairs the application activities from the student's book
- Have some pairs to present their discussion findings to the entire class
- Give opportunity to other pairs to supplement
- Share the expert view/give constructive feedback in form of supplement

Possible answers

Refer to the following possible answer to assess students' answers:



LESSON 2: Entrepreneurial pathways of some successful entrepreneurs

a) Learning objectives:

- Explain the concept of entrepreneurial pathways
- Evaluate entrepreneurial pathways of some successful entrepreneurs.
- Embrace entrepreneurial pathways of successful entrepreneurs

b) Teaching resources:

Flip chart, chalkboard, markers, pens, pictures, field trips

c) Prerequisites/Revision/Introduction:

Students have studied the meaning of entrepreneurial pathway in the previous lesson. They also made a field trip to visit and engage with some local entrepreneurs. The knowledge acquired will enable them to learn from the entrepreneurial pathways of some successful entrepreneurs.

d) Learning activity 1.2

- Invite students to analyze the pictures individually from the student book and work in pairs to share with the classmates what you know about the entrepreneurial pathways of the famous entrepreneurs in the illustration.
- Call some pairs to make presentations (if time allows, you can let pairs present where possible)
- Provide constructive feedback in terms of supplements

Possible answers

There is no specific answer to this activity. Students may have heard of the giant entrepreneurs from different sources. Consider each student's answer. The answers from students may include:

- Mukarubega is the owner of the formerly called RTUC and currently its UTB
- SINA Gerard deals in beverage and has remarkable sales point at Nyirangarama
- Nyirinkwya is a popular gynecologist-obstetrician based in Rwanda.

On top of that, some students may share what they know about their entrepreneurial pathway. When they don't provide very right answers, don't worry. This aims at a rousing their interest to know the entrepreneurial pathways of some local entrepreneurs and learn from them.

Continue the lesson by describing the characteristics of successful entrepreneurs.

e) Application activity 1.2

- Distribute a printout of a small piece of paper containing extracted testimonies of some local successful entrepreneurs.
- Form manageable groups of students

- Ask students to read the testimonies on papers, discuss and share ideas in groups
- Invite each group to present their findings (where the class location allows, use gallery walk method)
- Provide supplements

Possible answers

Qualities which contribute to an entrepreneur's success include but are not limited to the following:

- Keen to opportunities
- Hardworking
- Perseverance and patience
- Being visionary
- Being creative
- Need for achievement
- Risk tolerance, etc.

LESSON 3: Choosing work to do

a) Learning objectives:

- Identify work they are interested in
- Identify careers based on their own characteristics.
- Choose the right careers based on self-assessment.
- Develop plans for future careers
- Use various sources in order to get career information and guidance.

b) Teaching resources:

Flip chart, chalkboard, markers, pens, pictures, field trips

c) Prerequisites/Revision/Introduction:

In S3, unit 2 students have studied sources of career information as well as different fields of career. The knowledge and skills acquired will enable them to understand this lesson and choose the right careers.

d) Learning activity 1.3

- Invite students to read the questions individually from the student book
- Ask them to share in pairs
- Invite some pairs to make presentations (if time allows, you can let all pairs present where possible)
- Provide constructive feedback in terms of supplements

Possible answers

1

i) Type of works one may be interested in:

- cashier
- Pilot
- Flight attendant (air hostesses)
- Musician
- Lawyer
- Teacher, etc.

Reasons: level of salary, availability of the job, potential professional development, recognition/status, working conditions, passion etc.

ii) Refer to the student book 1:3:2 examples of careers one can pursue.

2. Refer to the student book 1:3:1 source of career information.

- Link these answers to the new lesson.

e) Application activity 1.3

- Students read the activity individually
- Ask students to share ideas in pairs and prepare a presentation for one of them.
- Invite randomly selected pairs to present their findings.
- Give constructive feedback in form of supplements

Possible answers

The right career field choice may be chosen based on self-assessment. Individuals possess different qualities, talents, and skills.

Guidance:

There is no specific answer for this activity. Give an opportunity to learners to prepare their presentations (answers). Guide them to design the correct and clear answer entailing the relevant information from the entire class. Refer to SB to harmonize learners' work.

LESSON 4: Career guidance, maintaining and enriching one's career

a) Learning objectives:

- Prepare a career plan for the work they are interested in
- Describe the importance of CPD at workplace
- Draft own logical Individual Development Plan
- Appreciate the role of personal development

b) Teaching resources:

Flip chart, chalkboard, markers, pens, pictures, field trips

c) Prerequisites/Revision/Introduction

Students have studied career opportunities in S3, unit 2. They also studied different career fields in the previous lesson. The knowledge and skills acquired will enable them to understand career guidance and learn how to maintain and enrich one's career.

d) Learning activity 1.4

- Invite students to analyze the pictures individually from the student book and work in pairs to share with the classmates what you know about the entrepreneurial pathways of the famous entrepreneurs in the illustration.
- Call some pairs to make presentations (if time allows, you can let pairs present where possible)
- Provide constructive feedback in terms of supplements

Possible answers

1. a) For instance, if someone has chosen PCB as combination, the reasons might be: (i) good performance in the subjects of physics, chemistry, and biology, (ii) aspiration to study general medicine at university, (iii) passion for science, etc.
 - People who influenced that combination choice include:
 1. Career guidance officer
 2. Parents
 3. School teachers
 4. Role models
 5. Peers, etc.
- b) Career guidance refers to the process of assisting or helping someone to choose a given career. It consists of services that help people to successfully manage their career development.
2. a) Continuous Professional Development (CPD) is a systematic process of planning for the future and of gaining experience and training relevant to the directions in which employees want to develop both with the current job role and in future career progression.
- b) CPD at workplace is basically important in order to:
 - i) Maintain the current job role, and meet the requirements of the role better,
 - ii) Achieve career aspirations

Application activity 1.4

- Form manageable groups of students
- Ask students to read the questions individually, share ideas and do the activities in pairs
- Invite randomly selected pairs to present discussion findings (avoid pairs to consistently present when there are some others which have not yet presented)
- Provide supplements

Possible answers

- i) While preparing a career plan for different works, people will include different information. This is to mean that plans will differ from another. Emphasize the following as steps to prepare a sound career plan:
- Exploration of career options
 - Conducting field research
 - Determining one's job target
 - Building credentials and resume
 - Prepare for job search
 - Launch one's job search

Learning needs	Suitable approach
An accounting clerk wishes to work towards becoming iCPAR qualified	External training course
A worker is transferred into a new piece of equipment and needs to learn how to operate it.	On job training
A new member of staff is about to join the organization	Induction training
An organization decides that its supervisors would benefit from leadership training	Internal training course

Note: More than one approach can be applied to satisfy a given learning need. Remember to consider the explanation of students where applicable.

Skills Lab 1

Build

To introduce the topic, the teacher asks learners the following questions: Do you have any business idea in your mind you wish to start after your studies? Through think-pair and share, students discuss business ideas and goals. The teacher encourages students to think through what it might take for their Individual Development Plans.

Practice

Inform learners that in their respective lab pairs, they come up with their Individual Development Plans.

Explain the instructions to the activity:

- Each pair will think of the requirements for their Individual Development Plans.
- Suggest different activities they will implement for their personal development.
- They will have 15 minutes (which can be changed according to class circumstances) to design the IDPs after which they will share findings to the whole group. The teacher facilitates the learners while they are working in pairs.

Present

The teacher guides the presentations as he/she gives feedback to each group and makes conclusions through posing questions as a form of assessment.

Encourage learners to ask questions where they do not understand. The teacher emphasizes that each student will keep their work in their portfolio notebooks.

Conclusion

The teacher concludes by linking business ideas developed, personal goals and career plans.

1.6. Additional information

Types of entrepreneurs and how they differ from each other

Various scholars have identified different types of entrepreneurs. The classification below was developed by Clarence Danhof. It is called Danhof's classification of entrepreneurs.

- **Innovative entrepreneurs:** These are creative entrepreneurs who introduce new products and new production techniques of the market through gathering available information and experimenting new combination of factors of production. Such entrepreneurs always see and exploit opportunities for introducing new products, production methods or new markets. These are common in developed countries.
- **Imitative entrepreneurs:** These are also referred to as adoptive entrepreneurs. These entrepreneurs do not innovate new products and services. They imitate or adopt existing commodities and start their

enterprises exactly in the same manner. These are common in developing countries.

Example: Resto and Bar operators in Kigali. What they do is just starting up a Resto-Bar business (for instance, in Biryogo) because he/she has seen the same business succeeding in Kimironko.

- **Drone entrepreneurs:** Are also called conservative entrepreneurs, they do not accept or imitate changes and they decline to utilize available resources to make changes in production processes even when their businesses are making losses and consequently are out competed and their businesses collapse.
- **Fabian entrepreneurs:** These entrepreneurs tend to be very cautious in adopting and accepting changes and innovations. They do not adopt environmental methods of production and business. **Fabian entrepreneurs** only adopt new methods if they realize that their businesses will fail if they don't adopt new ideas. In addition to categories by Danhof above, below are more classification of entrepreneurs:
 - **Business entrepreneurs:** These are also called trading entrepreneurs. They undertake buying and selling as their core business activity. Example: Boutique operators in your home communities are traders. They purchase finished goods and resell them to make profits.
 - **Industrial entrepreneurs:** These are entrepreneurs engaged in converting raw materials into usable finished products. Example: Sina Gerard who owns Urwibutso Enterprise which deals in agro-processing industry.
 - **Agricultural entrepreneurs:** These are engaged in agricultural activities. For instance, they deal in activities such as growing cash and food crops, rearing animals, dairy farming, poultry etc. They use modern methods of production and use of exotic breeds and non- exotic.

Example: Tea production cooperatives operating in western region of Rwanda.

- **Induced entrepreneurs:** These entrepreneurs are attracted into entrepreneurs' activities by policies and incentives provided by the governments, NGO's etc. Incentives like loans, tax holidays, and land tenure system. Example: People investing in the production of medical equipment due to incentives granted by the government of Rwanda.

1.7. End unit 1 assessment

Possible answers

1. a) A **career** is an undertaking a person gets involved in, in pursuit of their future or life goals.
 - b) Sources of information concerning work to do include: schools, media, potential workplace, parents, friends, relatives, trade groups, labour unions, guidance and career counselor, local libraries, trade fairs, etc.
 - c) Career opportunities that people today are engaged in may include: becoming an accountant, teacher, entrepreneur, Doctor, engineer, Pharmacist, soldier, farmer etc.
2. (i) Steps for choosing a career:
 - Perform a self-assessment
 - Identify one’s highly desirable career
 - Make a list of jobs to explore
 - Carry out a research about jobs and employers
 - Get training (if you need it) and update the resume
 - Find and apply for jobs
 - Continue growing and learning
 - (ii) Challenges that someone may encounter in his or her career include: lack of professional training centers, low salaries, working for long hours, lack of safety gears like helmets, gloves etc.
3. a) The term “**career guidance**” refers to the act of assisting students and adults to successfully choose a right career for themselves, manage and develop it.
 - b) Sources of career guidance include: Teachers, parents, career guidance counselors, etc.
4. a) Benefits of being an entrepreneur or doing business as a career include but are not limited to the following:
 - Independence in decision making
 - No minimum academic qualification
 - Interaction with different kinds of people
 - Flexibility in shifting from one business to another

- High income in form of profits
 - Improved social and economic status
 - Direct service to the community
 - Self-reliance
- b) The challenges of being an entrepreneur or doing business as a career include:
- Requires startup capital
 - Higher temptation to spend business money
 - More risks of losing resources invested
 - Business risks like theft, fire, etc.
 - Economic instability like inflation, low demand, high unemployment
 - Income is uncertain
 - Longer hours of work

1.8. Additional activities

1.8.1. Remedial activity

What do you understand by the following terms:

- i) Career opportunity
- ii) Entrepreneurial pathway

Possible answers

- i) **Career opportunity** is any job, circumstance or situation which favors someone to pursue a given undertaking.
- ii) **The entrepreneurial pathway** is anyone's route taken during an entrepreneurship journey.

1.8.2. Consolidation activities

1. Why have you chosen to study accounting in secondary education level?
2. Search and read different books to expand your knowledge about characteristics of a good entrepreneur.

Possible answers:

1. Accounting profession has different qualities which pull students to study it. Those qualities include:
 - Accountants are in high demand
 - Above-average earnings
 - Career flexibility
 - Setting oneself up to become an entrepreneur
2. on top of what is provided in the student's book, the following are other characteristics of a good entrepreneur:
 - Responsiveness
 - Being inquisitive
 - Goal oriented
 - Independence
 - Self-confidence, etc.

1.8.3. Extended activity

Using typical examples of your home community, compare entrepreneurs based on Danhof's classification of entrepreneurs.

Possible answer:

Clarence Danhof classifies entrepreneurs into four types, namely:

- **Aggressive/Innovative entrepreneur:** Innovative entrepreneur is one who assembles and introduces new combinations of factors of production.
- **Imitative entrepreneur:** Imitative entrepreneur is also known as adoptive entrepreneur. He or she adopts successful innovation introduced by other innovators.
- **Fabian entrepreneur:** The Fabian entrepreneur is timid and cautious. He or she imitates other innovations only if he or she is certain that failure to do so may damage his or her business.
- **Drone entrepreneur:** His or her entrepreneurial activity may be restricted to just one or two innovations. He refuses to adopt changes in production even at the risk of reduced returns.

UNIT 2

SETTING PERSONAL GOALS

2.1. Key unit competence:

To be able to set achievable entrepreneurial goals

2.2. Unit Prerequisite

In S1, learners were introduced to roles, benefits and challenges of an entrepreneur, setting goals. This prior knowledge, skills or competences should help them to be able to set smart entrepreneurial goals in life and take advantage of opportunities available. As a foundation of this whole unit.

2.3. Cross-cutting issues to be addressed

Note: The examples below are just to guide you on how to address crosscutting issues throughout the unit BUT THIS DOES NOT mean that these are the only ones. You can address and give learners opportunities to discuss all the cross-cutting issues where possible taking consideration of their environment or community around them.

Gender education: Emphasis throughout this unit has to be put on how both male and female have same opportunities when it comes to setting personal goals. There are targets specifically reserved or meant for a **particular** gender, but they can all choose whatever they wish.

Environment and sustainability: All careers base from the environment, and one cannot implement his/her profitable business career without the environment. Therefore, great care for environment is paramount for continued long term achievement of entrepreneurial goals.

Inclusive education: In addition to all having equal opportunities to identify, examine and justify the need for setting goals, emphasis has to be put on how we all regardless of our background, economic or social setup have right to set personal goals that do not discriminate as our needs are the same. Learners need to understand that education in general should not discriminate but promote inclusiveness of all etc. Learners should also adhere to inclusiveness in their business club.

Peace and Values: You need to emphasize to learners the need to live in peace and harmony with others. Learners need to appreciate the need for setting goals that promote peace and are not against the values of the community they want to serve. Learners also need to acknowledge the importance of promoting positive business goals especially towards society, customers, shareholders, environment, and government among others as they pay and sensitize others to meet their tax obligation.

Financial education: You need to emphasize to learners the need and culture to saving and manage properly their business revenues and any other monetary issues. This will help them to be financially fit in order to achieve future goals and create various businesses.

Note: Refer to other cross-cutting issues as identified in the curriculum framework.

2.4. Guidance on the introductory activity

- a) This introductory activity is intended to:
 - Provide interest and motivation to the learners for setting goals in business
 - Focus learner's attention on setting personal goals
 - Convince learners about what they will benefit from the unit
 - Build on previous knowledge, skills, values and attitudes to help you (the teacher) assess the learner's prior knowledge and help link with the new content, or
 - Could be new content to help arouse learners' interest about what to expect in the new content
 - Be answered in one lesson, or
 - Gradually over a period as the unit progresses. There are no right or wrong answers
- b) Use an appropriate method such as small groups or pairs, provide learners with the introductory activity in student book, and give instructions to the activity. During grouping or pairing, ensure a balance between boys and girls and learners' different abilities
- c) Learners in small groups or pairs analyze the illustration given for the unit. Learners explain what the illustration means to them, select application goals from the given, propose the new goals and determine the qualities they are ready to develop then later classify all those goals into short-, medium- and long-term goals. Monitor to confirm whether everyone is working on the activity, instructions were understood, address any challenges or questions, ensure everyone is given an opportunity and is contributing in-group discussions. Encourage learners to work together, value each other's contributions, share ideas, etc.

- d) Learners present their findings, results, answers through an appropriate method such pair-share, gallery walk, small group presentations on the introductory activity. Encourage different learners from the groups to share the group's work to avoid that a few learners are dominating. Also encourage other learners to listen and not disturb when other teams are sharing unless it is a question. Encourage learners to appreciate each other's work especially during presentation, they may clap or show thumbs up, flowers etc. as a gesture of appreciation for the effort of each group.
- e) Appreciate the team's presentations and remind them this activity was not meant to come to the very right answers but to help them become aware of what to expect in the unit. Answers to the activity will be got as the unit progresses. You can support learner's answers by referring to possible answers to the introductory activity below:

Possible answers for introductory activity

Note: *These responses may be shared or not with the learners. They are precisely to guide the teacher while harmonizing learners' responses during presentation.*

1. Students will respond differently depending on their varied perception. But as a teacher, you should appreciate each answer. The emphasis is about the rationale behind the illustration. Students should identify that the surrounding arrows represent different Personal goals
2. As said above if a student didn't find an interesting goal from the given, the teacher should provide support and room for them to give their opinions.
3. Students are likely to provide different entrepreneurial qualities. The teacher will ensure that whatever quality given is reflecting good characteristics of entrepreneurs and generic competences: For instance, Hardworking, opportunity seeking, innovation, creativity, research, perseverance, risk taking, problem solving, decision making, communication etc.
4. Learner's answers should be fit in the following parameter while trying to classify goals:

Types	Long term goals (Beyond 5yrs)	Medium term goals (3 to 5yrs)	Short term goals (Below 2 years)
Examples	-Buying or building a house	- having 10 cows	-growing crops on a small scale. -rearing 2 goats

Note: For the goals that do not demonstrate time scale, learners may classify them anywhere between the long term or the short-term category. Time scale was not demonstrated in the student books just to avoid lengthy sentences. The teacher must clarify that the classifications always consider the time frame.

2.5. List of lessons/sub-heading (including assessment)

No.	Lesson titles	Learning objectives (from the syllabus including knowledge, skills and attitudes):	Number of Periods
1	Meaning of Goal, Personal Goal and Types of goals	-Explain the terms: Goal and personal goal -Explain personal values, skills and qualities	2
2	Identifying one's personal values, skills and qualities in relation to entrepreneurial mindset competencies	-Promote desirable entrepreneurial qualities in family, society and employment. Recognize that desirable values, skills and qualities are important in attaining one's goal -Treat others with respect as one would do in the workplace - Advocate for values desirable in family, society and employment.	2
3	Strategies to learn new skills	- Describe the various learning styles. -Identify various strategies to better learning	2
4	End Unit Assessment and remediation	To be able to set achievable entrepreneurial goals.	2

LESSON 1: Meaning of key terms, Types of goals and Setting Long term & Short-term goals

a) Learning objectives:

- Explain the terms: goal, personal goal and business goal.
- Explain personal values, skills and qualities

b) Teaching resources: Basic materials for a class/ lesson to be conducted: Learners books, internet, case studies and any other trustworthy and reliable resources to enhance learning.

c) Prerequisites/Revision/Introduction: Read the Key unit competence in the syllabus to determine what students will know and be able to do by the end of the unit. Look at the action verb, concept and context of each learning objective. This will help you see the skills, knowledge and attitudes embedded in the learning objective. Remember the learning objectives link to the key unit competence.

d) Learning activities: Follow the guidance about the Learning activity.

Activity 2.1 learners' book

Learners in small groups, either pairs or individual read and analyze the questions: Give the meaning of a goal, SMART Goal, Personal goal and business goal. Identify and justify the types of goals from the given examples in the student's book.

1. While learners are doing the activity, make sure everyone is working and actively participating.
2. Learners share their findings, responses or answers to the activity using an appropriate method such as group presentation, pair-share or large group discussion. Ensure all learners including those with special education needs are given an opportunity to give their views and should be respected.
3. Harmonize their findings or answers and help them draw conclusions/summary to the meaning of a goal and types of goals. Answer or address any questions or challenges about the activity. Guide them to make notes in their books referring to learner's book.

Possible answers 2.1

1. **a. A goal** is defined as lifelong aims, which an individual or entity endeavor to achieve.
- b. SMART goal** is an acronym that stands for Specific, Measurable, Achievable, Realistic and Time frame.

c. Personal goal: This is an objective that someone sets for a specific reason within a specific timeframe.

d. When someone's goal relates to business activities, it is called "**Business Goal**"

2. a. Starting my own business in 6 years to come → LONG TERM Goal

b. Obtaining at least 85% in my end term exams → SHORT TERM goal

c. Earning CAT and A2 Certificate at the completion of my secondary studies → Medium goal.

Application activity 2.1

1. Learners either in groups or individuals differentiate the new terms given.
2. Depending on the purpose of the application activity, choose an appropriate method to assess learners' findings, answers, or responses. Depending on the performance or results, you may decide to give remedial or extension activities.

Possible answers 2.1

1. **Personal goal** refers to an objective that someone sets for a specific reason within a specific timeframe while **Collective goal** refers to that objective set by a group of people in common.
2. **Short term goal:** This is a goal set to be achieved in a period not beyond 2 years e.g., scoring 80% in end of term 1 exam

Long term goal: This is a goal set to be achieved in a period beyond 5 years e.g., studying to become a doctor

3. Steps are written in form of questions
 - Where do I want to be in the next period? e.g., 4 months, 6 months, one year etc.?
 - What must I know to get there? for example to start my business, I will need to discover which type of business to get involved in, I have to know how many are doing it, how they do it, for whom they produce (market), prepare my Weaknesses, Strength, Opportunities available and Threats (SWOT analysis) and where to do the business from.

- What steps must I take in order to know and be able to do these things? For example, I have to prepare a business plan
- What abilities and experience do I already have that are going to help me take these steps? Refer to the qualities of an entrepreneur.
- What obstacles might be on my way and how can I deal with them? You have to list the challenges that you may meet on the way to achieving your goal. This is because you don't expect everything to go on smoothly. A lot of challenges can be met.

Note: Teachers are encouraged to stimulate learners so that they set realistic goals related to the businesses they intend to start back home.

4. Learners will give different goals. But what is necessary here is to ensure that they set achievable and realistic goals. For instance, a student who would set a goal which misses any of the 5 main characteristics of a good goal should be guided and coached on how better to set a SMART Goal.
5. learners will identify their goals and specify those that are short or long term with the resources to be used and time to take.

Lesson 2: Personal values, skills and qualities in relation to entrepreneurial mindset competencies

a) Learning objectives:

- Promote desirable entrepreneurial qualities in family, society, and employment.
- Recognize that desirable values, skills, and qualities are important in attaining one's goal
- Treat others with respect as one would do in the workplace
- Advocate for values desirable in family, society, and employment.

b) Prerequisites/Revision/Introduction: Read the Key unit competence in the syllabus to determine what students will know and be able to do by the end of the unit. Look at the action verb, concept and context of each learning objective. This will help you see the skills, knowledge and attitudes embedded in the learning objective. Remember the learning objectives link to the key unit competence.

c) Teaching resources: Basic materials for a class/ lesson to be conducted: Learners books, internet, case studies and any other trustworthy and reliable resources to enhance learning.

d) Learning activity: Follow the guidance about the Learning activity (see above).

e) Application activity: Follow the guidance about the Learning activity (see above)

Learning activity 2.2:

Learners in small groups, either pairs or individual read and analyze the questions: Give the meaning of entrepreneurial mindset. Identify entrepreneurial mindset competences from the given examples in the student's book.

1. While learners are doing the activity, make sure everyone is working and actively participating.
2. Learners share their findings, responses or answers to the activity using an appropriate method such as group presentation, pair-share, or large group discussion. Ensure all learners including those with special education needs are given an opportunity to give their views and should be respected.
3. Harmonize their findings or answers and help them draw conclusions/summary to the meaning of entrepreneurial mindset. Answer or address any questions or challenges about the activity. Guide them to make notes in their books referring to learner's book.

Possible answers 2.2

- i) John was the one who demonstrated an Entrepreneurial mindset. This is observable when he showed Iraguha that the problem should be seen as an opportunity for one to better plan.
- ii) No response should be rejected. Every learner will give his/ her own view, but the common goal is that all students should turn their views towards the real meaning of an entrepreneurial mindset which refers to an individual's set of beliefs, attitudes, and skills that drive him or her to create a business activity that contributes directly or indirectly to the net output of the economy or to the capacity to produce additional output.
- iii) Referring to the above conversation, Students may provide extremely different Entrepreneurial mindset competencies, but the teacher should ensure that they all turn around the following competences:
 1. Need for achievement
 2. Taking Action and Initiative
 3. Values-driven
 4. Self-efficacy

5. Innovation problem solving
6. Resilience

Note: Students shall look for the behaviors that John has demonstrated in the conversation that reflects the above competences.

2. Each learner will tick, the values and qualities depending on their own experience. What is needed here is to ensure that learners know themselves (self-awareness) and the surrounding community people. This will enable them to properly set personal goals since smart goals are based on someone's values, skills, and qualities.

e) Application Activity 2.2 learners' book

1. Learners either in groups or individuals differentiate the new terms given.
2. Depending on the purpose of the application activity, choose an appropriate method to assess learners' findings, answers, or responses. Depending on the performance or results, you may decide to give remedial or extension activities.

Possible answers for application activity 2.2

1.

i) **Mindset** is defined as a set of opinions and the way an individual thinks. From the above conversation, you can clearly see that Mugisha's mindset is totally different from Byiringiro's.

Byiringiro seems to be persistent, courageous and an opportunity seeker while Mugisha fears risks and is not independent.

ii) Byiringiro had a productive entrepreneurial mindset as compared to Mugisha

iii) On this aspect of discussing how mindsets influence our success, learners are likely to give relative answers, but the goal should be ensuring that they try to link how their actions/ behaviors/ success depend on individuals' thoughts and beliefs. Mindsets also refer to a person's usual attitude or mental state and reactions towards a given situation, they influence an individual's response to a situation

2. Four (4) desirable entrepreneurial competence to advocate for youth to adopt and their importance: Learners will respond from the following entrepreneurial competences and give relative importance. Entrepreneurial competences are as follow:

- Need for achievement
- Taking Action and Initiative
- Values-driven
- Self-efficacy
- Innovation problem solving
- Resilience

Lesson 3: Strategies to learn new skills

a) Learning objectives:

- Describe the various learning styles.
- Identify various strategies to better learning

b) Prerequisite/Revision/Introduction: Read the key unit competence in the syllabus to determine what students will know and be able to do by the end of the unit. Look at the action verb, concept and context of each learning objective. This will help you see the skills, knowledge attitudes embedded in the learning objective. Remember the learning objectives link to the key unit competence.

c) Teaching aids: Basic materials for a class/ lesson to be conducted: pictures, Learners' books, internet and any other trustworthy and reliable resources to enhance learning.

d) Learning activity: Follow the guidance about the learning activity.

Activity 2.3 learners' book

1. Learners in small groups, either pairs or individual read and analyze the activity to come up with answers following the instructions given.
2. While learners are doing the activity, make sure everyone is working and actively participating.
3. Learners share their findings, responses or answers to the activity using an appropriate method such as group presentation, pair-share, or large group discussion. Ensure all learners are given an opportunity to give their views and should be respected.

Harmonize their findings or answers and help them draw conclusions/ summary of what they have learnt. Answer or address any questions or challenges about the activity. Guide them to make notes in their books referring to student book.

Possible answers to learner's activity 2.3

1. writing, listening, observing/seeing, reading, doing, speaking
2. learners will choose their own learning style.

Note: In a class environment we have fast learners, time takers and those who are between fast and slow. But all use different learning styles hence it's important for a time taker to integrate the learning styles of a quick learner so as to be at the same level.

e) Application activity 2.3 learners' book

Learners analyze the given question and write SMART goals which would be entailed in their dreams. This activity may be given as a research question or homework.

Depending on the purpose of the application activity, chose an appropriate method to assess learners' findings, answers or responses. Depending on the performance or results, you may decide to give remedial or extension activities.

Possible answers for application activity 2.3 in learner's book

1. This question has no specific answer but it's up to the teacher to determine whether what the students have written is right or wrong following the characteristics of good goal

e.g.

- To increase sales of rabbit meat up to 8500Frw a day by 2023
 - Start a small mandazi making business with the 15000Frw from my savings after S6
 - Save 1500Frw every term from the pocket money.
2. There is no specific answer for this question. You have to judge the answer in relation to their business ideas.
 3. The Rwandan proverb named: "Kora ndebe iruta vuga numve" This simply means that a better learning is that one where the learner clearly observes all the required steps by step of making something or just have chance to operate on better than just hearing or listening.

Skills lab 2

i. Build

Using Think, Pair and Share; ask learners to brainstorm about what is missing in their business club, do a summary of key requirements for bridging that gap. Then call them to join in groups for the next activity:

ii. Practice

Preparing Business Clubs goals

Assign each group a task to design Smart short-, medium- and long-term goals as they put together the gaps identified during the build part.

iii. Presentation

Communicate the appropriate time for this activity to be done. Choose the appropriate method they can use to present their findings for example gallery walk or one group presenting at a time. During presentations encourage learners challenge/supplement each other (control this as it takes time) as it will enable them to understand better. Goals set must be important for the entire club and to the school / community at large. However, these are sample goals for the business club:

- i) Increase sales revenue by 30% next term
- ii) Introduce at least 2 new products every beginning of term
- iii) Make the school's yards productive by growing vegetables for the school feeding consumption, next term.

iv. Conclusion

Use a small ball to make conclusion. Slow the ball randomly to different learners to answer questions on what they have learnt.

v. Portfolio Assignment

As a take home of this lab, provide learners a portfolio assignment which is meant to test the skills learners have attained from this lab. Remember this is an individual activity and thus each learner must do it.

1. Analyse the following examples of goals:
 - I will do very big businesses.
 - I will attend morning lessons.
 - I will become a tax clearance agent next year.
 - I will find a good job soon.

- a) Explain whether they are good goals or not.
- b) Make the bad goals into good goals.
- c) Explain what you understand by SMART goals.

Possible answers

- a) These are bad goals *except the third goal* because they do not fulfill the characteristics of a SMART goal
- b)
 - I will start a large business ten years from now with capital of almost 1,500,000
 - I will attend morning lessons every day
 - I will find a job after finishing s6 national exams.

2.6. Additional Information

Goal Setting

Many people feel as if they're a drift in the world. They work hard, but they don't seem to get anywhere worthwhile.

How to Set a Goal

First consider what you want to achieve, and then commit to it. Set SMART (specific, measurable, attainable, realistic and time-bound) goals that motivate you and write them down to make them feel tangible. Then plan the steps you must take to realize your goal, and cross off each one as you work through them.

Goal setting is a powerful process for thinking about your ideal future, and for motivating yourself to turn your vision of this future into reality.

The process of setting goals helps you choose where you want to go in life. By knowing precisely what you want to achieve, you know where you have to concentrate your efforts.

Why Set Goals?

Setting goals gives you long-term vision and short-term motivation. It focuses your acquisition of knowledge and helps you to organize your time and your resources so that you can make the most of your life.

By setting sharp, clearly defined goals, you can measure and take pride in the achievement of those goals, and you'll see forward progress in what might previously

have seemed a long pointless grind. You will also raise your self-confidence, as you recognize your own ability and competence in achieving the goals that you've set.

2.7. End of unit 2 assessment

Read the case study. Then answer the questions that follow.

On this question, learners may give different timeframes of the goal. But the interesting thing is that all goals should be under the 2 years time frame. For instance, this can be an example of Beatha's new goal: "Starting a new local small bakery for Mandazi and cakes next month"

1. Beatha needs to clearly think through and respond to the guiding questions as seen in the notes (students book) as the steps required while trying to reach to a new goal
2. There are no specific explanations for this question. But the five Entrepreneurial mindset competencies can be found in student's book. Learners will give different explanations
3. There is no specific answer for this question. You have to judge the answer whether the provided learning strategy that the learner demonstrated is really practical or not.
4. There is no specific answer for this question. You have to judge the answer whether the challenge presented is real and that its mitigation is right or wrong.

2.8. Additional Activities

2.8.1. Remediation activities

1. Briefly explain the terms:
 - a) Business idea and Business opportunity
 - b) Explain the various sources of business ideas
2. Explain the meaning and the role of SWOT analysis

Guidance to the teacher regarding answers to the above remedial activities

1. **A business idea** is a thought about the possibility of a business

A business opportunity is an identified situation that can be turned into a real and profitable business activity. Business opportunities are situations or circumstances that creates good environment to implement a business idea.

b. Sources of business opportunities: You can visit the students book on “3.1.3. Sources of viable business ideas and opportunities”

2. Meaning and the role of SWOT (refer to student's book on 3.3. Evaluation of Business ideas) for detailed explanation about SWOT as a tool for evaluating business ideas and opportunities.

2.8.2. Consolidation activity

Justify how setting a SMART goal can help in achieving career goals more successfully.

Possible answer

1. **Goals trigger behavior:** Having a clear, compelling goal mobilizes your focus toward actionable behavior. In other words, goal setting should motivate you.
2. **Goals guide your focus:** When you set a goal, you naturally direct your attention toward a next step and, as a result, lead yourself in the right direction which forces your actions—your behaviors to follow. It's a cheesy saying but I'll say it anyway: whatever the mind believes, the body achieves. The body follows the mind.
3. **Goals sustain momentum:** Seeing progress is addicting. No seriously, it's literally addicting because of the dopamine released in your brain after attaining a reward. Just as a snowball grows as it's rolled down a hill, momentum works the same way.
4. **Goals align your focus:** Goal setting helps you align focus with behavior because you get feedback on your progress. The actions you take—or avoid—offer clues about your values, beliefs, challenges, strengths, and weaknesses which allow you to course correct as necessary and reset your goal achievement strategy (and subsequently, your focus).
5. **Goal setting promotes self-mastery:** Perhaps the most important reason why goals work is because they build character. Actually, *achieving* goals builds character.

Any other answer the student may come up with that is reasonable therefore these answers are not an end, give room for more points from the learners.

2.8.3. Extended Activities

Come up with a way in which students with different learning styles can study together effectively:

1. Draw a goal tree for one of your personal career goals.
2. Choose a type of organization and work position you would like to work in after school. Explain what roles you would conduct in this position and what you have already done in school to prepare yourself for this role.

Guidance to the teacher regarding answers to the above extended activities

These questions have no specific answers but it's up to the teacher to determine whether what the students have drawn or wrote is right or wrong, encourage the learners to set achievable goals that suit their level and that matches their respective business ideas.

UNIT 3

BUSINESS IDEAS AND OPPORTUNITIES

3.1. Key Unit Competency:

To be able to generate viable business ideas

3.2. Unit Prerequisite

In the beginning of senior four, learners were introduced to the Entrepreneurial journey, setting personal goals and the characteristics of a good entrepreneur (O' level). While in Year 1, they were introduced to entrepreneurship as a career opportunity, setting personal goals and market research. This prior knowledge, skills or competences should help them to be able to generate viable business ideas. Remember for a business idea to be viable, there is a need to meet with opportunities available.

3.3. Cross-cutting issues to be addressed

Note: The examples below are just to guide you on how to address cross-cutting issues throughout the unit but this does not mean that these are the only ones. You can address and give learners opportunities to discuss all the crosscutting issues where possible taking consideration of their environment or community background.

Gender education: Emphasis throughout this unit has to be put on how both male and females have the same opportunities when it comes to generating viable business ideas and opportunities, there are no ideas/opportunities specifically reserved or meant for a particular gender but they can all choose whatever ideas they feel capable of.

Environment and sustainability: The greatest source of business ideas and opportunities is the environment, and one cannot implement his/her opportunity into a profitable business without the environment. Therefore, great care for the environment is paramount for continued business ideas and opportunity generation as well as survival of the business activities.

Inclusive education: In addition to all having equal opportunities to generate business ideas and opportunities, emphasis has to be put on how we all regardless of our background, economic or social setup have right to generate ideas that do not discriminate as our needs are the same. Learners need to understand that good business ideas should not discriminate but promote inclusiveness of all...etc.

Peace and Values: You need to emphasize to students the need to live in peace and harmony with others. Learners need to appreciate the generation of business ideas and opportunities that promote peace and are not against the values of the community they want to serve. Learners also need to appreciate the importance of promoting positive business values especially towards society, customers, shareholders, environment, government, among others to generate viable business ideas and opportunities.

Refer to other cross-cutting issues as identified in the curriculum framework.

3.4. Guidance on the introductory activity

This introductory activity is intended to:

1. Provide interest and motivation to the learners about business ideas and opportunities
2. Focus learner's attention on business ideas and opportunities. its purpose is to convince learners about what they will benefit from the unit.
3. Build on previous knowledge, skills, values, and attitudes to help the teacher to assess the learner's prior knowledge and help to link with the new content, or
4. the new content can help to arouse learner's interest about what to expect in the new content. that can be answered in one lesson, or
5. Gradually, over a period as the unit progresses. At this point, there are no right or wrong answers as learners will gradually get more appropriate answers progressively as they go through the unit.

Use an appropriate method such as small groups or pairs and provide learners with Unit 3 introductory activity, give clear instructions to the activity. During grouping or pairing, mix boys and girls and learners with different abilities.

Possible answers for the Introduction Activity: refer to learner's book

- a) There are no specific answers for these questions, but the teacher can judge whether student's answers are right or wrong. He/ she can also provide guidance to learners on the possible business ideas for the identified situations in the community:

Current situation in the hometown (problems identified)	Possible Business ideas (ANSWERS)
Day school students experience heavy rains that usually destroy their books.	Provide waterproof bags Provide affordable umbrellas School vans transportation
In the area, there is scarcity of wrapping materials.	Make paper bags (from used exam papers, of cement etc.) Provide returnable wrapping materials
Majority of the population have no access to smartphones and computers, yet majority of local government related services require to use technology	Provide electronic payment services (irembo services) Mobile money and tigo cash etc.
High demand of charcoal as a source of energy	Selling of energy saving stoves (Rondereza), Charcoal made from used papers and cartons, Installing solar energy, etc. Selling of gas and gas stoves Installing biogas kits.
No clean water in the community	Selling of purified bottled water, Selling of harvested rainwater, Making and selling water harvesting tanks. Door to door delivery of water in jerry cans by bicycle, etc. Digging of boreholes

On this question, students can provide varied possible answers, but it is up to the teacher to judge what is right or wrong. Coco and Caleb couldn't start immediately as they had no identified viable business ideas yet. They already had opportunities but no ideas.

2. The teacher can judge whether student's answers are right or wrong given the guiding definitions of business idea and opportunity. Refer student's book 3.1.1.
3. All problems identified in the first column of the above table are business opportunities. Yes, they are because one can have varied business ideas though not all business ideas are viable business opportunities because one must consider different factors in choosing the best business opportunity, for Example personal interests, passion, availability of resources etc. (refer to the learners' book)
4. Refer student's book (3.2) on the factors considered while choosing the viable business idea and opportunity.

2) Learners will suggest different problems among which business ideas can got. E.g., recycling wastes.

3.5. List of Lessons/sub-headings including assessments

No of lessons	Lesson Title	Learning objectives (from the syllabus including knowledge, skills and attitudes)	Periods
1	Concepts of Business, business ideas and business opportunities	<ul style="list-style-type: none"> - Explain the conceptual terms - Identify the qualities of a good business idea - Use different resources to search for business ideas - Recognize that a business idea alone is not sufficient to start a business - Discuss the different sources of business ideas/opportunities - Differentiate different sources of business ideas and business opportunities - Appreciate one's environment as a source of business ideas and opportunities 	2

2	Factors influencing choice of a business opportunity and the	- Describe the factors influencing one's choice of a business idea/opportunity	1
3	Evaluation of Business Ideas	Evaluate different business ideas to come up with a viable business. -Use the SWOT analysis to evaluate business ideas/opportunities -Advocate for the use of SWOT analysis in evaluating the viability of business ideas.	1
End of Unit Assessment & Remediation		To be able to generate viable business ideas	2

LESSON 1: Concepts of Business, business ideas and business opportunities

a) Learning objectives:

- Explain the conceptual terms (business idea, business opportunity)
- Identify the qualities of a good business idea
- Differentiate different sources of business ideas/opportunities
- Recognize that a business idea alone is not sufficient to start a business
- Appreciate one's environment as a source of business ideas and opportunities

b) Teaching aids: Basic materials for a class/ lesson to be conducted:

Desks, Learners books, internet, case studies and any other trustworthy and reliable resources to enhance learning.

c) Prerequisites/Revision/Introduction:

Read the Key unit competence in the syllabus to determine what students will learn know and be able to do by the end of the unit. Look at the action verb, concept and context of each learning objective. This will help you see the skills, knowledge and attitudes embedded in the learning objective. Remember the learning objectives are linked to the key unit competence.

Use K-W-L (What learners already know-What they want to know-What they have learnt) after the introductory activity to assess how much students already know and what they would be interested in learning about business ideas and opportunities.

d) Follow the guidance about the introductory activity.

Activity 3.1 A Reality T.V. Show

Learners in small groups, pairs or individual read and analyze the case study and come up with the Meaning of a business, a business idea and a business opportunity following the instructions given. You may ask two learners to act out the interview as the rest listen and follow.

During the interview activity, make sure everyone is following and actively participating. Those who are not acting may have to listen attentively without disturbing and should applaud the actors after.

Learners share their findings, responses or answers to the activity using an appropriate method such as group presentation, pair-share, or large group discussion. Ensure all learners are given an opportunity to give their views and should be respected.

Harmonize their findings or answers and help them draw conclusions/summary to the meaning of a business, a business idea and a business opportunity. Answer or address any questions or challenges about the activity. Guide them to make notes in their books referring to learners' book.

e) Application Activity 3.1

Learners analyze the given problem, which relates to their community either in groups or in pairs and come with ideas that may result into viable business ideas that will match with identified opportunities. This activity may be given as a research question or homework.

Depending on the purpose of the application activity, choose an appropriate method to assess learners' findings, answers, or responses. Depending on the performance or results, you may decide to give remedial or extension activities.

Possible answers for activity 3. 1 (case study)

a) Business; Is the production, distribution, and sale of goods and services for a profit. (Mushroom growing)

b) A business idea is what one needs to start a business activity on.

From the case study, the sources of business ideas for Rwiyemeza's business activity were listening to the radio, reading newspapers, and watching TV about how different people have succeeded by starting own business activities.

c) A business opportunity refers to a situation or circumstance that can be turned into a profitable business activity.

Some challenges Rwiyemeza faced were competition, unsure market, lack of experience, deciding on turning my business idea into a profitable business, among others.

d) Each learner will provide relative importance and it is up to the teacher to judge and decide which reason is right or wrong. Meanwhile, it is very important to generate business ideas because ideas best guide someone's step to making the opportunities productive. Moreover, it is also important to generate business ideas because business ideas result into business activities which provide further opportunities to owners and community at large. More ideas to why entrepreneurs generate business ideas:

- In order to start own businesses.
- Create own jobs or employment.
- Meet identified needs in the community.
- Solve unmet customer needs and wants.
- To take advantage of existing favorable investment climate.
- For future survival of existing businesses.

e) Refer to the student book (3.1.2) for the characteristics of a viable Business idea

Possible answer to application Activity: 3.1

There are no specific answers for these questions, each individual learner may come up with different business opportunities. The teacher is required to ensure that students do thorough analysis of their communities as he/she coaches them to generate viable business ideas. This activity may be given as a form of homework.

LESSON 2: Factors influencing choice of a business opportunities

a) Learning objectives:

- Describe the factors influencing one's choice of a business idea/opportunity.

b) Teaching aids: Basic materials for a class/ lesson to be conducted:

Desks, Learners books, internet, case studies and any other trustworthy and reliable resources to enhance learning.

c) Prerequisites/Revision/Introduction:

Read the Key unit competence in the syllabus to determine what students will learn know and be able to do by the end of the unit. Look at the action verb, concept and context of each learning objective. This will help you see the skills, knowledge and attitudes embedded in the learning objective. Remember the learning objectives are linked to the key unit competence.

Use K-W-L (What learners already know-What they want to know-What they have learnt) after the introductory activity to assess how much students already know and what they would be interested in learning about business ideas and opportunities.

Follow the guidance about the introductory activity.

d) Activity 3.2

- Invite students to read the activity individually from the student book
- Ask students to share ideas in pairs
- Call some pairs to make presentations (if time allows, you can let all pairs present where possible)
- Provide constructive feedback in terms of supplements

Possible answers (Guidance)

- a) Guide learners to come up a business option that can better work for their respective community. Remind them to properly identify market gaps in their locality before the choice of the business. Learners will give different reasons, so it is up to the teachers to judge what reason is right or wrong.
- b) Look at student's book for reference on the factors influencing the choice of a business
- c) Ignoring to consider those factors would result into the complete failure of the business, providing unneeded products, conflicting with the social norms, government, etc.

e) Application Activity 3.2

- Invite students to read the case study individually from the student book
- Ask students to share ideas in pairs
- Call some pairs to make presentations (if time allows, you can let all pairs present where possible)
- Provide constructive feedback in terms of supplements

Possible answers

Refer to student's book 3.2 for guide

LESSON3: How to evaluate a business idea

a) Learning objectives:

- Evaluate different business ideas to come up with business opportunity.
- Use the SWOT analysis to evaluate business ideas/opportunities
- Advocate for the use of SWOT analysis in evaluating the viability of business ideas

b) Teaching aids: Basic materials for a class/ lesson to be conducted:

Desks, Learners books, internet, case studies and any other trustworthy and reliable resources to enhance learning.

c) Prerequisites/Revision/Introduction: Read the Key unit competence in the syllabus to determine what students will learn know and be able to do by the

end of the unit. Look at the action verb, concept and context of each learning objective. This will help you see the skills, knowledge and attitudes embedded in the learning objective. Remember the learning objectives are linked to the key unit competence.

Use K-W-L (What learners already know-What they want to know-What they have learnt) after the introductory activity to assess how much students already know and what they would be interested in learning about business ideas and opportunities.

Follow the guidance about the introductory activity.

d) Activity 3.3

- Invite students to read the activity individually from the student book
- Ask students to share ideas in pairs
- Call some pairs to make presentations (if time allows, you can let all pairs present where possible)
- Provide constructive feedback in terms of supplements

Possible answers

1)

- how much capital to start with?
- What are my strengths and weaknesses?
- Who are my competitors?
- Are there any opportunities and threats?
- What percentage of the market share will I possess?

2. Strength, Weakness, Opportunities and Threat.

It is a structured planning method that evaluates those elements of an organization, business venture, project.

e) Application Activity 3.3

- Ask students to share ideas in pairs
- Provide constructive feedback in terms of supplements

Possible answers

Refer to student's book 3.3.2 for guide

Skills Lab 3:

For this lab, students will be able to generate viable business ideas

Guidance to the lab: (This lab may be conducted either by inviting the local successful entrepreneur in your class, by visiting the entrepreneur at his/her premises as a whole class or by sending students in their community to interview different entrepreneurs)

i. Build

Using Think, Pair and Share; ask learners to brainstorm on the important information they will gather from the local entrepreneurs. Students may be required to first take notes of the questions to ask in case the entrepreneur arrives or when they reach at his/her premises.

Provide necessary guiding instructions on what they will do when interviewing the entrepreneur

Let learners ask for clarifications where need be

Emphasize to the learners that this lab will help them to select better and viable business ideas for the businesses they intend to start or in the club or back at home. They should be able to take advantage of available opportunities and select business ideas which are in line with customers' needs.

ii. Practice

Learners will interview the entrepreneur as they avoid asking him/her similar questions 99 they should avoid unnecessary repetitions.

Each pair/ individual student should take noted on the finding from the interview and their views after reflections: they should focus on:

1. Possible business ideas they feel they can profitably implement
2. Challenges they may face and how they think they can overcome them

Move around the pairs and make a follow up whether the learners are on track.

Moderate the conversations to allow learners capture more experience from the entrepreneur

iii. Presentation

Communicate the appropriate time for this activity to be done.

Choose the appropriate method they can use to present their findings for example gallery work or one group presenting at a time.

During presentations encourage learners to challenge/supplement each other.

Ask them to recommend the most viable business idea each one may pursue.

Students should keep their work in the portfolio notebooks or hand on the present boards for future reference.

iv. Conclusion

Use 'a small ball' to make conclusion. Throw the ball randomly to different learners to answer questions on what they have learnt.

Emphasize the following by writing them on the notice board.

- Selecting a viable business idea is key to a successful business.
- Products should be able to solve community problems.
- The products made should not have negative effects on the environment.
- Business club should try as much as possible to be a solution to the community than a problem

v. Portfolio Assignment:

As a take home of this lab, provide learners a portfolio assignment (from the learner's book) which is meant to test the skills learners have attained from this lab. Remember this is an individual activity and thus each learner must do it.

3.6. Additional information

Given time constraint for this lesson, students were only given key items relating to business ideas and opportunities. In case the teacher finds an opportunity he/she can share the following information with students as they will contribute much to their ability to properly set viable business ideas.

- Basis of identifying business opportunities

Business opportunities will be identified basing on:

- Prevailing consumer/customer needs
- Available resources in the community
- Idle resources such as wood off-cuts, plastic waste, waste papers, scrap metals, waste food, animal remains, human residues, etc...
- Types of customers such as loyal customers, wandering customer, need based customers, and on types of customers based on their age, profession, gender, location, hobby, beliefs, etc...

- Events such as social events (graduation ceremonies, hero's day, sports days, ...)
- Existing business such as filling in the gaps that exist on the market, copying existing businesses, creating some innovation on others ideas, etc...
- Identifying business opportunities based on consumer/customer needs

A consumer: is a person or institution that makes final use of business products to satisfy his or its needs. A consumer is therefore a final user of the product whereas a customer buys the product for business purposes.

Needs: As we will see in unit 5, a need is defined as a basic thing that an individual must have in order to survive as a human being. Dr Abraham Maslow/observed that these needs are in a hierarchy and the satisfaction of one leads to the desire for the other.

Maslow grouped these needs as follows:

- Basic / physiological/ fundamental needs e.g. Food, water, air, shelter, etc...
- Safety/security needs
- Social/ love and belongingness/ psychological needs
- Esteem/ego needs
- Self-actualization

3.7. End of unit 3 assessment

Possible answers

1. a &b) refer to student's books for the definitions on Business ideas and opportunities
2. Guide learners on how availability of different resources creates business opportunities. (Having looked at this in the unit.)
3. yes; help learners to suggest some community problems and find out the businesses that can be created.
4. Refer to student's book (3.3)

3.8. Additional activities

3.8.1. Remedial Activities

1. What do you understand by the terms: Business, Business idea and Business opportunity?
2. Give examples of any business idea that may come into your mind
3. What is SWOT
4. How the business idea itself does not sufficiently help one to start a business?
5. Describe the factors influencing one's choice of a business idea/opportunity in your community

Possible answers

1,2,3 & 4: The teacher will judge the correctness of the responses provided by the students and give appropriate support and feedback

5. Identified market need or gap– the nature of the identified need or challenge in the market or customer need will influence an entrepreneur's

Growing market– most people do not want to avoid the hustles of starting a new business. So, most people will choose ideas or opportunities that easy for them their businesses while others may choose an idea that gives them a chance to be creative.

- Low funding requirements– the amount of funding required to implement a business opportunity may influence one's choice of a business idea. Most people will choose opportunities that do not involve of funding in relation to profits.
- Vision or goals– the choice of a business opportunity will greatly depend on the vision or goals of the entrepreneur. These could be short term or long-term goals
- High profit margins– of course, on every entrepreneur's mind is profit. The profit margin expected from the opportunity will greatly influence one's choice.
- Not easily copied– every entrepreneur of course wants to protect their ideas, protect intellectual property and developing a brand reputation. So, entrepreneurs are likely to choose ideas/opportunities that cannot be easily duplicated in the market at least in the short run.

3.8.2. Consolidation activities

Suppose that after evaluating the viability of your business, you discovered that your strengths are stronger than your weaknesses.

1. Propose any four tips or techniques you can use to maintain your strengths so as to keep outcompeting the rivals
2. Given enough resources, suggest any five viable businesses, you can run if you identify a group of people of Self-esteem needs

Possible answers

1. Tips to maintain your company's strengths.

- **Be truthful.** It probably goes without saying, that if you are not truthful during this process, the entire analysis won't be effective.
 - **Allow for feedback.** As you are brainstorming strengths, make sure your employees are comfortable offering their feedback. You may not agree on some strength, but it's best to talk to them through.
 - **Stay focused.** You want to hear many viewpoints, but when you get several people in a room, time can get away from you. Keep the group on task.
 - **Keep your list of strengths handy.** Keep your list in an accessible spot. You'll analyze all of the data that you collect over the next few days at the end of the week.
2. Viable businesses that one can run in a society of self-esteem individual include the following among others:
- Jewelry shops, car trading, selling expensive items like tablets, smart phones, watches, rings, ...

3.8.3. Extended Activities

1. Discuss the different sources of business ideas/opportunities in your community.
2. Identify problems in the same sector that affect the community and explain the various business that can be created by providing specific solutions to the mentioned problems.

Possible answers:

1

- Personal interest in searching for new things/Hobbies
- Franchises (improving upon an existing idea)
- Mass media (newspapers, magazines, TV, Internet)
- Business exhibitions
- Surveys and research
- Customer needs, advice, complaints, preferences, wishes, etc.
- Changes in society
- Brainstorming
- Being creative
- Prior jobs
- identifying a need or a gap in the marketplace
- Use skills as a foundation for a business.

2. There is no specific answer on this activity. Since learners will provide different views the teacher must judge whether the answers are correct/ realistic or not realistic.

UNIT 4

TECHNOLOGY IN BUSINESS OPERATIONS

4.1. Key unit competence:

To be able to choose an appropriate technology for a business

4.2. Unit Prerequisite

Learners were introduced to ICT, the modes of electronic payment in ordinary level and to ICT in business in Senior 4. All this prior knowledge, skills, attitudes, and values should enable learners to justify the role of technology in business operations and choose an appropriate technology to use.

4.3. Cross-cutting issues to be addressed

The examples below are some of the cross-cutting issues to be addressed throughout the unit. Learners should discuss technology relating to businesses in the local environment or community.

Gender education: In this unit, both males and females must be put into consideration. Learners should know that regardless of gender, technology is vital and has to be used in the business operations. They can use any type of technology, tools of ICT that is appropriate for their businesses.

Environment and sustainability: All technology chosen should be sustainable and should try as much to protect the environment. Learners should be able to make decisions on the type of technology, taking into consideration the environment, and how sustainable technology is. The technology chosen should not focus only on the profitability of the company, but also look at its effects on the natural, social and economic environment.

Inclusive education: There should be no discrimination based on gender, disability, race or background, economic or social setup when it comes to the use modern of technology.

Peace and values education: Living in peace and harmony with others should be emphasized to the learners needs. Learners should appreciate that the introduction of technology has done more good than harm in business operations today. When technology is used properly with care it can help people live peacefully.

Financial education: You need to emphasize to students the need to manage properly their finances when it comes to buying different types of technology to be used in business. They should buy what is needed and appropriately use different types of technology.

Refer to other cross cutting issues as identified in the curriculum framework.

4.4. Guidance on the introductory activity

This introductory activity is intended to:

- Attract the learner’s attention on the various production techniques used in business.
- To help the teacher assess the learner’s prior knowledge, skills, attitudes, and values on the importance of technology in business.

The teacher asks learners to form groups or pairs. Then the learners are provided with the introductory activity with clear instructions. Learners will make an analysis on the photos provided in groups or pairs. Ensure everyone is following and actively participating.

They will try to give possible answers as the facilitator moves around to monitor where necessary.

Learners present their findings, responses or answers through an appropriate method such pair-share, small group presentations on the introductory activity. Encourage different learners from the groups to share the group’s work to avoid just a few learners dominating. Also encourage to be active listeners when a group or a pair is presenting their work. Encourage learners to appreciate each other’s work, especially the presentation. Appreciate the team’s presentations and remind them that this activity is an introduction to the role of technology in business.

Possible answers to the introductory activity:

1.
 - a) There are no specific answers to this question. After scanning their environment, each student will provide a business that is relative. However, it is up to the teacher to judge and see which businesses can really be built up on the ICT.
 - b) Refer to the student’s book for the meaning of ICT, Technology and E-Commerce
 - c) Since this is an open question, the teacher should judge what is right or wrong about the impact of technology in business today

2. Refer to the student's book for them difference between different types of technology
3. There are no specific answers to this question. It is up to the teacher to judge and see which suitable technology is fit for the club. Learners may choose either capital intensive, Labour intensive or intermediate technology.

4.5. List of lessons (including assessment)

No	Lesson title	Learning objectives (from the syllabus including knowledge, skills and attitudes):	Periods
1	Meaning and types of technology	<ul style="list-style-type: none"> – Explain the term “technology” – Distinguish between capital, labor intensive and intermediate technology – Advocate for appropriate technology for different activities 	2
2	Factors considered when choosing appropriate technology	<ul style="list-style-type: none"> – Identify factors considered when choosing technology for the business – Select appropriate technology for their businesses 	1
3	Role of ICT in business and problems associated with its use	<ul style="list-style-type: none"> – Explain the role of ICT to enhance the effectiveness in their business – Use ICT tools like phones, ATM cards, computers, etc. for business operations 	2
5	ICT as a source of business opportunities & E-commerce	<ul style="list-style-type: none"> – Find out various business opportunities that can be started using ICT – Acknowledge ICT as source of business opportunities 	1
6	End Unit assessment and Remediation		2

LESSON 1: Meaning and types of technology in business

a) Learning objectives:

- To explain the term “technology”
- To distinguish between capital, labor intensive and intermediate technology
- To advocate for appropriate technology for different activities

b) Teaching aids:

Basic materials for a class/ lesson to be conducted: Learners books, internet and projector, textbooks, resourceful persons and any other trustworthy and reliable resources to enhance learning.

c) Prerequisites/Revision/Introduction:ss

Read the Key unit competence in the syllabus to determine what students will know and be able to do by the end of the unit. Look at the action verb, concept and context of each learning objective. This will help you to see the skills, knowledge and attitudes embedded in the learning objective. Remember, the learning objectives link to the key unit competence.

Use K-W-L (What learners already know-What they want to know-What they have learnt) after the introductory activity to assess how much students already know and what they would be interested in learning about technology in business operations.

d) Activity 4.1 learner’s book

Learners analyze the question and using their knowledge of entrepreneurship obtained in O 'level and research made from the school and community around. They describe how technology has helped in the efficiency of people life.

Possible answers include.

1. There is no specific answer for this question since learners will give different alternative answers. The teacher should judge on the correctness of their answers
2. There is no specific answer for this question since learners will give different alternative answers about what technology to use and why. The teacher should judge on the correctness of their answers
3. The term **“Technology”** means the use of knowledge, tools, techniques or specific methods to solve a problem or serve a purpose.

e) Application activity 4.1

Possible answers for application activity activity 4.1

1. Learners will explain differently how intermediate technology is applied. The teacher shall guide and provide constructive feedback to learners.
2. Learners will respond the question using this table:

Human activity area	Type of Technology to use	Why?
Cultivation	E.g.: Labour intensive	
Cloth making (Tailoring)	Intermediate	
Secretariat	Intermediate	
Transportation	Capital	
Milking	Labour	
Mining	Capital intensive	

Learners will give reasons why they have chosen that type of technology. The teacher will judge and give necessary clarification on different types of technology that can be used in the given human activities.

LESSON 2: Factors considered when choosing appropriate technology

a) Learning objective:

- To identify factors considered when choosing technology for the business
- To select appropriate technology for their businesses.

b) Possible methods: Think-pair-share; small group discussion, brainstorm, field study, gallery walk, interview with entrepreneurs in the community, research in the library, research on the internet, etc.

c) Prerequisites/Revision/Introduction:

Read the learning objective to determine what students will know and be able to do by the end of the lesson. This will help you see the skills, knowledge and attitudes embedded in the learning objective. Remember, the learning objectives are linked to the key unit competence.

Learners briefly make a recap of the previous lesson. Help learners link the previous lesson to the current lesson.

d) Activity 4.2

Using an appropriate method, such as small groups or pairs learners investigate from the community or from their students business club and find out the factors considered while choosing an appropriate technology. The teacher can also invite a resource person to address to learners. Ensure a balance among the groups or when pairing and that the instructions are clearly understood.

Make a follow up as learners do the activity. Ensure everyone is actively participating and address any challenges/issues identified.

Learners share their findings through an appropriate method such as group presentation, pair-share, written reports, whole class presentation. Ensure learners of different needs and abilities are given the opportunity to share or present their findings.

Harmonize their findings or answers and help them draw conclusions/summary

Possible answers to the activity 4.2

There is no specific answer for this activity. It is up to the teacher to judge student's responses whether they are right or wrong depending on the findings from the investigation.

However, the factors considered while choosing the appropriate technology, may include:

Social benefit: The technology should have social benefits to the country, in terms of job creation, as well as not having a lot of social costs like pollution (air, water and noise).

Health impact on users: The technology should put into consideration the health of the users as well as the population around. Some technology for example machines and mobile phones make vibrations which affect the health of the people leading them to get cancer related problems.

Ease of use and adaptability: The technology chosen should be simple to use and easy to learn and adopt. It should be able to accommodate the skills of the available labor in a given country.

Productivity and profitability: The technology chosen should be able to yield profits for the business as well as efficient and effective use of resources to produce much output.

Cost effectiveness: The technology chosen should be affordable to the company and should be able to yield more returns for the capital invested.

Institutional needs: The technology should be able to address the needs of the institution or company where it is being used. For example, banks need more capital-intensive technology in form of information communications technology as compared to labor intensive technology.

Environmental friendly: The technology must comply with the environmental laws; thus, it should not degrade the environment. This is very common with industries which use capital intensive technology. Etc.

2. guide learners on the advantages of using a given type of technology.

e) Application activity 4.2 in learners' book

Learners read and analyze the application exercise either in groups or in pairs.

Depending on the purpose of the application activity, choose an appropriate method to assess learners' findings, answers, or responses. Depending on the performance or results, you may decide to give remedial or extension activities

Possible answers:

- a) Learners will assess their environment and describe the role of technology towards the society.
- b) Learners will discuss the possible negative effects that their business club has caused to the environment and propose an appropriate technology. E.g of effects include noise pollution, physical health effects such as eye strains, psychological effects etc.
- c) Advise their colleagues /club members on the rationale behind comparing the cost of the technology vs its benefits.

The teacher should guide learners and provide necessary feedbacks. Answers to the above can be found in the student's book on the factors to be considered while choosing an appropriate technology and the role of ICT in business operations.

LESSON 3: Role of technology & ICT tools in business and Problems associated with its use

a) Learning objective:

- To explain the role technology and ICT to enhance the effectiveness in their business
- To use ICT tools like phones, ATM cards, computers, etc. for business operations

b) Teaching aids: Basic materials for a class/ lesson to be conducted: Learners books, internet, newspapers, textbooks, computers, Billing machines, or magazines and any other trustworthy and reliable resources to enhance learning.

c) Prerequisites/Revision/Introduction: Review the learning objective to determine what students will know and be able to do by the end of the lesson. This will help you see the skills, knowledge and attitudes embedded in the learning objective. Remember the learning objectives link to the key unit competence.

Lead a review of the previous lesson on characteristics considered when choosing appropriate technology for a business, handle any homework or assignments, and ensure a conducive learning environment. Help learners link the previous lesson to the current lesson.

d) Activity 4.3 learner's book

Using an appropriate method, learners in reference to their community, and looking at fully developed businesses will discuss about the role of technology & ICT tools in business today and ICT tools used in various businesses. Learners will also investigate and discuss about the problems associated with the use of Information Communication Technology in business. Lastly, students will provide solutions to the mentioned problems.

The teacher should move around the teams to ensure that all students participate in the discussions and give them necessary feedbacks on the role of ICT and the problems associated to its use.

Possible answers (Guidance)

For answers to the activity, read through the students book on 4.3, Role of ICT in business and problems associated with its use

1)

- Technology helps to increase productivity of the labor through collaborating with each other hence speeding up the work.
- It helps to keep track of records with the use of the accounting software.
- Technology can be used for security purposes thus reducing threats of losing financial data and vandalism to unknown persons. For example, by using passwords on computers.
- Technology improves the efficiency of businesses. The use of mobile phones, printers and E-commerce which eases the work in business.
- ICT enables easy access to funds through the use of ATM cards, such as debit cards, credit cards, and electronic money transfer etc.
- It also enables better decision making as entrepreneurs can get information at the right time.

2) Email, automated teller machine, Tap & go, debit card, CCTV cameras, electronic safes

3) refer to the student book for problems associated with ICT in business.

e) Application activity 4.3 Learner's book

- a) Learners will discuss in pairs, about how new technologies business activities for their business club particularly. such enhances efficiency, speeds up work, cost effectiveness, communication is easier etc.
- b) They will also discover what might be their cost if they do not adopt to technology in their business club.

The teacher must provide sufficient support to learners to enable them to understand not only the roles of ICT but also to provide solutions to the identified challenges.

LESSON 4: ICT as a source of business opportunities & E-commerce

a) Learning objectives:

- Find out various business opportunities that can be started using ICT
- Acknowledge ICT as source of business opportunities

b) Teaching aids: Basic materials for a class/ lesson to be conducted: Learners books, internet, newspapers, textbooks or magazines and any other trustworthy and reliable resources to enhance learning.

c) Prerequisites/Revision/Introduction: Review the learning objective to determine what students will know and be able to do by the end of the lesson. This will help you see the skills, knowledge and attitudes embedded in the learning objective. Remember the learning objectives link to the key unit competence.

Lead a review of the previous lesson on the role of ICT in business operations and handle any homework or assignments and ensure a conducive learning environment. Help learners link the previous lesson to the current lesson.

d) Activity4.4:

Guide learners to think critically and come up with Business opportunities related to ICT.

Possible answers:

The following list provides a range of potential ICT opportunities available in Rwanda:

1. Agency banking
2. Mobile money, Airtel money services
3. Offering irembo services,
4. Tax declaration services, Preparation of financial statements for clients (special for accountants)
5. Develop Accounting software.
6. Starting training programs for people who want to use computers and such technology in their business enterprise, etc.

e) Application activity 4.4.

1. Learners describe how new technologies affect business activities either in groups or in pairs.
2. Depending on the purpose of the application activity, choose an appropriate method to assess learners' findings, answers or responses
3. Depending on the performance or results, you may decide to give remedial or extension activities.

Possible answers for application activity 4.4

- a) There is no specific answer for this question. Learners will give varied possible answers. As the teacher you will have to judge if their views are correct or wrong.
- b) This too will depend on each student.
- c) Students shall defend how the answers provided in (a) above have boosted the Rwandan economy.

Skills Lab 4:

Guidance on the lab: This activity can be given as an assignment just to enable students have chances to learn from real & existing businesses. However, you can also invite the entrepreneur in your class or simply visit him/her as a whole class.

Objective: To be able to choose an appropriate technology for their business ideas

Build:

Through research and use of the prior knowledge that learners have on technology, ask them to respond to the following questions about technology as a think pair share activity.

- What technology is used in business?
- How does technology improve on business performance?
- If they are to visit an existing business that uses different technologies, what main questions can they ask to the entrepreneur?

Students give possible answers. Give then instructions that will guide their interview with the entrepreneur.

Practice: Group activity

After the interview, learners are expected to come up with different reasons why some technologies were chosen by entrepreneurs, the challenges encountered while using them and explanations of what appropriate technology they will use for their respective business ideas. Ask learners to group themselves according to similar technology chosen.

The teacher moves around the groups guiding the discussions and supporting learners accordingly as they answer the given questions.

Guiding facts as per questions given:

From the student's book, read on the types of technology used in business, the factors considered while choosing them and the problems attached to using them.

The teacher guides the presentations through question and answer approach to insight more understanding in the learners. Also give comments or feedback to the groups/ individuals after every presentation.

Presentations:

Each team presents summarized findings as from the questions. The students write in their portfolio books during presentations as they complement each other and ask for clarifications from the teacher where necessary.

They post their presentations on the present board. Individual key notes are kept in their respective portfolio notebooks.

Conclusion:

The teacher concludes by emphasizing that the appropriate technology is the one people should understand further since it is the one which matches with the existing conditions of the user. It thus fits in the conditions existing and responds to the needs of the society at that time. Therefore, Capital intensive technology can be appropriate for person A while for person B, is inappropriate.

Portfolio Assignment:

Each learner is required to look at the available ICT tools that are used in the school community and note/ write how they can be used in the Students Business Club for better performance in the product making.

4.6. Additional information

As the purpose for additional information for the teacher, the following information serve to enrich student's understanding, skills and values in the context of the unit

under consideration. The teacher should judge what is most important for students and share with them as time allows.

Technological risks are risks facing a firm associated with technology, such as whether a new technology will work or be reliable. Companies adapting new technology are always at risk of machine failure, computer system collapse, & software bugs, etc...

Technology transfer: This refers to the movement of technology from one country or location to another. It involves the process through which the knowledge about certain production processes move or imported from one place to another.

Importance/ Benefits of technology transfers include:

- It helps to earn income for the country importing it.
- It leads to the development of new skills through innovation
- Social and cultural transformation
- Helps in the exploitation and proper use of limited resources
- Better quality products
- Increase in productivity/ efficiency in economy
- Factor for international co-operation, etc...

Problems of technology transfers in Least Developed Countries

- Lack of required skills
- Protectionism of more developed countries
- Lack of capital
- Lack of strategic raw materials
- Small size of the market
- Inappropriateness of technology (Due to poor/ unsuitable conditions of the importing country)

Beside the roles provided in the student's book, the following are the detailed roles of ICT in :

– Financial management

ICT allows to the business having access to the account software that monitors revenue and costs and generate reports on the current financial status as well as historical to enhance data analysis and inform division making to the management. ICT helps in the following:

- **Secure information.** Important information can be backed up on external servers making information more secure than keeping paper files and documents.
- **Easy mobility of information.** It's easy to move information from one department to another or outside the business by use of emails and fax machines
- **Book keeping.** Computers can balance the business books much more quickly and accurately than using manual system. This involves use of software like Tally, Sage, quick books, etc.
- **Security.** ICT ensures security through computerized access systems like computer operated safes and money counters.
- **Filing of documents.** Business documents are filed electronically which is cheaper and safer.
- **Easy retrieval of files.** Valuable information can be retrieved faster by searching in the computer system, which makes work easily accessed.
- **Access to funds.** ICT enables easy access to funds through use of ATM cards, such as debit cards, credit cards, and electronic money transfer etc.

– **Publicity**

ICT permits interactions between producers and consumers that allow to attain the consumer satisfaction and the producer is at the optimum level of profit throughout advertisement on different channels and again the business is getting known wherever on the world. Publicity can be done through telephone surveys, E-mail, Web sites, Chatting, Blogging, SMS, Social networking, ... ICT in publicity helps in the following:

- **Telephone systems.** Telephones are used to communicate to potential customers about business products as well as innovations and inventions
- **Electronic mail.** Messages are sent and received between the business and customers which makes communication very fast and convenient.
- **Websites.** A website is a collection of web pages. Web pages may contain text, images or videos. Businesses use websites to provide information to customers.
- **Chatting.** Chatting online involves two or more people exchanging short messages across computer network. This can be used for immediate inquiries about prices, quality of the products, color as well as knowing the latest products on the market.

- **Blogs.** A blog is a kind of website. It's used for regular information that someone wants to communicate. When an author posts a blog, visitors to the website who see that blog can comment and share such comments with other people that visit the website. Blogs contain text, pictures and links to other web pages.
- **SMS.** (short message service). SMS can be sent as a reminder to customers, to announce new products and other purposes. SMS is cheap and easily accessible on mobile phones.
- **Social networking.** Social networks such as WhatsApp, twitter, Facebook, Google, Instagram, yammer are useful tools to keep in touch with customers, suppliers and the general public.

– Record-keeping

ICT provides some packages, databases, to hold human resources records, stock details and permits a quick data processing in short period of time.

– Electronic commerce (e-commerce/online business)

ICT describes the process of buying, selling, transferring, or exchanging products, services or information via computer network including internets. E-commerce (electronic commerce or EC) is the buying and selling of goods and services on the Internet, especially the World Wide Web.

Advantages of e-commerce

- It is easy to start and manage an online business.
- A business can reduce the costs of handling sales inquiries, providing price quotes, and determining products availability. This means that the costs are low and better quality services.
- It helps consumers to buy products anywhere in the world.
- Electronic payments of tax refunds, public retirement, and welfare support cost less to issue and arrive securely and quickly when transmitted over the internet.
- Electronic payments can be easier to audit and monitor than payments made by cheque, providing protection against fraud and theft losses.
- It can also make products and services available in remote areas.
- It is faster in buying and selling of goods and services.
- Low operational costs and better quality of services.
- There is no need of physical company set-ups in terms of buildings.

- Buying and selling is done 24hours/7days.
- It is cheaper. Sellers and buyers reach each other without the physical movement of the buyers to the shop.
- Virtual goods like music, electronic books can be delivered instantly.
- IT helps in monitoring customers purchases so that you can stock the right products in the right quantities at the right time.
- It improves stock control Eg: The use of Bar code readers helps the shop to know what the remaining stock is.

4.7. End Unit 4 Assessment

1. Advantage & Disadvantages of Labor-intensive technology

Some Advantages include but not limited to:

- It generates more employment opportunities
- Labor is more mobile than capital technology
- It does not require a lot of skills
- It helps to improving the standards of living
- Some disadvantages include but not limited to:
 - Inferior quality products are produced
 - Limited hours of work
 - It requires a lot of supervision
 - Lack of uniformity in production
 - Human capital is subject to disputes

2. I) Example E-shops available in Rwanda include but not limited to:

- **DMM HeHe:** This is an online shopping platform that works with local businesses to deliver groceries to clients. All buyers can access the platform via www.hehe.rw
- **Shop Mart:** Shop Mart is another online shopping platform that particularly delivers fruits and vegetables together with dry goods.
- **Kasha:** Kasha is an E-commerce platform that enables primarily women but also men access a variety of health products and self-care with a guarantee of confidentiality, quality and convenience.
- The products include sanitary pads, emergency contraceptive pills, soaps, lotions among others.

- **Vuba Vuba:** This is the local food delivery company that commenced its operations in Rwanda
- **Murukali:** Murukali delivers groceries, office equipment and day to day necessary products.
- **Rushfood:** Rushfoods is another online platform that compliments the local food distribution chain.
- **Olado:** Olado is another E-commerce platform that links up buyers and sellers to do business online. They only facilitate transactions related to electronics, sports equipment, home appliances and packed foods.
- Etc
 - ii) Merits and demerits of using e-commerce: Read students book on 4.4 for the advantage and disadvantage of e-commerce.
 - iii) There is no specific answer to this question, the teacher is required to judge on the technologies proposed by students and decide on their correctness.

3. Importance of ICT in Financial management of the business club: Each learner will give relative answer but as the teacher you will guide them to understand that ICT greatly affect the efficiency of the financial resource management. The following ICT tools are used in the financial management: Computers, calculators, money counting machines, Automated Teller Machine (ATM), computerized accounting software's (Quick books, Sage line 100, Sage pastel, Tally, etc) electronic safes etc

4.8. Additional activities:

4.8.1. Remedial activities

1. Describe the roles of ICT in business operations
2. Explain the problems associated with the use of ICT in business operations
3. Name any five ICT tools known to you

Possible answers

Refer to student's book on 4.3 for roles and problems associated with ICT

4.8.2. Consolidation activities

1. Why is information communication technology important in a business organization? Discuss
2. Explain the advantages of using e-commerce while carrying out business

Possible answers

Refer to student's book on 4.3 and 4.4

4.8.3. Extended activity

Describe the various businesses that can be started basing on Information Communication Technology.

Possible answers

The following are few examples of businesses that can be started basing on ICT

1. Develop and design websites for individuals, organizations and companies.
2. Selling ICT equipment's like power cables, phones, network cables, tablets, laptops etc.
3. Repair ICT equipment's like laptops, computers, and mobile phones.
4. Starting and managing online shops.
5. Starting training programs for people who want to use computers and such technology in their business enterprises.
6. Mobile money, Airtel money services etc (Potential)
7. Offering irembo services, bank agency etc (Potential)
8. Manage databases for different companies
9. Providing delivery services to other online retailers.
10. Tax declaration services, Preparation of financial statements for clients (Potential)
11. Create companies that train people about information technology
12. Develop Accounting software
13. Multimedia publishing
14. Computer networking
15. Graphics designs
16. Manufacturing or product designs

UNIT 5

BASIC ECONOMIC CONCEPTS AND IMPORTANCE OF ECONOMICS IN ENTREPRENEURIAL ENVIRONMENT

5.1. Key unit competence:

To use the basic economic concepts in daily entrepreneurial activities

5.2. Unit prerequisite

In S1, Unit 4 (concept of needs, wants, goods and services), students studied the relationship between needs and wants, goods and services, and scarcity, choice and opportunity cost. This background will enable students learn basic economic concepts and importance of Economics in entrepreneurial environment.

5.3. Cross-cutting issues to be addressed

Note: The examples below provides guidance on how to address cross-cutting issues throughout the unit; but this does not mean that they are the only ones. Teachers can address and give learners opportunities to discuss all the crosscutting issues where possible taking consideration of their environment or community around them.

- **Peace and values education:** The teacher should handle class environment in an orderly and peaceful manner,
- **Inclusive education:** The teacher should engage all students in class activities and discussion without any form of discrimination.
- **Gender education:** The teacher should use gender responsive language by not harming or minimizing any gender in his/her speech and examples given in his or her explanations. The teacher should also bear in mind that all students (girls and boys) have equal opportunities and rights to study. When forming group activities, assigning tasks and responsibilities, asking questions, and giving feedback a teacher should include both girls and boys.

Refer to other crosscutting issues as identified in the preliminary pages of the teacher's guide and curriculum framework.

5.4. Guidance on the introductory activity

- Form manageable groups of 4 or 5 students. (The number of group members may change according to class situations)
- Invite students to read the case study from student book, share ideas and then answer related questions
- Guide students' discussions
- Invite groups to present their discussion findings
- Supplement groups' presentations and link the answers to the new lesson

Possible answers

1. For the meaning of needs, wants, choice, preference scale, supplementary goods, and substitute goods, refer to the students' books 5.3.10 for guidance
2. The relationship between scarcity, choice, and opportunity cost simply explained as follows: scarcity leads to choice, and choice creates opportunity cost.
3. Mutoni advised Kagabo to replace some of the goods because his financial resources were scarce/ not enough for him to buy all he wanted to buy. So, he had to make a choice.
4. Setting priorities by Kagabo when shopping would allow him to buy the most needed goods first, and the least needed goods last. All this should always fit his shopping budget.
5. Creating a preference scale has the following importance in general:
 - **Ranking of needs:** Scale of preference helps us to rank our needs or wants in order of their relative importance.
 - **Financial prudence:** Scale of preference does assist in managing our finances properly
Identification of highest.
 - **Priority:** Scales of preference assists individuals to identify quickly the most importance needs among others.
 - **Rational choice:** Scale of preference assists individuals, firms and governments to make rational choices in the list of wants.
 - **Efficient utilization of limited resources:** Scale of preference also helps individuals to make efficient utilization of available resource.

- **Optimum allocation of resources:** Scale of preference facilitates optimum allocation of resources.
 - **Maximization of satisfaction:** Scales of preference enables economics agents to maximize their satisfaction.
6. Yes, she did.
 7. Here, you have to consider all the answers from the students. It may surprisingly happen that a student answers that he/she is not willing to study Economics. You should provide career guidance assistance in this situation.
 8. Kagabo would have made a preference scale to meet family priority of needs.

5.5. List of lessons/sub-heading

	Lesson title/ Sub-heading	Learning objectives (from the syllabus or set according to the lesson title)	Number of periods
1	Meaning, origin and branches of Economics	– Explain the term “Economics”, its origin and branches	4
2	Importance of Economics	– Explain importance of studying economics. – Appreciate the role of economics in influencing entrepreneurial decisions in community	3
3	Basic economic concepts	– Explain the basic terms used in economics. – Explain the basic economic concepts in relation to the entrepreneurial environment – Use economic terms appropriately when holding entrepreneurial discussions – Embrace the use of economic concepts in daily entrepreneurial activities – Propose business ideas based on society’s needs and wants	5

		<ul style="list-style-type: none"> - Analyze the role of various economic systems towards producing a conducive entrepreneurial environment - Describe the tasks performed by an economic system 	
End Unit Assessment & Remediation		To be able to apply the basic economic concepts in daily entrepreneurial activities	3

LESSON 1: Meaning, origin and branches of Economics

a) Learning objective:

- Explain the term “Economics”, its origin and branches

b) Teaching resources

Flip chart, chalkboard, markers, pens, magazines

c) Prerequisites/Revision/Introduction (guidance on how to start a lesson)

This is the first lesson. It seems small but it is allocated 2 periods because, being the introduction to the unit and more so to Economics as a new subject to them, students have to be given some ample time to get introduced to Economics as a subject and used to modalities of discussing economic issues. However, the teacher must be aware of time management.

The teacher should guide the students to find out the meaning of Economics, its origin, and branches of Economics. This is done by asking them to first give their own views on what they think is Economics then after, allow them search on the meaning, origin, and branches of Economics from the textbook or internet, as they compare with what they had in their minds.

d) Learning activities

Activity 5.1

- Invite students to read the case study individually from the student book
- Ask students to share ideas in pairs
- Let learners express themselves on what they think is economics. Respect their views because it is what they think.

- Provide constructive feedback in terms of supplements (here, you share with them the expert view.)

Possible answer

- i) Refer to the student's book 5.1.1
- ii) Refer to the student's book 5.1.1

Link the students' answer with the new lesson.

e) Application activity 5.1.

- Ask students to read the scenario individually. Then let them share in pairs
- Invite randomly selected pairs to present their findings to the entire class
- Give opportunity to groups which did not present to supplement
- Give supplement (explain to student why the term “elasticity” is suitable to fill the sentence.

Possible answer

- i) Economics
- ii) Macroeconomics..... Microeconomics
- iii) Scarce resources
- iv) Macro economics

LESSON 2: importance of Economics

a) Learning objectives:

- Explain importance of Economics.
- Appreciate the role of economics in influencing entrepreneurial decisions in community

b) Teaching resources:

Flip chart, chalkboard, markers, pens, pictures, field trips

c) Prerequisites/Revision/Introduction:

Students studied the meaning of Economics, its origin and branches in the previous lesson. This background will help them to learn the importance of Economics.

d) Learning activity 5.2

- Form manageable groups of 4 or 5 students
- Ask students to read the activity individually, and then ask one student to read loudly. Help students/groups to understand the activity clearly.
- Instruct students to work on the activity in groups
- Invite randomly selected groups to present their findings to the entire class (Gallery walk method can be used)
- Give opportunity to groups which did not present to supplement
- Share the expert view/give constructive feedback in form of supplement

Possible answer

Refer to the student's book. Consider each and every student's answer because they may give different examples.

e) Application activity 5.2

- Ask students to read the activity individually, then ask one student to read the activity loudly. Make sure every student understands the activity clearly, and what he or she is expected of.
- Ask students to do these activities as homework
- When students come back to school, call some students present their answers
- Give opportunity to some students who did not present to supplement
- Provide supplements

Possible answer

Refer to the student's book. You can also use the following to supplement on the textbook:

- Encouraging citizens to start their own jobs
- use of progressive taxation
- encourage people to save
- free education

Raise minimum wage

LESSON 3: Basic economic concepts

a) Learning objectives:

- Explain the basic terms used in economics.
- Explain the basic economic concepts in relation to the entrepreneurial environment
- Use economic terms appropriately when holding entrepreneurial discussions
- Embrace the use of economic concepts in daily entrepreneurial activities
- Propose business ideas based on society's needs and wants
- Analyze the role of various economic systems towards producing a conducive entrepreneurial environment
- Describe the tasks performed by an economic system

b) Teaching resources

Flip chart, chalkboard, markers, pens, magazines

c) Prerequisites/Revision/Introduction

d) Learning activities

In senior 1 (Unit 4: Concept of needs, wants, goods and services), students have studied different types of goods, relationship between needs and wants, goods and services, scarcity, choice and opportunity cost. In senior 2 (Unit 4: Markets), students have studied types of markets, and relationship between demand and supply. This background will help them to learn the basic economic concepts

Activity 5.3

- Invite students to read the case study individually from the student book
- Ask students to share ideas in pairs
- Invite randomly selected pairs to present their answers
- Provide constructive feedback in terms of supplements

Possible answer

1. Refer to the student's book 5.3.1
2. Refer to the student's book. Consider each student's answer. 5.3.3
3. Refer to the student's book. Consider each student's answer because there is no specific as students come from different areas where different economic activities might be practiced.5.3.2

Link the students' answer with the new lesson.

Exercise about needs and wants

- Form manageable groups of students
- Ask students to read the case study individually from the student book and answer the questions in groups.
- Invite randomly selected groups to present their answers
- Provide constructive feedback in terms of supplements

Possible answers

- a) Based on **Munana's** scenario in the activity, his **needs** are rent, food, School fees for his children, medication and transport fee to and from his work **while his wants** are smart phone, going out for a picnic with his family, buy jewelries for his wife and plait his daughter's hair.
- b) Between needs and wants, needs are basic because one cannot live without them. They pose a threat to one's living in case they are accessed. Wants are not basic because one can live without them and still has no threat to his life.
- c) This last question needs one to give his or her views first on which to fulfill first but at the end guide them to the view that one has to full fill needs first before wants since one must attain them to survive. They should also be made to recall that, if it was not for scarcity of resources, all would be fulfilled at ago since resources at their disposal would be enough.

e) Application activity 5.3

- Explain what students are expected of in this application activity
- Assign this application activity 5.3 as a homework

- Remember to assist student to correct this application activity during the next class. Ask students to write correct answers in their notebooks for further reference.

Possible answer

1. The question requires the students to use their understanding from some of the basic concepts studied and relate to the usual terms used in daily life to categorize them into either goods or services.

Category (A) Goods	Category (B) Services
Cars, houses, chairs, beds, refrigerators, flasks, textbooks, pens	Education, healthcare, communication, tourism, entertainment, banking, research

Products in category A are goods because they are physical or tangible, while those in category B are non-physical or intangible. However, they both aid in satisfying human needs and wants.

2. The contribution of each economic agent towards the development of the economy.

Here, students have to first identify the economic agents. i.e. households, firms, the government and the foreign sector. Having understood what each agent is all about, the teacher guides the students in their discussion about the contribution of each agent towards development of the economy. i.e.

a) Households:

- Supply resources used in production e.g. Labor and land
- To satisfy their needs and wants, they consume products produced by firms thus provide ready market for investor's products which encourages further production in the economy.
- In addition, households are engaged in certain non-remunerative types of productive activities such as child rearing, cooking, cleaning, household maintenance and repairs.
- They pay taxes to the government as a source of government revenue

b) Firms:

- They transform raw resources into useful goods and services which are then sold to consumers/ households or other firms for a profit. They are the producers of goods and services in an economy, which increases national output

- They pay taxes to the government as a source of government revenue.
- Employ resources for production process thus reducing unemployment in the economy.

c) Financial sector:

- They channel funds from surplus spending units to deficit spending ones which promotes credit accessibility for either consumption or investment in an economy.
- They too pay taxes to the government.
- They help in monetizing the economy in providing credit facilities for commercial purposes.

d) Government sector:

- Care taking- administers and coordinates the provision of justice, national defense and foreign relations.
- Provision of services- provision of public health, police and fire protection, public roads, schools, parks, facilities, transportation and communication services.
- Social protection- Provide old age pensions, unemployment insurance, welfare payments, family allowances etc. all which improve citizens' standard of living.

e) Foreign sector:

- Promotes inter-connections of the country's economy with the rest of the world for example through exportation and importation.
- Helps in technology transformation and exchange of ideas and skills between or among national economies thus promoting quick economic growth and development.

3) Mixed economy.

Exercise on economic systems

- Form manageable groups of students
- Assign students to read the case study individually from the student book, and answer the questions in groups.
- Invite randomly selected groups to present their answers
- Provide constructive feedback in terms of supplements

Possible answers

For all the questions refer to the student book under subheading 5.3.11

- a) Economic system or socio- economic organization refers to the organization of ownership and allocation of resources in an economy.
- b) Laissez faire economy, Mixed economy, centrally planned economy
- c) Refer to the student book on the content of 5.3.11
- d) Refer to the student book 5.3.11

Skills Lab 5

Build

Students in manageable groups read the activity.

Give them timeline for the completion of activity. Remind them to brainstorm based on the information from their respective local markets.

Let them know that the focus is about methods of fixing commodity prices in the market.

Note: This activity will enable them to properly set prices for their club products.

Practice

Ask students to sit in their respective groups, brainstorm and summarize methods of how prices are set in their local markets. Move around the groups and provide clarifications where need be.

Present

The teacher allows 2 randomly selected groups to defend their findings. He/she guides the presentations as he/she gives feedback to each group and makes conclusion through posing questions as a form of assessment.

Encourage learners to ask questions where they do not understand. The teacher emphasizes that each team will hang the work on the present board for future reference.

Conclusion

The teacher should highlight other methods of fixing prices that may have not been presented. Remind students to use appropriate methods while fixing prices for their club products.

5.6. Additional information

In the student's book, we have tackled microeconomic concepts only. While handling this unit, you should let students know that macroeconomic concepts exist too. The macroeconomic concepts include but are not limited to economic cycle, inflation, rate of economic growth and development, national income, gross domestic product (GDP), and changes in unemployment.

5.7. End of unit 5 assessment

Possible answers

1.

a) From the different definitions of economics, refer to all definitions in the student's book many economists consider Robbins' definition the most appropriate. This is because:

- It gives the fundamental causes of the economic problems such as unlimited human needs, limited means to satisfy man's needs, the alternative uses for the resources and the different importance of wants.
- Robbins' definition emphasizes scarcity as a foundation of Economics, otherwise without scarcity, there would be no Economics.
- Man's problem is not accumulating wealth, but satisfaction of human needs.

b) One would put more emphasis on studying economics because of its importance to him or her and the society. Refer to importance of economics in the student's book. 5.2

2.

a) **Wealth** refers to the stock of valuable assets held by an individual, a firm/an organisation or a country, at any particular moment of time. Wealth can be individual wealth, business wealth or public or society wealth **welfare** refers to the wellbeing of people or it is the satisfaction that the individual or society derives from wealth. Wealth and welfare are publicly related.

The relationship between wealth and welfare is such that, as one's wealth increases, his or her welfare increases because he or she derives more satisfaction from that wealth, thereby increasing his or her welfare. This applies to the business as well as society. E.g. as a country's wealth increases, its people's welfare also increases which promotes development of the economy.

b) How does individual and business wealth affect society wealth?

Individual wealth refers to wealth that belongs to an individual and is usually kept in individual homesteads. Business wealth refers to that wealth which belongs to the business/enterprise like machinery, premises, buildings, trucks etc. while Public/society wealth is the wealth that belongs to the society in collectivity and it is managed by the government on behalf of people. E.g. public hospital, bridges, dams, airports, railways, schools, etc.

Therefore, the more the individuals and businesses want to increase their wealth, the more they use or exploit society wealth like roads, natural resources etc. and this leads to their quick depletion thus reducing their existence for future use. But if they (individuals and businesses) utilise them efficiently, they (society wealth) are available today and in future for use by the citizens.

On the other hand, the more the individual and business wealth, the more the society wealth and vice versa. Because as individuals and businesses increase their wealth in form of land, labour, business premises and plants, the more the government expenditure on public utilities increase to foster public and individual wealth etc.

3.

a) Refer to the answers on the activity 5.3.2

b) Describe how the various economic agents are organized to allocate resources in an economy.

Various economic agents are organized through the different economic systems i.e.

- Capitalism where there is resource allocation by private individuals with little government interference
- Socialism where there is resource allocation by the government.

Mixed economic systems where there is resource allocation by the interplay between the government and private individuals.

5.8. Additional activities

5.8.1. Remedial activity

1. The commodities we desire to have in life that we see and touch with our eyes are called while those we don't see and touch but help to satisfy our needs and wants are called
2. Public goods are those owned and enjoyed collectively by While private goods are those that are owned and exclusively enjoyed by
3. Categorize the following into free goods and economic goods.

Telephone, sunshine, Inyange water, rain water, bread, air, car, uniform, shoes, bags, sea water.

Possible answers

1. Goods and services
2. The whole society..... by private individual
3. They can be categorized as:

Free goods	Economic goods
Sunshine, rainwater, air, seawater	Telephone, uniform, shoes, Inyange water, bags, bread, car

5.8.2. Consolidation activity

Question: Why are public goods always provided by the state?

Possible answer:

- Because they are expensive to be provided by individuals
- Some are risky undertakings not to be just left in hands of the public e.g. security
- They are non-rivalry meaning that there is no competition in consuming them. Therefore, everybody uses them without reducing their availability to others.

- They are non-excludable meaning that no one is excluded from using them
- They are non-divisible, meaning they are provided in totality, so everyone can use it.

5.8.3. Extended activity

In 3 pages, discuss the difference between economic growth and economic development.

Possible answer

There is no specific answer for this question. Students may come up with different ideas(points). Consider each student's answer. You can use the following as a hint for this extended activity:

Economic growth (Quantitative)	Economic development (Quantitative and Qualitative)
<ul style="list-style-type: none"> • Increase in GDP • Higher national income/output 	<ul style="list-style-type: none"> • Quantitative and qualitative increase of goods and services • Improved living standards • Improved educational standards • Improved healthcare • Improved infrastructure • Diversification of economy

UNIT 6

BASIC PRINCIPLES OF ECONOMICS

6.1. Key Unit Competence:

To be able to apply basic economic principles in daily business life

6.2. Unit prerequisite

In S1, Unit 4 (concept of needs, wants, goods and services), students studied the relationship between needs and wants, goods and services, and scarcity, choice and opportunity cost. This background will enable students learn basic principles of Economics. In this unit, they will be able to embrace testimonies of local entrepreneurs' journey which may encourage them for the business idea they intend to start in their communities.

6.3. Cross-cutting issues to be addressed

Note: The examples below are just to guide you on how to address cross-cutting issues throughout the unit but this does not mean that these are the only ones. You can address and give learners opportunities to discuss all the crosscutting issues where possible taking consideration of their environment or community around them.

- **Inclusive education...** Emphasis has to be put on how all learners irrespective of their backgrounds, economic or social setup have right to participate in business activities that benefit their communities. Teachers should emphasize that irrespective of their backgrounds, all students have equal chance to quality education.
- **Gender education:** The teacher should bear in mind that all students (girls and boys) have equal opportunities and rights to study. When forming group activities, assigning tasks and responsibilities, asking questions, and giving feedback a teacher should include both girls and boys.
- **Financial education:** Being financially responsible partly means resources are used appropriately and productively. Through this unit, learners will be able to appreciate the need to take care of available scarce resources and therefore, note to them that due to scarce resources, they will be pushed to make right choice (there is a need to prioritize by making a list of one's wants in order of satisfying). This concept of choice calls for opportunity cost, opportunity cost arises out of scarcity and choice. Students should

appreciate the application of basic principles of Economics in their day-to-day business activities.

Refer to other crosscutting issues as identified in the preliminary pages of the teacher's guide and curriculum framework.

6.4. Guidance on the introductory activity

- Form manageable groups of 4 or 5 students. (The number of group members may change according to class situations)
- Invite students to read the scenario from student book, share ideas and then answer related questions
- Guide students' discussions
- Ask students to present their discussion findings
- Supplement students' presentations and link students' answers to the new lesson

Possible answers

- a) Other scenarios showing how needs are never satisfied can include:
- A family in need of starting a successful business, when a started business becomes successful, it needs to own a residential house
 - A country that needs to own a modern airport, when this need is satisfied, it calls another need of buying latest air bus planes
 - Etc.
- b) All the above happen because:
- Human needs are unlimited
 - Resources are scarce (you can never have enough resources to satisfy all the needs at once)
 - Etc.
- c) The key solutions to the above scenarios include:
- There should be a choice. Since the available resources are scarce (cannot satisfy all the needs), one should make a choice by satisfying the most pressing wants first and then the least ones last.
 - After making a choice or choices, you can very well understand that opportunity cost concept is applied (immediate foregone alternative to make the right choice)

Note: Students may suggest other solutions. Consider each student's answer.

6.5. List of lessons/sub-heading

#	Lesson title/ Sub-heading	Learning objectives (from the syllabus or set according to the lesson title)	Number of periods
1	Meaning and relationship between basic principles of Economics	<ul style="list-style-type: none"> – Identify the fundamental/basic principles of economics. – Explain the relationship among the fundamental principles of economics using the Production Possibility Frontier (PPF). – Explain why the PPF curve shifts. – Analyse the applicability of the fundamental principles of economics in the business world. – Analyse the implication of shifts in the PPF on economic growth. 	4
2	Fundamental economic questions	<ul style="list-style-type: none"> – State the fundamental economic questions – Analyse the applicability of fundamental economic questions in the economic world 	2
End of unit assessment & Remediation		Apply basic economic principles in daily business life	3

LESSON 1: Meaning and relationship between basic principles of Economics

a) Learning objectives:

- Identify the fundamental/basic principles of Economics.
- Explain the relationship among the fundamental principles of Economics using the Production Possibility Frontier (PPF).
- Explain why the PPF curve shifts.
- Analyse the applicability of the fundamental principles of economics in the business world.
- Analyse the implication of shifts in the PPF on economic growth.

b) Teaching resources

Flip chart, chalkboard, markers, pens, magazines

c) Prerequisites/Revision/Introduction (guidance on how to start a lesson)

Students already know how resources are scarce. For instance, materials at schools are in most cases insufficient (computers, bedrooms in some schools are not sufficient). On top of that, students have studied in S1, the relationship between scarcity, choice and opportunity cost. This background will enable them to learn the meaning and relationship between basic principles of Economics.

d) Learning activities

Activity 6.1

- Invite students to read the case study individually from the student book
- Ask students to share ideas in pairs
- Call some pairs to make presentations (if time allows, you can let all pairs present where possible)
- Provide constructive feedback in terms of supplements (here, you share with them the expert view.)

Possible answers

1.

- a) Scarcity** refers to the limited supply or insufficiency of resources in satisfying the needs of an individual, family or state, in relation to the unlimited wants. For instance, due to limited financial resources, Muhire failed to all the listed items while at the market.
- b) Choice** refers to the act of making a right decision at the right time so as to use limited or scarce resources to satisfy the unlimited wants. E.g.: John advises Muhire to reduce on the purchasing list and prioritize his needs starting with the most pressing like rice are put at the top to be satisfied first, and then the less pressing like Mayonnaise are put last on the list.
- c) Opportunity cost** is the immediate alternatives foregone when choice is made. For instance, for the case of Muhire, Mayonnaise was foregone in order for Muhire to be able to buy the most need products.

2. The relationship between scarcity, choice and opportunity cost can be explained as follows:

Due to limited resources (scarcity), people or business organizations are obliged to make right choices using prioritization as a tool, and then the fact that choices are made, some wants and needs are left unsatisfied (the immediate foregone alternative(s) when choice is made is called opportunity cost).

For example, if a student has FRW 10,000. If he/she wants to buy a book (FRW9,500) and overcoat (FRW8,000). If he or she decides to buy a book as the most pressing need, then overcoat need is left unsatisfied. Overcoat is the opportunity cost to buy a book.

Link the students' answer with the new lesson.

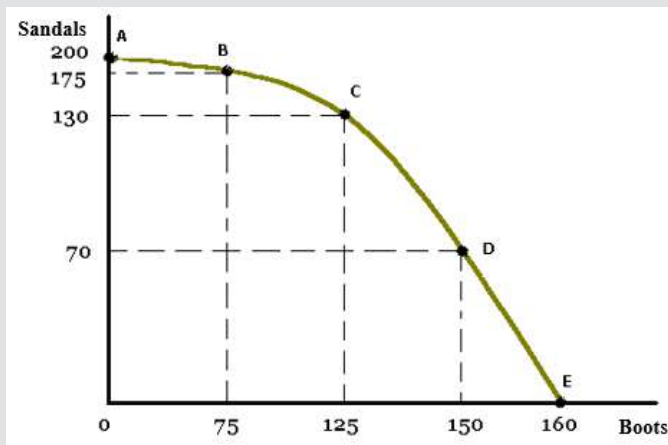
e) Application activity 6.1.

- Form manageable groups
- Invite groups to read, discuss and do the application activities from the student's book
- Invite randomly selected groups to present their findings to the entire class (Gallery walk method can be used)
- Give opportunity to groups which did not present to supplement
- Share the expert view/give constructive feedback in form of supplement

Possible answers

a) The firm can reduce on the production of Sandals (X) to increase production of Boots (X).

b)



LESSON 2: Fundamental economic questions

a) Learning objectives:

- State the fundamental economic questions
- Analyse the applicability of fundamental economic questions in the economic world

b) Teaching resources:

Flip chart, chalkboard, markers, pens, pictures, field trips

c) Prerequisites/Revision/Introduction:

In S3 unit 7, students have studied how to develop a business plan which is normally prepared by answering the basic economic questions ((what to produce: product description, how to produce: production plan, when to produce: action plan, where to produce: business location, for whom to produce: marketing and sales plan. This background will enable students to understand the basic economic questions an entrepreneur has to answer before starting a business.

d) Learning activity 6.2

- Form manageable groups of 4 or 5 students
- Ask students to read the activity individually, and then ask one student to read the case study loudly. Help students/groups to understand the activity clearly.
- Instruct students to work on the activity in groups
- Invite randomly selected groups to present their findings to the entire class (Gallery walk method can be used)
- Give opportunity to groups which did not present to supplement
- Share the expert view/give constructive feedback in form of supplement

Possible answers

Economic questions answered by Inyange Industries in the case study are:

1. **What to produce?** (Milk, ghee, juice, and bottled water)
2. **Where to produce?** (Proprietors made a number of choices concerning its location)
3. **How to produce?** (Proprietors made a number of choices concerning the tools and human resources to employ, the time to engage in production)

4. For whom to produce? (They also identified the consumers of their products)

e) Application activity 6.2

- Ask students to read the activity individually, then ask one student to read the activity loudly. Make sure every student understands the activity clearly, and what he or she is expected of.
- Let each student do the activity on his or her own
- Invite some students to present their answers
- Give opportunity to some students who did not present to supplement
- Provide supplements

Possible answers

Let us have “**Green beans farming (*Phaseolus vulgaris*)**” as a business one intends to start after secondary education.

Answers to economic questions:

i) Green beans

ii) You can answer the how to produce green beans questions as follows:

a) How to plant green beans:

- Sow seeds directly
- Check the temperature
- Support the pole beans
- Provide space

b) How to grow green beans

- Balance the soil PH
- Provide sun (green beans need 6-8 hours of full sun per day)
- Water properly
- Mulch
- Sow more beans (for a continuous harvest, sow bean seeds every two weeks)

c) How to harvest green beans

Bush beans are generally ready to harvest within 50–55 days, while pole beans can take 55 to 60 days. The bean pods are ready to harvest when they're four to six inches long and slightly firm, and before the beans protrude through the skin. *Gently pull the beans from the plant, taking care not to tear the blooms. Harvest often to promote more sprouting.*

- iii) Green beans will be grown during summer time. This is because during summer time green beans are not sufficiently available at the market.
- iv) They will be located for instance in Muhoza sector, Musanze district. This is because the area has a fertile soil appropriate for such a business.
- v) Musanze is a touristic region with high class hotels. These hotels are a market target for this business.
- vi) Economic questions are asked and answered before starting a business or production in order to meet the needs of its consumers, hence profitability of the business.

Skills Lab 6

Build

Students in pairs brainstorm and scan the operations of their business club.

Students think on all club projects those that have failed and those that are currently operational.

Give instructions that this lab is going to help them understand better the rationale behind basic principles of economics. Let students ask questions for clarification

Practice

Ask students to take notes of the products/projects that they have failed to do though they were willing. Let them explain the phenomenon that influenced them not to do all the projects they intended to do. Remind them to give real examples of what projects have been their opportunity costs for the current projects. Move around the teams as you facilitate accordingly.

Present

The teacher guides the presentations as he/she gives feedback to each group and makes conclusion through posing questions as a form of assessment.

Encourage learners to ask questions where they do not understand. The teacher emphasizes that each team will hang the work on the present board for future reference.

Conclusion

The teacher concludes by explaining the relationship between scarcity, choice, and opportunity cost.

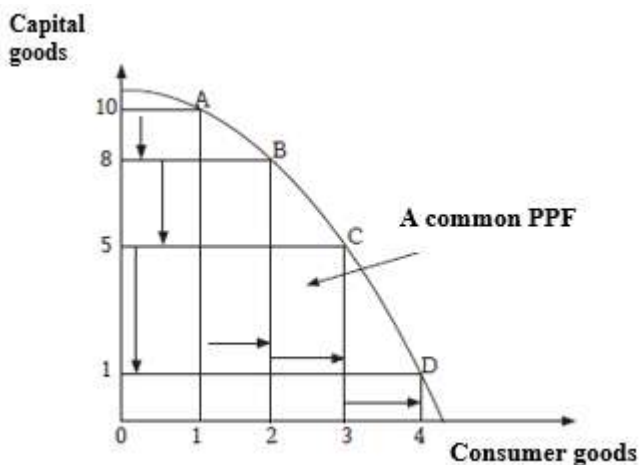
Portfolio assignment:

Given the information related to two principal club projects, draw the PPF of their business club.

6.6. Additional information

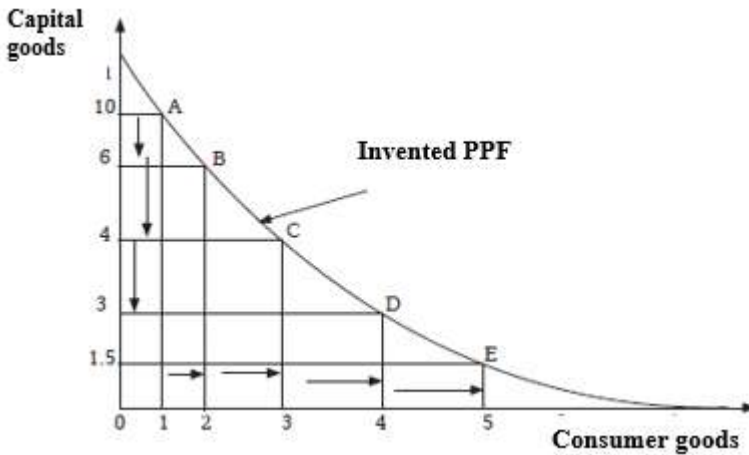
Types of PPF

1. **Common PPF:** This is a PPF where there is an increase in opportunity cost as the production of one good is increased.



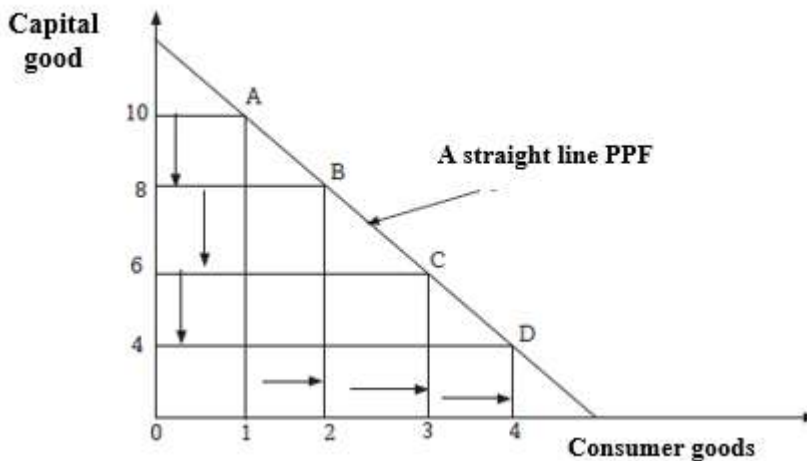
From the above PPF, in order to produce an additional unit of consumer good, two units of capital goods have to be foregone. But additional unit of consumer good, will cause three units of capital goods to be foregone and another additional unit of consumer good will cause four units of capital good to be foregone. A common PPF is also known as a **concave PPF**.

2. **Inverted PPF:** This is a PPF where the opportunity cost is decreasing with an increase in production of one good.



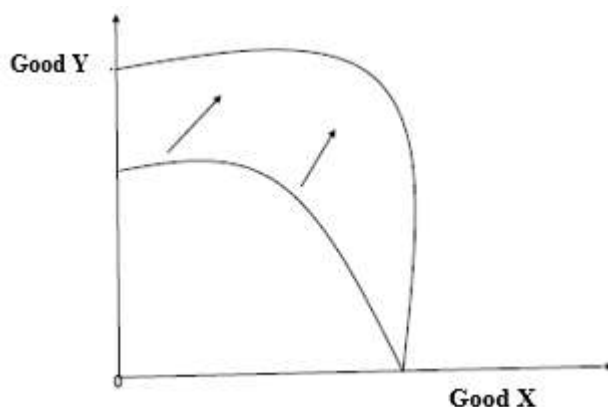
From the above PPF, to produce an additional unit of consumer good, four units of capital good are foregone. But another additional unit of consumer good will cause two units of capital good to be foregone. Any further additional unit of consumer goods will cause one unit of capital goods to be foregone. Opportunity cost will continue to decrease with any additional unit of consumer goods being produced. An inverted PPF is also known as a **convex PPF**.

3. **A straight line PPF:** This is a PPF where the opportunity cost is constant with an increase in the production of one good.

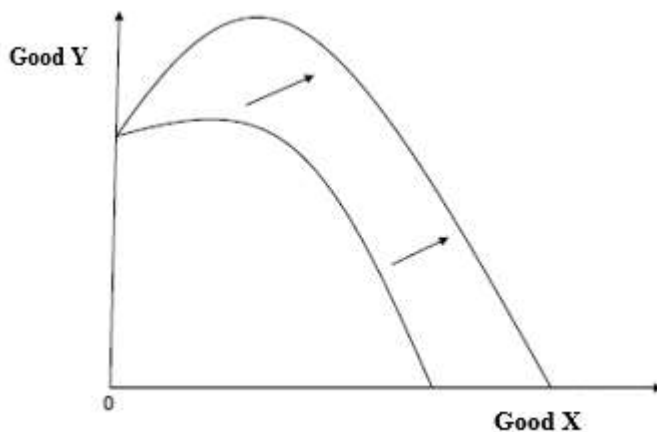


From the above PPF, an increase in production of one unit of consumer goods causes an opportunity cost of two units of capital goods. Each subsequent production of one additional unit of consumer goods will have a constant opportunity cost of two units of capital goods. A straight line PPF is also known as a **constant PPF**.

4. **Biased PPF:** This is a PPF that shifts outwards in favour of one commodity only. In this case, the PPF shifts outwards more in one direction than the other. This is caused by improvement in technology and increased factors of production that are in favour of one commodity.

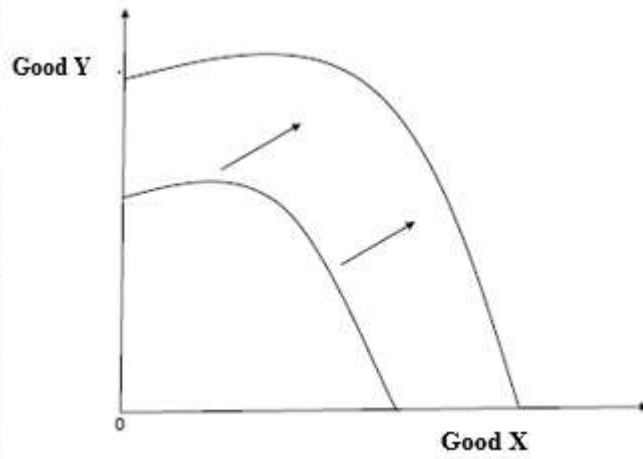


The above illustration shows an increase in production of Good Y while there is no increase in production of Good X. This implies that the improvement in technology and increase in resources caused increase in production of Good Y only.



The above illustration shows an increase in production of Good X with no increase in production of Good Y. This implies that the improvement in technology and increase in resources was in favour of production of Good X only, causing an increase in production of Good X.

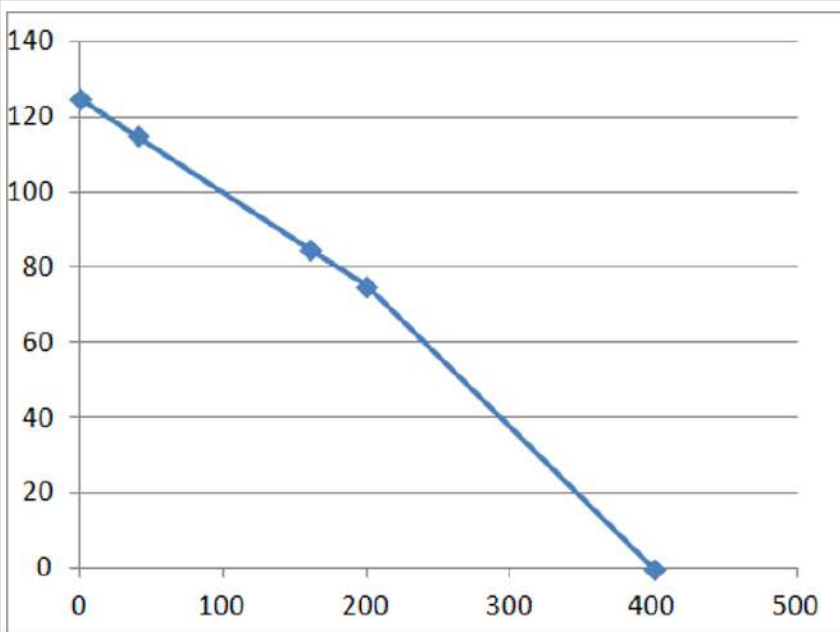
5. **Unbiased PPF:** This is the PPF that shifts evenly such that, there is an increase in production of both goods. This therefore implies that an improvement in technology and increase in resources favours both goods, thereby causing an increase in production of both Goods X and Y.



6.7. End unit 6 assessment

Possible answers

1. Scarcity choice opportunity cost.
2. s



ii) 400

iii) 125

iv) Dfg

v) 200-75, 400-0

3. Refer to question 1. While marking students' answers, remember to check on the number of words used in order to train students on how to answer in essay form.

6.8. Additional activities

6.8.1. Remedial activity

State the fundamental economic questions

Possible answers

Refer to application 6.2

6.8.2. Consolidation activities

Why is it important to answer the following economic questions?

- i) What to produce?
- ii) Where to produce?
- iii) For whom to produce?

Possible answers:

- i) The firm needs to decide on the nature of the goods to produce (capital goods or consumer goods)
- ii) The producer has to determine on the location of his or her firm or industry. The location will depend on availability of the market, the source of a raw materials, security and transport and communication networks.
- iii) The producer considers the target consumers that will be use the goods to be produced. The produce may be for the young, the rich, the poor, and the rural people or for the urban people.

6.8.3. Extended activity

How does the PPF explain economic growth or decline in the country?

Possible answer: A shift outwards by the PPF indicates economic growth while a shift inwards by the PPF indicates economic decline. An outward shift indicates economic growth and this may be due to any of the following reasons:

- Discovery of new natural resources.
- Advancement in technology that leads to production of more goods and services.
- Expansion of markets that encourages production of more goods and services.
- Improvement in the skills of labour that results into efficiency in production.
- Increased investment as a result of improved entrepreneurship skills.
- An inward shift indicates economic decline as it indicates a reduction in the quantity produced of both Y and X.

UNIT 7

THEORY OF DEMAND AND SUPPLY

7.1. Key unit competence:

To be able to analyse demand and supply Conditions in the market to make right economic and entrepreneurial decisions

7.2. Unit prerequisites

The teacher should guide the students towards application of various knowledge, skills, attitudes and values, acquired and developed in O'level about demand. However, they may not have the capacity to apply it in the real life without the guidance of the teacher. Therefore, the teacher should help the students to understand deeply the concept of demand and supply with their applicability. The teacher has to make the students realize the value of demand and supply in resource allocation. Demand and supply theory are central pillars in business. To understand how the market functions, one has to understand demand because to a larger extent, the level of demand determines how much you need to produce for the market and the prices that prevail in the market. While lack of demand and supply present economic problems, excess demand or excess supply are also problems that must be dealt with.

In this unit, demand and supply are defined, their types, their determinants are discussed and their relationship with the price analyzed. The main subtopics covered are:

The definitions of terms, types, determinants, laws of demand and supply, demand and supply schedules and curves.

7.3. Cross-cutting issues to be addressed

While teaching this unit, stress the issue of environment and sustainability because suppliers with purpose to supply much, they normally over utilize resources to produce and sell much for profit maximization.

Also, stress the issue of Standardization culture, where, as future producers, they should mind much about quality if they want to earn much from their sales.

- **Gender education:** In this unit, both males and females must be put into consideration. Learners should know that regardless of gender, Demand and supply laws affect everyone irrespective of gender and any other type of discrimination.
- **Financial education:** You need to emphasize to students the need to manage properly their finances when it comes to buying since this affects someone's finances. Additionally, while supplying, they should aim at supplying much when prices are high just to benefit from the profits maximization.

Refer to other cross cutting issues as identified in the curriculum framework

7.4. Guidance on the introductory activity

This introductory activity is intended to:

- Attract the learner's attention on the various conceptual terms related to Demand and supply
- To help the teacher assess the learner's prior knowledge, skills, attitudes and values on the laws of demand and supply.

The teacher asks learners to form groups or pairs. Then the learners are provided with the introductory activity with clear instructions. Learners will make an analysis on case study provided in groups or pairs. Ensure everyone is following and actively participating.

They will try to give possible answers as the facilitator moves around to monitor where necessary.

Learners present their findings, responses or answers through an appropriate method such pair-share, small group presentations on the introductory activity. Encourage different learners from the groups to share the group's work to avoid just a few learners dominating. Also encourage to be active listeners when a group or a pair is presenting their work. Encourage learners to appreciate each other's work, especially the presentation. Appreciate the team's presentations and remind them that this activity is an introduction to the theory of demand and supply.

Possible answers to the introductory activity:

1. a)
 - i) Increase in fuel price
 - ii) increase in price of commodities
 - iii) reduction in the purchasing power of customers

b) government will use price controls or subsidies

2. a. Students list down commodities commonly used in people's daily life

b. The students will give their opinions and the teacher will harmonize.

c. They express how they would react in case prices doubled.

d. haggling, fixing treaties, sales auctioning etc

Note: Since learners may give personal opinions depending on their background, the teacher is expected to judge their answers and give constructive feedbacks accordingly.

7.5. List of lessons (including assessment)

	Lesson title/ Sub-heading	Learning objectives (from the syllabus or set according to the lesson title)	Number of pe- riods
<u>THEORY OF DEMAND</u>			
1	<ul style="list-style-type: none">• Law of demand, Demand schedule and Demand curve	<ul style="list-style-type: none">• Explain the key terms related to "demand".• State the law of demand, explain the types of demand, and describe the shape of the demand curve.• Use the demand curve to illustrate the law of demand and the relationship between the price and quantity demanded	4
2	<ul style="list-style-type: none">• Determinants of demand	<ul style="list-style-type: none">• Identify possible determining factors of demand• Analyze the factors determining demand• Appreciate that demand is sensitive to changes in the determining factors	3
3	<ul style="list-style-type: none">• Types of demand and abnormal Demand Curves	<ul style="list-style-type: none">• Distinguish between normal and abnormal demand curves and between change in demand and quantity demanded• Analyze the factors that may lead to violation of the law of demand. and their impact on business decisions.	4

4	<ul style="list-style-type: none"> • Change in demand Vs change in quantity demanded 	<ul style="list-style-type: none"> • Use the demand curve to illustrate the law of demand and the relationship between the price and quantity demanded. 	3
<u>THEORY OF SUPPLY</u>			
5	<ul style="list-style-type: none"> • Law of supply, Supply schedule and Supply Curve 	<ul style="list-style-type: none"> • Explain the key terms related to “supply” • State the law of supply, explain the types of supply, and describe the shape of the supply curve. • Use the supply curve to illustrate the law of supply and the relationship between the price and quantity supplied 	2
6	<ul style="list-style-type: none"> • Determinants /factors of quantity supplied 	<ul style="list-style-type: none"> • Identify possible determining factors of supply • Analyze the factors determining supply • Appreciate that sensitive is sensitive to changes in the determining factors 	2
7	<ul style="list-style-type: none"> • Types of supply 	<ul style="list-style-type: none"> • Distinguish between normal and abnormal supply curves and between change in supply and quantity supplied • Analyze the factors that may lead to violation of the law of supply and their impact on business decisions. 	2
8	<ul style="list-style-type: none"> • Change in supply and change in quantity supplied 	<ul style="list-style-type: none"> • Use the supply curve to illustrate the law of supply and the relationship between the price and quantity supplied 	4
9	<ul style="list-style-type: none"> • Equilibrium price and quantity 	<ul style="list-style-type: none"> • State the equilibrium condition of markets. • Analyze the effects of changes in demand and supply on the equilibrium point & production decisions of an entrepreneur 	4
10	End unit assessment & Remediation		2

PART 1: THEORY OF DEMAND

LESSON 1: Law of Demand, Demand schedule and Demand curve

a) Learning objectives

- Explain the key terms related to “demand”.
- State the law of demand, explain the types of demand, and describe the shape of the demand curve.
- Use the demand curve to illustrate the law of demand and the relationship between the price and quantity demanded

b) Teaching aids:

Basic materials for a class/ lesson to be conducted: Learners books, internet and projector, textbooks, resourceful persons and any other trustworthy and reliable resources to enhance learning.

c) Prerequisites/Revision/Introduction:

Read the Key unit competence in the syllabus to determine what students will know and be able to do by the end of the unit. Look at the action verb, concept and context of each learning objective. This will help you to see the skills, knowledge and attitudes embedded in the learning objective. Remember, the learning objectives link to the key unit competence.

Use K-W-L (What learners already know-What they want to know-What they have learnt) after the introductory activity to assess how much students already know and what they would be interested in learning about technology in business operations.

d) Activity 7.1.1. (Learner’s book)

- Have learners seated in pairs groups and help them understand the data given from Gicumbi market clients
- Each pair analyse the data and respond to the attached questions
- Move around the pairs to ensure that they are in the right track as you provide necessary clarifications
- After the completion of the activity, select any two pairs to share with the entire class about their findings from the exercise.
- Since this activity is an introductory, do not reject any student’s idea instead guide them and encourage them to follow the next activity.

Possible answers

a) Increase in price leads to a decline in quantity demanded

b)

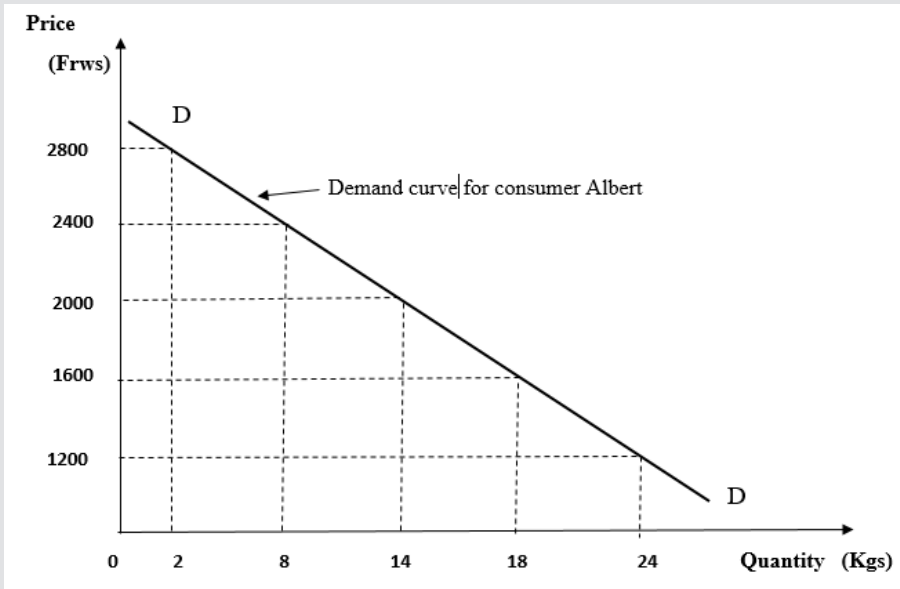
Demand schedule for consumer Cecille	
Price of sugar (Frw)	Quantity demanded (Kgs)
1200	20
1600	14
2000	10
2400	4
2800	0

Demand schedule for consumer Albert	
Price of sugar (Frw)	Quantity demanded (Kgs)
1200	24
1600	18
2000	14
2400	8
2800	2

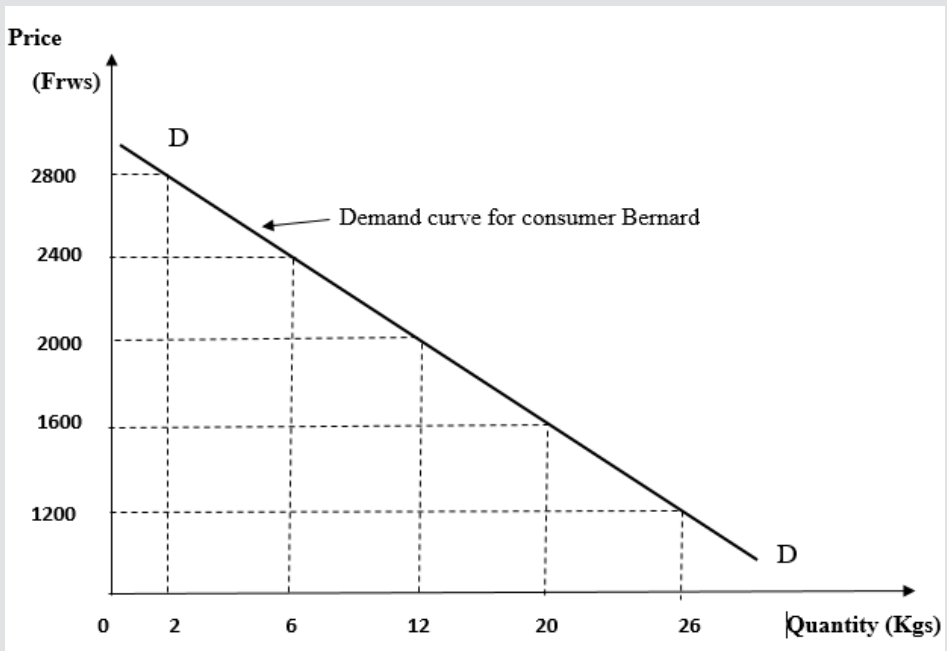
Demand schedule for consumer Bernard	
Price of sugar (Frw)	Quantity demanded (Kgs)
1200	26
1600	20
2000	12
2400	6
2800	2

Demand schedule for consumer David	
Price of sugar (Frw)	Quantity demanded (Kgs)
1200	24
1600	18
2000	14
2400	8
2800	2

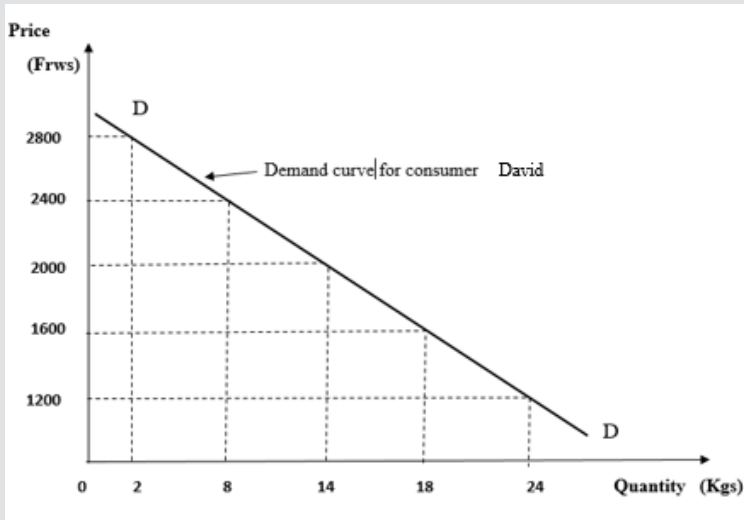
- c) Demand curves that show how the consumers respond to changes in price.
- i) Demand curve that shows how the consumer Albert responds to changes in price.



- ii) Demand curve that shows how the consumer Bernard responds to changes in price.

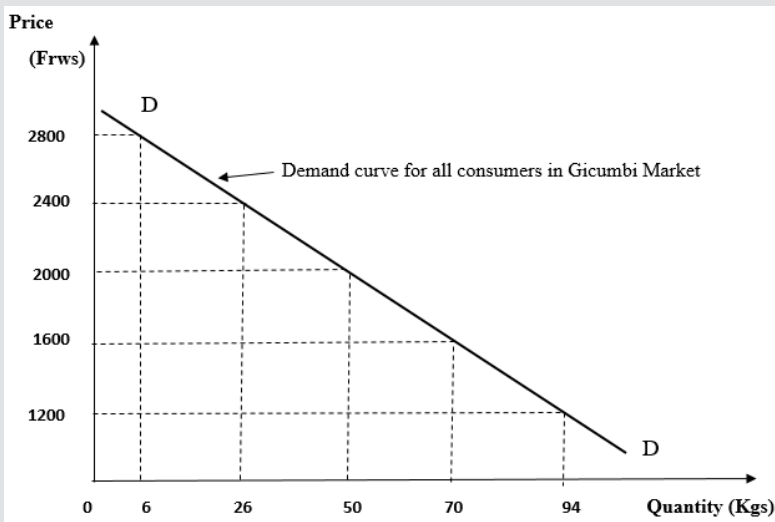


iii) Demand curve that shows how the consumer David responds to changes in price.



Demand schedule for all consumers in Gicumbi Market	
Price of sugar (Frw)	Quantity demanded (Kgs)
1200	94
1600	70
2000	50
2400	26
2800	6

d) The curve that shows how all consumers in Gicumbi market respond to changes in market prices



- e) An appropriate name for a curve that shows how all consumers in a market respond to change in price is « **Market Demand Curve** »

e) Application activity 7.1.1:

For this application activity, since students are now equipped with necessary information,

- Have them sit into manageable groups and help them understand the data given from Mulindi market clients?
- Allow them to analyse the data and respond to the attached questions
- Move around the groups to ensure that they are in the right track as you provide necessary clarifications
- After the completion of the application activity, using gallery walk let teams share with the entire class about their findings from the exercise.

Possible answers

a.

i) Household demand schedule

Demand Schedule for Rukundo Family	
Price of sugar (Frw)	Quantity demanded (Kgs)
400	34
500	30
800	24

Demand Schedule for Kayiranga Family	
Price of sugar (Frw)	Quantity demanded (Kgs)
400	40
500	30
800	28

Demand Schedule for Bizimana Family	
Price of sugar (Frw)	Quantity demanded (Kgs)
400	30
500	24
800	20

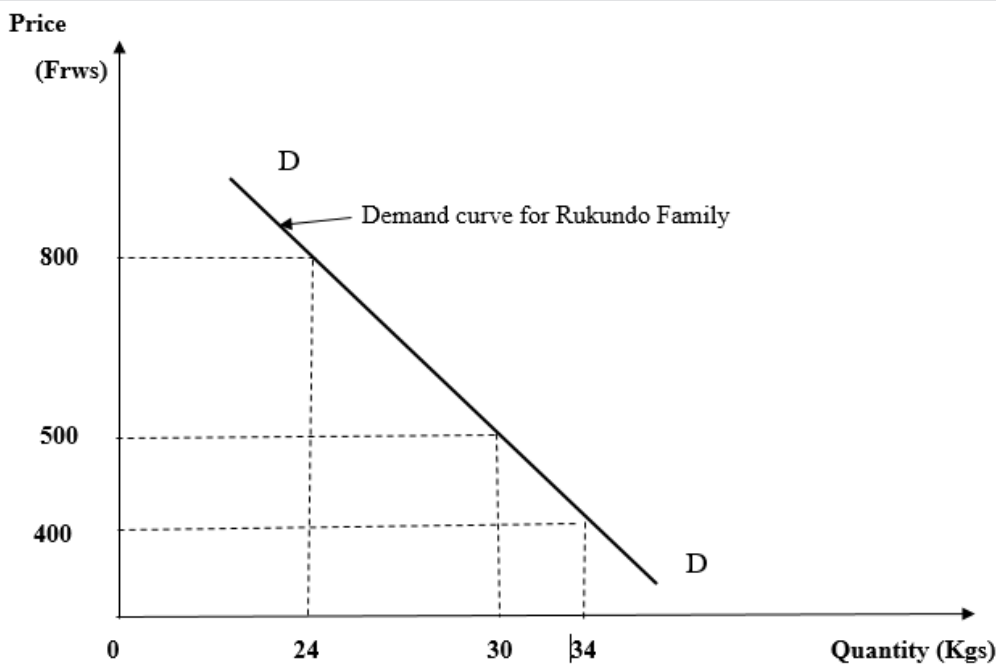
Demand Schedule for Gahire Family	
Price of sugar (Frw)	Quantity demanded (Kgs)
400	30
500	24
800	20

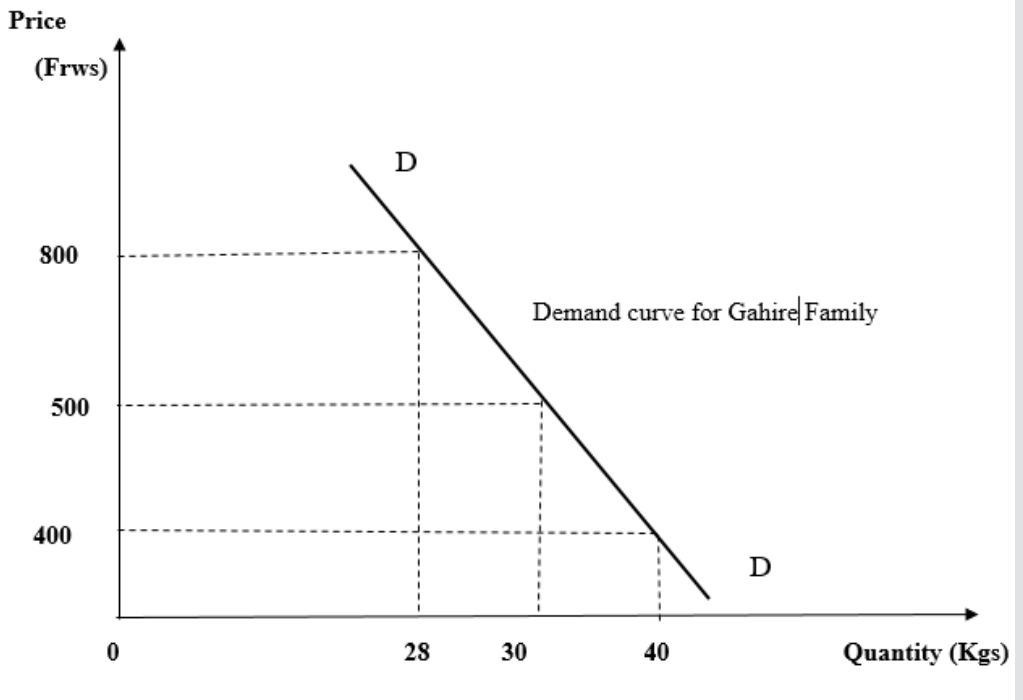
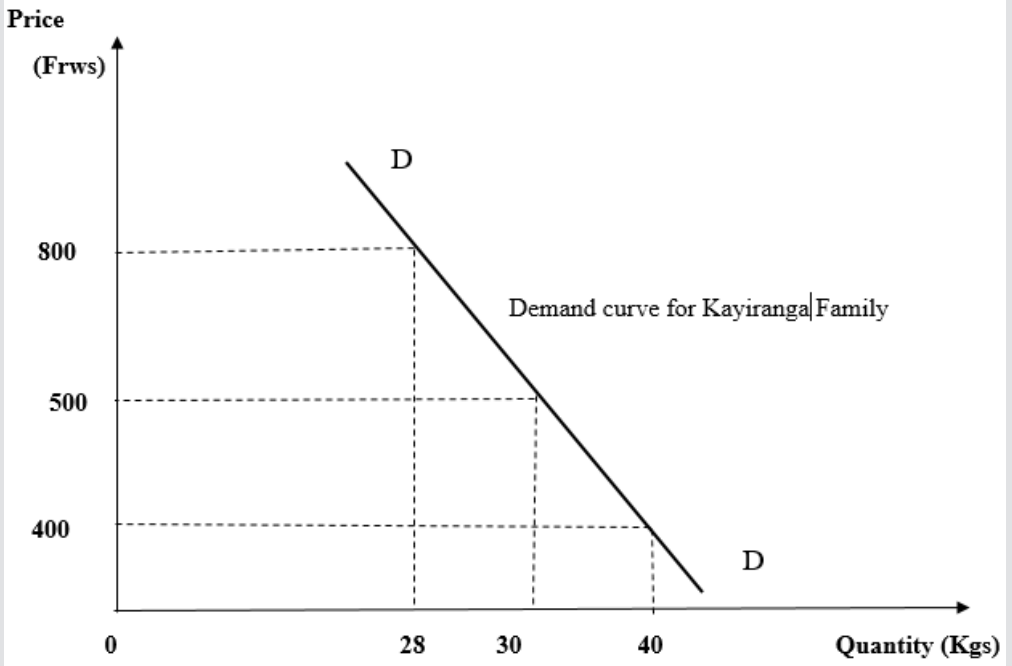
ii) Market demand schedule

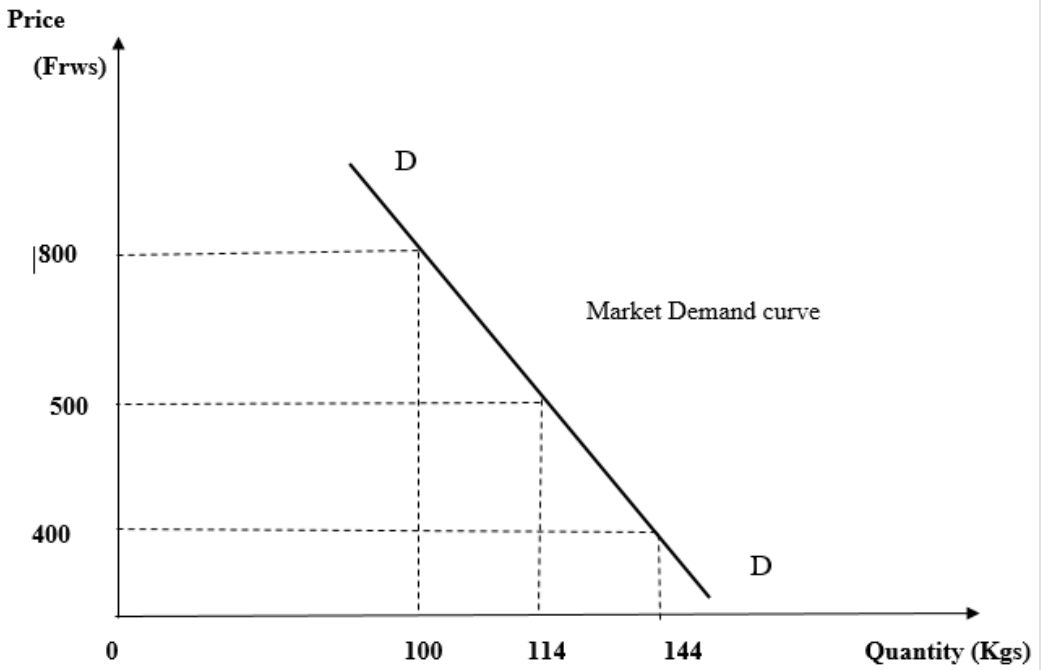
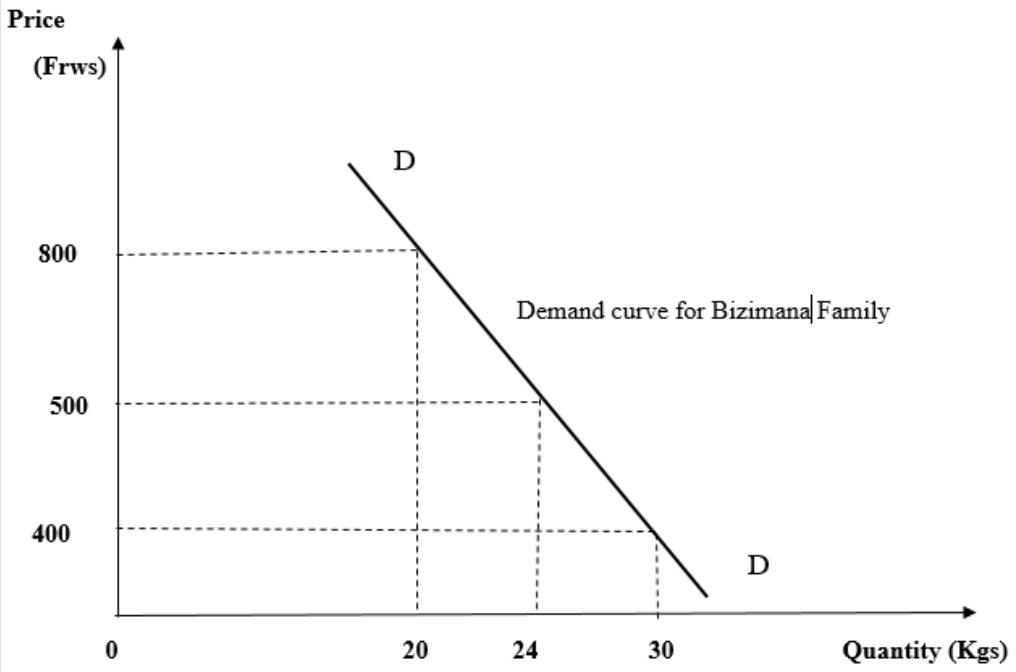
Market Demand Schedule	
Price of sugar (Frw)	Quantity demanded (Kgs)
400	144
500	114
800	100

b)

i) The household demand curves







LESSON 2: Determinants of demand

a) Learning objectives

- Identify possible determining factors of demand
- Analyze the factors determining demand
- Appreciate that demand is sensitive to changes in the determining factors

b) Teaching aids:

Basic materials for a class/ lesson to be conducted: Learners books, internet and projector, textbooks, resourceful persons and any other trustworthy and reliable resources to enhance learning.

c) Prerequisites/Revision/Introduction:

Read the Key unit competence in the syllabus to determine what students will know and be able to do by the end of the unit. Look at the action verb, concept and context of each learning objective. This will help you to see the skills, knowledge and attitudes embedded in the learning objective. Remember, the learning objectives link to the key unit competence.

Use K-W-L (What learners already know-What they want to know-What they have learnt) after the introductory activity to assess how much students already know and what they would be interested in learning about technology in business operations.

d) Activity 7.1.2. (Learner's book)

Students in groups analyse the demand schedules and provide necessary reasons for the market situations for Shema and Kabalisa.

Possible answers

- The reason as why the units of clothes bought increased as prices reduce and vice versa is simply because of the law of demand.
- The reasons as to why Shema bought many units of clothes than Kabalisa at the same prices is simply because of differences in the way they, both, are influenced by other factors that affect demand other than price like:
 - Differences in levels of income
 - Differences in tastes and preference
 - Differences in levels of advertisements. Etc.

e) Application activity 7.1.2.

In teams, students brainstorm on the given questions and discuss or give reasons to why some market conditions went the way they went.

Provide guidance on the number of factors that may have cause some increase in quantity demanded and their effects.

Remind students to relate the given scenarios to their real-life market conditions and let them know that they must make informed entrepreneurial decisions

Possible answers

Refer to the students book on factors that affecting demand 7.1.2

LESSON 3: Types of demand & Abnormal Demand Curves

a) Learning objectives

- Distinguish between normal and abnormal demand curves and between change in demand and quantity demanded
- Analyze the factors that may lead to violation of the law of demand and their impact on business decisions.

b) Teaching aids:

Basic materials for a class/ lesson to be conducted: Learners books, internet and projector, textbooks, resourceful persons and any other trustworthy and reliable resources to enhance learning.

c) Prerequisites/Revision/Introduction:

Read the Key unit competence in the syllabus to determine what students will know and be able to do by the end of the unit. Look at the action verb, concept and context of each learning objective. This will help you to see the skills, knowledge and attitudes embedded in the learning objective. Remember, the learning objectives link to the key unit competence.

Use K-W-L (What learners already know-What they want to know-What they have learnt) after the introductory activity to assess how much students already know and what they would be interested in learning about technology in business operations.

d) Activity 7.3

- Have learners sit in group brainstorm and analyse the set of commodities given
- On a common sheet of paper, let them provide the possible economic terms given to those group of commodities, explain their relationship and how price changes affect the demand in each set.
- Ensure that shy students are actively participating in the group activity.
- Move around the teams and support accordingly as you appreciate the answers given by the students.
- Give learners enough time to ask questions where they do not understand

Possible answers

(a). The economic name given to the demand for each group of commodities

X, Y, Z & W

X- Substitute goods

Y- Complementary goods

Z- Composite demand commodities

W- Not related

(b) The relationship between commodities in each group of commodities

X, Y, Z & W?

- Commodities in X serve the same purpose.
- Commodities in Y are demanded together.
- Commodities in Z serve a variety of functions.
- Commodities in W are not related at all

(c). How Price changes affect demand of commodities in each set.

X- When the price of one increase, the quantity demanded of another increases.

Y- When the price of one increase, the quantity demanded of another reduce.

Z- If the price composite demand commodity increases one reduces the quantity demanded to only vital purposes.

W - If the price of one increases, it doesn't affect the demand of another commodity.

e) Application activity 7.3.

Let this activity be performed by learners sited in pairs. They should analyse the reasons behind them demanding goods in the market.

At the completion of this activity, A few randomly selected pairs will stand in front of the whole class to defend the reason they have given. Fellow learners should ask questions for better understanding.

Possible answers

There is no specific answer for this activity, learners will give a variety of possible reasons why people demand goods from the market, but it is up to the teacher to judge.

Goods of ostentation, consumer ignorance effect, depression effect, necessity goods

LESSON 4: Change in quantity demanded Vs Change in demand

a) Learning objectives

- Use the demand curve to illustrate the law of demand and the relationship between the price and quantity demanded.

b) Teaching aids:

Basic materials for a class/ lesson to be conducted: Learners books, internet and projector, textbooks, resourceful persons, and any other trustworthy and reliable resources to enhance learning.

c) Prerequisites/Revision/Introduction:

Read the Key unit competence in the syllabus to determine what students will know and be able to do by the end of the unit. Look at the action verb, concept and context of each learning objective. This will help you to see the skills, knowledge and attitudes embedded in the learning objective. Remember, the learning objectives link to the key unit competence.

Use K-W-L (What learners already know-What they want to know-What they have learnt) after the introductory activity to assess how much students already know and what they would be interested in learning about technology in business operations.

d) Activity 7.4.

Learners in manageable groups, will brainstorm and use the pen and paper to identify the factors that may influence a change in demand.

Ensure that everyone contribute to the works.

Move around the groups to verify that there no unsolved difficulties.

Possible answers

Price, income, availability of substitute etc.

e) Application activity 7.4

Learners in pairs, will:

Imagine the applicable data and use the graphical illustrations to make the difference between the change in demand and the change in quantity demanded.

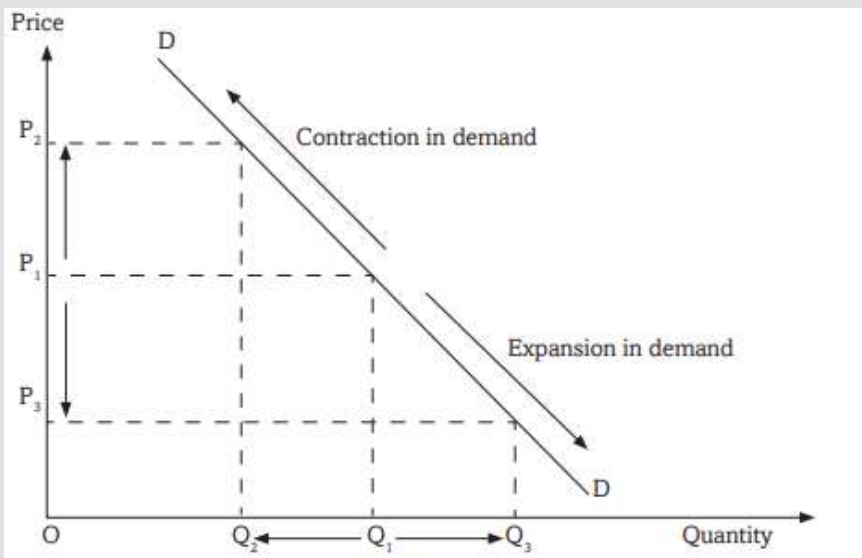
A few pairs selected randomly, present the data and the graphical illustration on the whiteboard / black board to share with the entire class about their findings.

Allow fellows to ask questions for clarification.

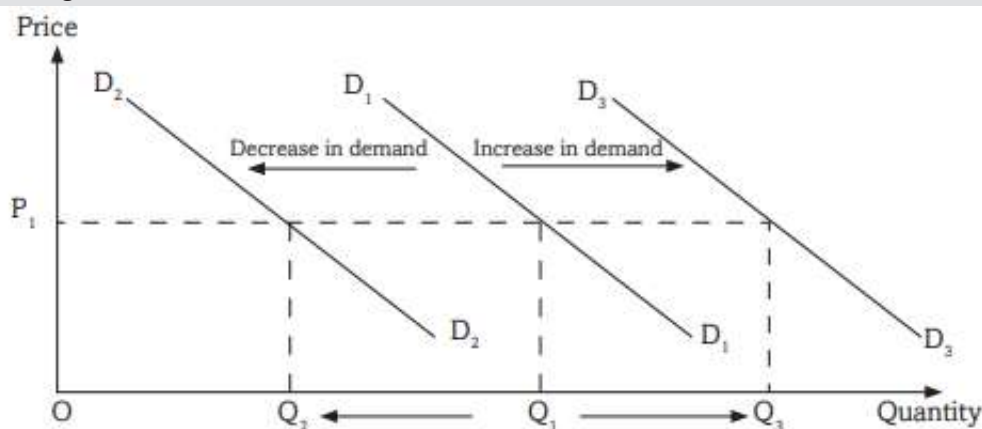
Provide necessary support as you moderate the discussions.

Possible answers

a) Change in quantity demanded



Change in demand



PART 2: THEORY OF SUPPLY

Note: Under this part two of the unit, the teacher needs to remind students that it is a continuation of theory of Demand and supply. Students must adapt their perception on the supply side which looks a little bit opposite to that of the demand.

LESSON 5: Law of Supply, Supply schedule and Supply curve

a) Learning objectives

- Explain the key terms related to “supply”.
- State the law of supply, explain the types of supply, and describe the shape of the supply curve.
- Use the supply curve to illustrate the law of supply and the relationship between the price and quantity supplied

b) Teaching aids:

Basic materials for a class/ lesson to be conducted: Learners books, internet and projector, textbooks, resourceful persons and any other trustworthy and reliable resources to enhance learning.

c) Prerequisites/Revision/Introduction:

Read the Key unit competence in the syllabus to determine what students will know and be able to do by the end of the unit. Look at the action verb, concept, and context of each learning objective. This will help you to see the skills, knowledge and

attitudes embedded in the learning objective. Remember, the learning objectives link to the key unit competence.

Use K-W-L (What learners already know-What they want to know-What they have learnt) after the introductory activity to assess how much students already know and what they would be interested in learning about technology in business operations.

d) Activity 7.5

- Have learners seated in pairs groups and help them understand the data given from Huye market clients
- Each pair analyse the data and respond to the attached questions
- Move around the pairs to ensure that they are in the right truck as you provide necessary clarifications
- After the completion of the activity, select any two pairs to share with the entire class about their findings from the exercise.
- Since this activity is an introductory, do not reject any student's idea instead guide them and encourage them to follow the next activity.

Possible answers

a) When the price of the commodity increased, quantity supplied also increased.

b, c d, e) Refer to the student book on supply schedule and supply curves (Individual and market supply schedules & curves)

e) Application activity 7.5

For this application activity, since students are now equipped with necessary information,

- Have them sit into manageable groups and help them understand the data given for Uwase and Kalisa clients.
- Allow them to analyse the data and respond to the attached questions
- Move around the groups to ensure that they are in the right truck as you provide necessary clarifications
- After the completion of the application activity, using gallery walk let teams share with the entire class about their findings from the exercise.

Possible answers

- i) The reason is because of the law of supply.

LESSON 6: Determinants of supply

a) Learning objectives

- Identify possible determining factors of supply
- Analyze the factors determining supply
- Appreciate that supply is sensitive to changes in the determining factors

b) Teaching aids:

Basic materials for a class/ lesson to be conducted: Learners books, internet and projector, textbooks, resourceful persons and any other trustworthy and reliable resources to enhance learning.

c) Prerequisites/Revision/Introduction:

Read the Key unit competence in the syllabus to determine what students will know and be able to do by the end of the unit. Look at the action verb, concept and context of each learning objective. This will help you to see the skills, knowledge and attitudes embedded in the learning objective. Remember, the learning objectives link to the key unit competence.

Use K-W-L (What learners already know-What they want to know-What they have learnt) after the introductory activity to assess how much students already know and what they would be interested in learning about technology in business operations.

d) Activity 7.6

Students in groups analyse the supply schedules and provide necessary reasons for the market situations for Umulisa and Kabatesi.

Possible answers

- ii) i) The reason as why the units of sweet potatoes sold go on increasing as prices increase and vice versa is simply because of the law of supply.

iii) ii) The reasons as to why Umulisa sold many units of clothes than Kabatesi at the same prices is simply because of differences in the way they, both, are influenced by other factors that affect supply other than price like:

- Differences in levels of technology
- Differences in levels of advertisements.
- Differences in operating capital, etc

e) Application activity 7.6

In teams, students discuss or give reasons to why some market conditions went the way they went.

Provide guidance on the number of factors that may have caused some increase in quantity supplied and their effects.

Remind students to relate the given scenarios to their real-life market conditions and let them know that they must make informed entrepreneurial decisions

Possible answers

Students will provide different reasons. Consider each and every student answer.

Refer to factors influencing supply while correcting student's reasons 7.4.2

LESSON 7: Types of supply & Abnormal Supply Curves

a) Learning objectives

- Distinguish between normal and abnormal supply curves and between change in supply and quantity supplied
- Analyze the factors that may lead to violation of the law of supply and their impact on business decisions.

b) Teaching aids:

Basic materials for a class/ lesson to be conducted: Learners books, internet and projector, textbooks, resourceful persons and any other trustworthy and reliable resources to enhance learning.

c) Prerequisites/Revision/Introduction:

Read the Key unit competence in the syllabus to determine what students will know and be able to do by the end of the unit. Look at the action verb, concept and context of each learning objective. This will help you to see the skills, knowledge and attitudes embedded in the learning objective. Remember, the learning objectives link to the key unit competence.

Use K-W-L (What learners already know-What they want to know-What they have learnt) after the introductory activity to assess how much students already know and what they would be interested in learning about technology in business operations.

d) Activity 7.4.3.

- Have learners sit in group brainstorm and analyse the set of commodities given
- On a common sheet of paper, let them provide the possible economic terms given to those group of commodities, explain their relationship and how price changes affect the supply in each set.
- Ensure that shy students are actively participating in the group activity.
- Move around the teams and support accordingly as you appreciate the answers given by the students.
- Give learners enough time to ask questions where they do not understand

Possible answers

a) The goods of G1 are named: Competitive supply

Those of G2 are called, Joint supply

b) relationships between the commodities of G1: For competitive products, the production of one stimulates the reduction of the other

G 2 : They are produced together

c) For G1 (Competitive commodities): Producers tend to maximize profits by foregoing the production of the product of which price didn't raise.

G2 : The change of price (increase or decrease) of one of the products, affects the quantity supplied of both commodities in a similar way

e) Application activity 7.4.3.

Let this activity be performed by learners sited in pairs. They should analyse the reasons behind them supplying goods in the market.

At the completion of this activity, A few randomly selected pairs will stand in front of the whole class to defend the reason they have given. Learners should ask questions for better understanding.

Possible answers

There is no specific answer for this activity, learners will give a variety of possible reasons why people supply goods to the market but it is up to the teacher to judge what are right or wrong reasons.

For more ideas about this question, refer to the determinants of supply

LESSON 8: Change in quantity supplied Vs Change in supply

a) Learning objective:

- Use the supply curve to illustrate the law of supply and the relationship between the price and quantity supplied.

b) Teaching aids:

Basic materials for a class/ lesson to be conducted: Learners books, internet and projector, textbooks, resourceful persons and any other trustworthy and reliable resources to enhance learning.

c) Prerequisites/Revision/Introduction:

Read the Key unit competence in the syllabus to determine what students will know and be able to do by the end of the unit. Look at the action verb, concept and context of each learning objective. This will help you to see the skills, knowledge and attitudes embedded in the learning objective. Remember, the learning objectives link to the key unit competence.

Use K-W-L (What learners already know-What they want to know-What they have learnt) after the introductory activity to assess how much students already know and what they would be interested in learning about technology in business operations.

d) Activity 7.4.4.

Learners in manageable groups, will brainstorm and use the pen and paper to explain their ideas about the difference between change in quantity supplied vis a vis change in.

Ensure that everyone contribute to the works.

Move around the groups to verify that there no unsolved difficulties.

Possible answers

Students will provide different answers. Consider each and every student answer.

a) Change in Supply refers to an increase or decrease in the amount of a commodity supplied in the market at a particular time due to other determinants of supply at a constant price while **change in quantity supplied** refers to the change in the quantity of goods available for sale on the market at any given time due to a change in the price of that commodity, other factors remaining constant.

e) Application activity 7.4.4

Learners in pairs, will:

Imagine the applicable data and use the graphical illustrations to make the difference between the change in supply and the change in quantity supplied.

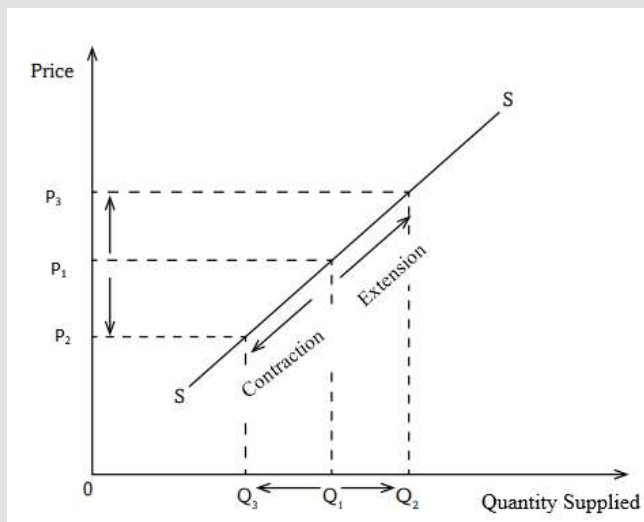
A few pairs selected randomly, present the data and the graphical illustration on the whiteboard / black board to share with the entire class about their findings.

Allow fellows to ask questions for clarification.

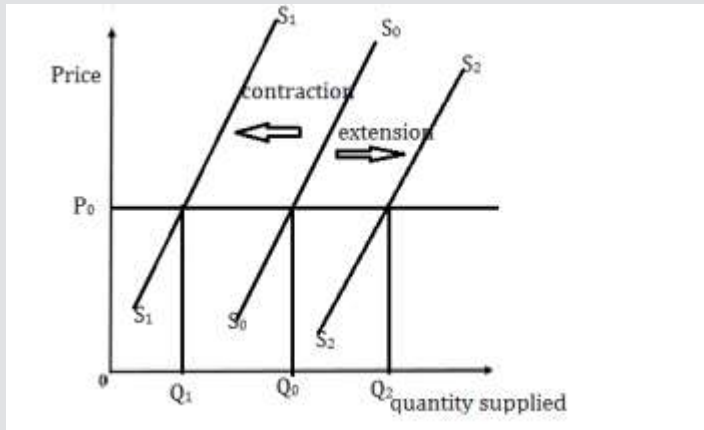
Provide necessary support as you moderate the discussions.

Possible answers

The following Graph illustrates the change in quantity supplied



- Graph illustrating change in supply



LESSON 9: Equilibrium price and quantity supplied

a) Learning objective:

- Use the supply curve to illustrate the law of supply and the relationship between the price and quantity supplied.

b) Teaching aids:

Basic materials for a class/ lesson to be conducted: Learners books, internet and projector, textbooks, resourceful persons and any other trustworthy and reliable resources to enhance learning.

c) Prerequisites/Revision/Introduction:

Read the Key unit competence in the syllabus to determine what students will know and be able to do by the end of the unit. Look at the action verb, concept and context of each learning objective. This will help you to see the skills, knowledge and attitudes embedded in the learning objective. Remember, the learning objectives link to the key unit competence.

Use K-W-L (What learners already know-What they want to know-What they have learnt) after the introductory activity to assess how much students already know and what they would be interested in learning about technology in business operations.

d) Activity 7.5. (Learner's book)

Learners in manageable groups, will brainstorm and use the pen and paper to identify the factors that may influence a change in supply.

Ensure that everyone contribute to the works.

Move around the groups to verify that there no unsolved difficulties.

Possible answers

Object **A** represented the number of kilograms brought to market by suppliers and object **B** represented the number of kilograms demanded by buyers of a particular commodity in a market, prices will increase because there is excess demand compared to what is supplied.

2.Learners are likely to give very many different responses, however they should all reflect to the fact that in order to bring the two objects to a balance, it requires the suppliers to raise the price to the extent that the quantity demanded equates to the quantity supplied. "Ceteris paribus"

e) Application activity 7.5

Learners in pairs, will:

Imagine the applicable data and use the graphical illustrations to make the difference between the change in supply and the change in quantity supplied.

A few pairs selected randomly, present the data and the graphical illustration on the whiteboard / black board to share with the entire class about their findings.

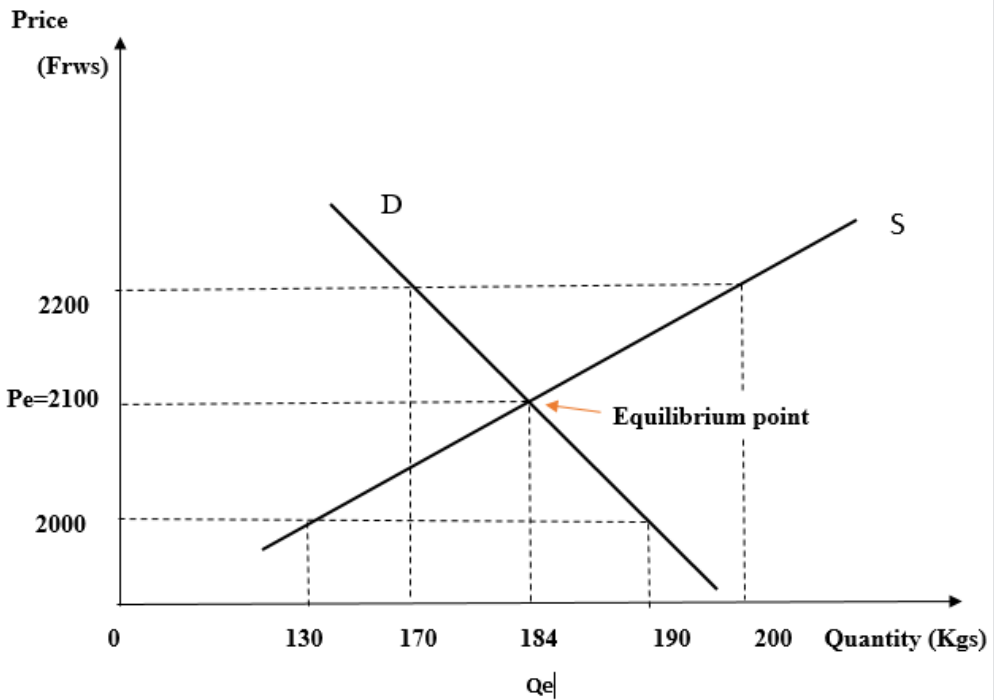
Allow fellows to ask questions for clarification.

Provide necessary support as you moderate the discussions.

Possible answers

Demand and supply schedules:

Demand schedule		Supply schedule	
Price (FRW)	Quantity (kg)	Price (FRW)	Quantity (kg)
2,000	190	2,000	130
2,100	184	2,100	184
2,200	170	2,200	200



7.6. Additional information

The teacher will make research for more information on theory of demand and supply

7.7. End of unit 7 assessment

1. Students will describe the different determinants of demand for commodities; Consider description of each relevant determinant. (Refer to the Determinants of demand student's book on subtitle 7.1.3)
2. Students will analyse the factors that might make someone to increase or to decrease the the quantity supplied ; Consider the analysis of the factors influencing the increase or decrease of supply. (Refer to the student book on subtitle 7.2.2)
3. $Q_d = 16 - 2P$; where Q_d is the amount of sugar that consumers want to buy (i.e., Quantity demanded), and P is the price of sugar
 $Q_s = 2 + 5P$; where Q_s is the amount of sugar that producers will supply (i.e., Quantity supplied) and P is the Price of sugar.

At equilibrium quantity (Q_e) it is assumed that $Q_d = Q_s$ where Q_d is quantity demanded and Q_s is quantity supplied, at this point we have equilibrium price (P_e).

Let us rewrite the above equations to make a set of linear equations describing the variables equilibrium quantity and equilibrium price as

$$Q_e = 16 - 2P_e$$

$$Q_e = 2 + 5P_e$$

Using the above set of equations, we find the equilibrium quantity and price as follows.

$$\text{At equilibrium, } Q_d = Q_s = Q_e$$

$$\text{thus } 16 - 2P_e = 2 + 5P_e$$

$$16 - 2 = 2P_e + 5P_e$$

$$14 = 7P_e$$

$$\mathbf{P_e = 2}$$

Equilibrium price is 2

Now, substitute the value of **P_e**, i.e. **2** in any of the equations:

$$Q_e = 16 - P_e \quad \text{or} \quad Q_e = 2 + 5P_e$$

$$Q_e = 16 - 2(2) \quad Q_e = 2 + 5(2)$$

$$Q_e = 16 - 4 \quad Q_e = 2 + 10$$

$$Q_e = 12. \quad Q_e = 12$$

Equilibrium quantity is 12.

From our demand and supply equations above, **Equilibrium Price (P_e) is 2** and

Equilibrium Quantity (Q_e) is 12

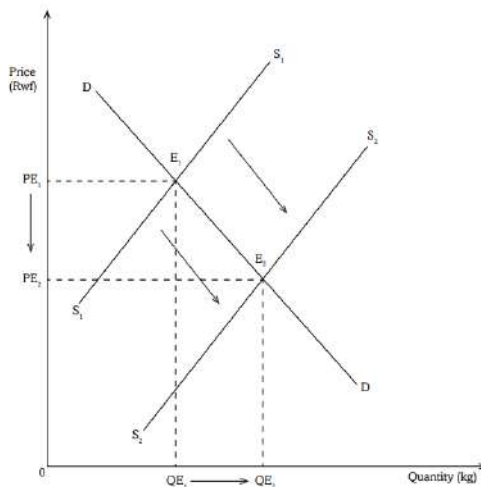
Possible answers:

7.8. Additional activities

Increase in supply

Increase in supply shifts the supply curve to the right. This will lead to increase in the equilibrium quantity and decrease in the equilibrium price. An increase in supply of a commodity may be brought about by an increase in the number of producers, improvement in technology, entry of new firms into the industry, decrease in taxes on

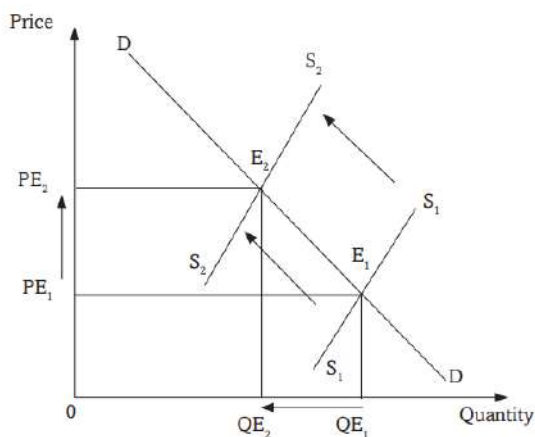
producers which reduces their production costs, favorable natural factors, increase in demand for the commodity, change in goals of the firm, decrease in prices of factors of production, or increase in price of jointly supplied commodities



When supply increases, the supply curve shifts to the right from S_1 to S_2 . Similarly, the equilibrium point is extended from E_1 to E_2 . This leads to increase in equilibrium quantity from OQE_1 to OQE_2 and a decrease in equilibrium price from OPE_1 to OPE_2 .

Decrease in supply

Decrease in supply shifts the supply curve to the left. The equilibrium point contracts to the left. This will lead to decrease in the equilibrium quantity and increase in the equilibrium price.



When supply decreases, the supply curve shifts to the left from S_1 to S_2 . Similarly, the equilibrium point contracts from E_1 to E_2 . This leads to a decrease in equilibrium quantity from OQE_1 to OQE_2 and an increase in equilibrium price from OPE_1 to OPE_2 .

7.8.1. Remedial activities

1. a) define the term demand
 b) state the law of demand.
 c) Both demand and supply are expressed as schedules or curves. During a specific period the demand schedule indicates the.....
 . and the supply schedule indicates the..... at various prices in the schedule.

2.

Complete the table below using + for an increase or - for a decrease or a? for indeterminate.

Effect of	Upon equilibrium	
	Price	Quantity
Increase in both demand and supply		
Decrease in both demand and supply		
Increase in demand and decrease in supply		
Decrease in demand and an increase in supply		

Possible answers

- a) Is the amount of goods or services that a consumer is willing and able to purchase at various price levels per period.
- b) The law states that the higher the price the higher the quantity demanded ceteris paribus.

2. + - + -

7.8.3. Extended activities

Fill in the gaps to complete the supply schedule

Supply Schedule for Milk					
Week June 8-14, 2006					
Price	W	X	Y	Z	Quantity Supplied
1.3		320	600	530	1700
1.2	225		550	525	1600
1.1	200	280		520	1500
1.0	175	260	450		1400
0.9	150	240	400	510	
0.8	125	220	350		1200
0.7	100	200		500	1100

Write your observations about the above schedule

.....

The completed schedule is given

Supply Schedule for Milk					
Week June 8-14, 2006					
Price	W	X	Y	Z	Quantity Supplied
1.30	250	320	600	530	1,700
1.20	225	300	550	525	1,600
1.10	200	280	500	520	1,500
1.00	175	260	450	515	1,400
0.90	150	240	400	510	1,300
0.80	125	220	350	505	1,200
0.70	100	200	300	500	1,100

Hence if you observe there would be two important columns in the supply schedule. The columns will be price versus the total quantity supplied in the market.

If we are to define supply it may sound similar to our definition of demand. Supply is the schedule of what is supplied (by suppliers willing and able to supply) versus price at a specific time.

UNIT 8

ELASTICITY OF DEMAND AND SUPPLY

8.1. Key Unit Competence:

To be able to apply elasticity of demand and supply in making rational economic and entrepreneurial decisions

8.2. Unit prerequisite

In S4, Unit 6(Basic principles of Economics) students have studied concepts of scarcity, choice and opportunity cost. In the previous unit (Theory of demand and supply), students analysed demand and supply conditions in the market. This background will enable students learn elasticity of demand and supply.

8.3. Cross-cutting issues to be addressed

Note: The examples below are just to guide you on how to address cross-cutting issues throughout the unit but this does not mean that these are the only ones. You can address and give learners opportunities to discuss all the crosscutting issues where possible taking consideration of their environment or community around them.

Inclusive education... Emphasis has to be put on how all learners irrespective of their backgrounds, economic or social setup have right to participate in business activities that benefit their communities. Teachers should emphasize that irrespective of their backgrounds, all students have equal chance to quality education.

Gender education: The teacher should bear in mind that all students (girls and boys) have equal opportunities and rights to study. When forming group activities, assigning tasks and responsibilities, asking questions, and giving feedback a teacher should include both girls and boys.

Refer to other crosscutting issues as identified in the preliminary pages of the teacher's guide and curriculum framework.

8.4. Guidance on the introductory activity

- Form manageable groups of 4 or 5 students. (The number of group members may change according to class situations)

- Invite students to read the scenarios from student book, share ideas and then answer related questions
- Guide students' discussions
- Ask students to present their discussion findings
- Supplement students' presentations and link students' answers to the new lesson

Possible answers

- **Elasticity** best describes what Mutoni experienced. This is because in all situations, the experience of Mutoni is the responsiveness of quantity demanded of carrot and sugar to changes in prices.
- Supposing that the prices of sugar had raised, Mutoni would have bought 5kg instead of 20 kg.
- Demand for rice is elastic compared to demand for sugar. This is because a small change in the price of rice (Frw 1,200 to Frw 1,500) caused a proportionately bigger change in quantity demanded (20kg to 10kg).

8.5. List of lessons/sub-heading

#	Lesson title/ Sub-heading	Learning objectives (from the syllabus or set according to the lesson title)	Num- ber of periods
1	<ul style="list-style-type: none"> • Introduction to elasticity 	<ul style="list-style-type: none"> – Explain the term “elasticity” 	2
2	<ul style="list-style-type: none"> • Types of elasticity – Elasticity of demand 	<ul style="list-style-type: none"> – Identify the types of elasticity of demand – Advocate for buying commodities based on variation in their determinants – Calculate and interpret the different types of elasticity of demand 	4
3	Types of elasticity (Cont'd) <ul style="list-style-type: none"> – Elasticity of supply 	<ul style="list-style-type: none"> – Identify different types of elasticity of supply – Advocate for supplying of commodities based on variation in their determinants – Examine the factors that influence the elasticity of supply 	4

End of unit assessment & Remediation		To be able to apply elasticity of demand and supply to make rational economic and entrepreneurial decisions	2
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LESSON 1: Introduction to elasticity

a) Learning objective:

Explain the term “elasticity”

b) Teaching resources

Flip chard, chalkboard, markers, pens, magazines

c) Prerequisites/Revision/Introduction (guidance on how to start a lesson)

Students already know how resources are scarce. For instance, materials at schools are in most cases insufficient (computers, bedrooms in some schools are not sufficient). On top of that, students have studied in unit 6, the relationship between scarcity, choice and opportunity cost. It is due to limited financial capability that when the price of a commodity increases, its quantity demanded is in most cases reduced and vice versa. This background will enable students to learn the meaning of elasticity.

d) Learning activities

Activity 8.1

- Invite students to read the case study individually from the student book
- Ask students to share ideas in pairs
- Call some pairs to make presentations (if time allows, you can let all pairs present where possible)
- Provide constructive feedback in terms of supplements (here, you share with them the expert view.)

Possible answer

Elasticity is the degree of responsiveness of dependent variables to independent variables.

Link the students’ answer with the new lesson.

e) Application activity 8.1.

- Ask students to read the scenario individually. Then let them share in pairs
- Invite randomly selected pairs to present their findings to the entire class
- Give opportunity to groups which did not present to supplement
- Give supplement (explain to student why the term “elasticity” is suitable to fill the sentence.

Possible answer

The change in quantity demanded of carrots from 15kg to 10kg as a response to change in the price of carrots from 1,000Frw to 1,500Frw is **elasticity**.

LESSON 2: Types of elasticity

a) Learning objectives:

- Identify the types of elasticity of demand
- Advocate for buying commodities based on variation in their determinants
- Calculate and interpret the different types of elasticity of demand

b) Teaching resources:

Flip chart, chalkboard, markers, pens, pictures, field trips

c) Prerequisites/Revision/Introduction:

Students already know how resources are scarce. For instance, materials at schools are in most cases insufficient (computers, bedrooms in some schools are not sufficient). On top of that, students have studied in unit 6, the relationship between scarcity, choice and opportunity cost. It is due to limited financial capability that when the price of a commodity increases, its quantity demanded is in most cases reduced and vice versa. This background will enable students to learn the meaning of elasticity.

d) Learning activity 8.2

- Form manageable groups of 4 or 5 students
- Ask students to read the activities individually, and then ask one student to read them loudly. Help students/groups to understand the activities clearly.
- Instruct students to work on the activities in groups

- Invite randomly selected groups to present their findings to the entire class (Gallery walk method can be used)
- Give opportunity to groups which did not present to supplement
- Share the expert view/give constructive feedback in form of supplement

Possible answers

1.

- **Elasticity of demand** is a measure of the degree of responsiveness of quantity demanded of a commodity to changes in factors that affect demand.
- **Elasticity of supply** is a measure of the responsiveness of the quantity supplied to changes in determinants of quantity supplied.

2.

- This situation represents elasticity of demand
- This situation represents elasticity of supply

Exercise on YED

- Form manageable groups of 4 or 5 students
- Ask students to read the activities individually, and then ask one student to read them loudly. Help students/groups to understand the activities clearly.
- Instruct students to work on the activities in groups
- Invite randomly selected groups to present their findings to the entire class (Gallery walk method can be used)
- Give opportunity to groups which did not present to supplement
- Share the expert view/give constructive feedback in form of supplement

Exercise on YED

- Form manageable groups of 4 or 5 students
- Ask students to read the activities individually, and then ask one student to read them loudly. Help students/groups to understand the activities clearly.
- Instruct students to work on the activities in groups
- Invite randomly selected groups to present their findings to the entire class (Gallery walk method can be used)
- Give opportunity to groups which did not present to supplement

- Share the expert view/give constructive feedback in form of supplement

$$YED = (-) \frac{Q2 - Q1}{Y2 - Y1} \times \frac{Y1}{Q1} = (-) \frac{10 - 14}{12,000 - 9,000} \times \frac{9,000}{14}$$

$$YED = (-) \frac{-4}{3,000} \times \frac{9,000}{14} = \frac{36,000}{42,000} = 0.86$$

Exercise on Cross elasticity of demand

- Form manageable groups of 4 or 5 students
- Ask students to read the activities individually, and then ask one student to read them loudly. Help students/groups to understand the activities clearly.
- Instruct students to work on the activities in groups
- Invite randomly selected groups to present their findings to the entire class (Gallery walk method can be used)
- Give opportunity to groups which did not present to supplement
- Share the expert view/give constructive feedback in form of supplement

Possible solution:

$$i) \quad ED = \frac{Q2 - Q1}{P2 - P1} \times \frac{P1}{Q1} = \frac{30 - 20}{8,000 - 1,000} \times \frac{1,000}{20}$$

$$PED = \frac{10}{7,000} \times \frac{1,000}{20} = \frac{10,000}{140,000} = 0.07$$

- ii) Commodity W and commodity Z are substitute because their cross elasticity of demand is positive

Exercise on PES

- Form manageable groups of 4 or 5 students
- Ask students to read the activities individually, and then ask one student to read them loudly. Help students/groups to understand the activities clearly.
- Instruct students to work on the activities in groups
- Invite randomly selected groups to present their findings to the entire class (Gallery walk method can be used)
- Give opportunity to groups which did not present to supplement
- Give a constructive feedback in form of supplement

Possible answer:

$$PES = (-) \frac{Q_2 - Q_1}{P_2 - P_1} \times \frac{P_1}{Q_1} = (-) \frac{200 - 800}{450 - 600} \times \frac{600}{800}$$

$$PES = (-) \frac{-600}{-150} \times \frac{600}{800} = \frac{360,000}{120,000} = 3$$

e) Application activity 8.2

- Ask students to read the activity individually, then ask one student to read the activity loudly. Make sure every student understands the activity clearly, and what he or she is expected of.
- Ask students to do these activities as homework
- When students come back to school, call some students present their answers
- Give opportunity to some students who did not present to supplement
- Provide supplements

Possible answers

1.
$$PED = \frac{Q_2 - Q_1}{P_2 - P_1} \times \frac{P_1}{Q_1} = \frac{200 - 120}{450 - 600} \times \frac{600}{120}$$

$$PED = (-) \frac{80}{-150} \times \frac{600}{120} = \frac{48,000}{18,000} = 2.6$$

2. (i)
$$YED = \frac{Q_2 - Q_1}{Y_2 - Y_1} \times \frac{Y_1}{Q_1} = \frac{40 - 70}{7,000 - 5,000} \times \frac{5,000}{70}$$

$$YED = \frac{-30}{2,000} \times \frac{5,000}{70} = \frac{-15,000}{14,000} = -1.071$$

- iii) The commodity X is an inferior good because its income elasticity of demand is negative.

3. (i)
$$CED = \frac{Q_2 - Q_1}{Y_2 - Y_1} \times \frac{Y_1}{Q_1} = \frac{30 - 50}{7,000 - 2,000} \times \frac{2,000}{50}$$

$$YED = \frac{-20}{5,000} \times \frac{2,000}{50} = \frac{-40,000}{250,000} = -0.16$$

- (ii) Commodities Y and X are complements because the rise in price of commodity Y results in reduction of quantity demanded of commodity X.

4.

$$\Delta Qd = 750 - 400 = 350$$

$$\% \Delta Qd = \frac{350}{400} \times 100 = 87.5\%$$

$$\% \Delta PY = 20\%$$

$$CED = \frac{\% \Delta Qdx}{\% \Delta Py} = \frac{87.5}{20} = 4.375$$

Commodities X and Y are substitutes because the increase in price of Y by 20% causes 87.5% increase in quantity demanded of commodity X

5.

$$\% \Delta Qs = \frac{300-100}{100} \times 100 = 200\%$$

$$\% \Delta P = 20\%$$

$$PES = \frac{\% \Delta Qs}{\% \Delta P} = \frac{200\%}{20\%} = 10$$

PES is elastic because $\% \Delta Qd(200\%) > \% \Delta P(20\%)$

Skills Lab 8

Build

Students in manageable groups read the activity.

Give instructions that this lab is going to help them understand better how a change in their product or others products can affect the business setting on either side. Let students ask questions for clarification

Practice

Ask students to compute the cross elasticity of demand and interpret their results. Remind them to show all the working while doing calculations.

Present

The teacher guides the presentations as he/she gives feedback to each group and makes conclusion through posing questions as a form of assessment.

Encourage learners to ask questions where they do not understand. The teacher emphasizes that each team will hang the work on the present board for future reference.

Conclusion

The teacher concludes by emphasizing the relationship between the business club's product and UBWIZA's one, and how they can affect one another at the market.

8.6. Additional information

Limitations of the concepts of elasticity of demand

- **Irrelevant and unreliable data**

The data that are used to calculate elasticities of demand may be irrelevant or unreliable. Data from past records may no longer be relevant to calculating elasticities of demand as some of the determinants of demand may have changed. Although data from current market surveys are relevant to calculating elasticities of demand, they may not be reliable as the respondents may not be truthful in their responses. Furthermore, if the sample sizes of the market surveys are small, the results may not be reliable as they may not be reflective of the actual markets for the goods.

- **Unrealistic assumption**

The assumption of *ceteris paribus* that is made in calculating elasticities of demand is unlikely to hold in reality. In reality, many factors such as the level of income, the price of the good and the prices of related goods are changing simultaneously.

- **Omission of total cost**

Although PED may be useful for increasing total revenue, this is not true for increasing profit due to the omission of total cost. For example, if demand is price elastic, a fall in price will lead to a larger proportionate increase in quantity demanded resulting in an increase in total revenue. However, if total cost rises by a larger extent, profit will fall.

- **Omission of production capacity**

PED and CED do not take production capacity into consideration. For example, if demand is price elastic, a fall in price will lead to a larger proportionate increase in quantity demanded resulting in an increase in total revenue. However, total revenue will not rise if there is no excess capacity to increase production.

8.7. End unit 8 assessment

Possible answers

1. Refer to the student's book 8.2

$$2. \quad (i) PED = \frac{Q_2 - Q_1}{P_2 - P_1} \times \frac{P_1}{Q_1} = \frac{20 - 25}{7,500 - 5,000} \times \frac{5,000}{50}$$

$$PED = \frac{-5}{2,500} \times \frac{5,000}{50} = \frac{-25,000}{125,000} = -0.2$$

- (ii) The PED is inelastic because $-0.2 > 1$
3. Refer to application activity 8.2, question 4
4. Refer to student's book (Practical application of price elasticity of demand)
5. Refer to student's book (Practical application of price elasticity of demand)

$$6. \quad PED = \frac{Q_2 - Q_1}{P_2 - P_1} \times \frac{P_1}{Q_1} = \frac{50 - 100}{1,500 - 3,000} \times \frac{3,000}{100}$$

$$PED = \frac{-50}{-1,500} \times \frac{3,000}{100} = \frac{-150,000}{-150,000} = 1$$

This PED is perfectly inelastic because a change in price doesn't affect quantity demanded.

7. Refer to student's book

8.8. Additional activities

8.8.1. Remedial activity

1. Differentiate between elasticity of demand and elasticity of supply.
2. Given that the price of a commodity reduced from 4,000Frw to 2,500Frw leading to a decrease in its quantity supplied from 110kg to 60kg, determine the elasticity of supply for this commodity

Possible answers

1. Refer to student's book

$$2. \quad PED = \frac{Q_2 - Q_1}{P_2 - P_1} \times \frac{P_1}{Q_1} = \frac{60 - 110}{2,500 - 4,000} \times \frac{4,000}{110}$$

$$PED = \frac{-50}{-1,500} \times \frac{4,000}{110} = \frac{-200,000}{-165,000} = 1.2$$

- 3.

8.8.2. Consolidation activity

The income of the consumer increased by 60% leading to a decrease in the quantity demanded of commodity S from 100 units to 70 units. Find the elasticity of commodity S.

Possible answer:

$$\% \Delta Qd = \frac{70-100}{100} \times 100 = -30\%$$

$$\% \Delta P = 60\%$$

$$PES = \frac{\% \Delta Qd}{\% \Delta P} = \frac{-30\%}{60\%} = -0.5$$

8.8.3. Extended activity

Using your knowledge and skills about elasticity and pricing power, describe reasons why different consumers pay different prices.

Possible answer

- a) Sellers often charge different prices for goods based on differences in price elasticity of demand.
- b) The ability to charge different prices depends on some market power; that is, some ability to control price (unlike the competitive model where all buyers and sellers exchange at exactly the same price).
- c) Customers are grouped according to elasticities. Business travelers have more inelastic demand for air travel, and thus can be charged a higher price than the more price elastic tourist. The low budgets of children make their demand more price elastic, explaining why they receive discounts for movies or sporting events.

UNIT 9

PRICE MECHANISM

9.1. Key Unit Competency:

To be able to analyze the role of price mechanism in the allocation of resources

9.2. Unit Prerequisite

In the beginning of senior four and O'level, learners were introduced to basic economic concepts, theory of demand and Supply and elasticity. They have reviewed price as one of the main determinants of both demand and supply. This prior knowledge, skills or competences should help them to be able to understand what is meant by price mechanism and analyse its role in the allocation of resources.

9.3. Cross-cutting issues to be addressed

Note: The examples below are just to guide you on how to address cross-cutting issues throughout the unit but this does not mean that these are the only ones. You can address and give learners opportunities to discuss all the crosscutting issues where possible taking consideration of their environment or community background.

Gender education: Emphasis throughout this unit has to be put on how both male and females have the same opportunities when it comes to react to the price changes on the market. Both males and females can equally be affected by the price system. Prices allocate resources to all irrespective of gender.

Environment and sustainability: The greatest territory in which price mechanism operates is the environment. Buyers and sellers cannot practice their activities without the environment. Therefore, a great care for the environment is paramount for continued business operations of production and consumption.

Inclusive education: In addition to all having equal opportunities to buy and sell, emphasis has to be put on how we all regardless of our background, economic or social setup have right to produce and consume whatever we need since our needs are the same. Learners need to understand that all consumers aim at utility maximization and all producers at profit maximization.

Peace and Values: You need to emphasize to students the need to live in peace and harmony with others. Learners need to appreciate the role of price theory in the allocation of resources. Learners also need to appreciate the principle of Consumer sovereignty which emphasize that productions should be based on what consumers need.

Refer to other cross-cutting issues as identified in the curriculum framework.

9.4. Guidance on the introductory activity

This introductory activity is intended to:

1. Provide interest and motivation to the learners about price mechanism
2. Focus learner's attention on price mechanism, its purpose is to convince learners about what they will benefit from the unit.
3. Build on previous knowledge, skills, values, and attitudes to help the teacher to assess the learner's prior knowledge and help to link with the new content, or
4. the new content can help to arouse learner's interest about what to expect in the new content. that can be answered in one lesson, or
5. Gradually, over a period as the unit progresses. At this point, there are no right or wrong answers as learners will gradually get more appropriate answers progressively as they go through the unit.

Use an appropriate method such as small groups or pairs and provide learners with Unit 3 introductory activity, give clear instructions to the activity. During grouping or pairing, mix boys and girls and learners with different abilities.

Possible answers for the Introduction Activity: refer learner's book

- a) Learners will give different views about what they expect in a situation of excess supply of Irish potatoes and when there is scarcity of it. However, the realistic anticipations would be that; in the first situation of excess supply, prices fall while in the second situation of scarcity, prices increase.
- b) Learners should respond that the demand increases in the first situation of excess supply since prices are not high. The demand falls in the second situation because prices are high due to the scarcity.
- c) Since this the introductory activity, students will give different ideas relating to the advantages and disadvantages offered by price mechanism. It is up to the teacher to judge whether their ideas are right or wrong. Here are some of the guiding responses:

Advantages of price mechanism

1. Price mechanism promotes efficient allocation and use of resources. Due to competition and desire to maximise profits, resource owners allocate them more efficiently to avoid wastages.
2. Under price mechanism, there is economic growth. Producers do research, invention and innovations which leads to increase in production and improvement in technology therefore resulting into economic growth.
3. Efficiency in production: There is competition between producers. These will cut on origination or costs so as to compete favourably in the market.
4. There is speculation under price mechanism. Speculators ensure steady supply of commodities. Consumers are offered a chance to access commodities all the time throughout.
5. Price mechanism encourages acquisition and distribution of commodities from areas where supply is high to areas where there is little or no supply. This also ensures a ready supply of commodities to the consumers
6. Price mechanism answers the following economic questions:
 - a) **What to produce:** Producers produce commodities that fetch high profits.
 - b) **How to produce:** The method of production used should be cost effective.
 - c) **For whom to produce:** Producers manufacture or produce commodities when they are assured of a ready market for the goods.
 - d) **When to produce:** Commodities are normally produced when needed.
5. It encourages effective distribution and redistribution of resources. Resources are distributed to areas where they are rewarded favorably depending on their demand and prices. Land is used in areas where rent is high, labour goes to where wages are high and capital where interest is maximum.
6. Price mechanism works automatically. It therefore does not require the government to put in a lot of resources for implementation. This makes it cheap to operate. It is the responsibility of the government and gives it a chance to concentrate on other areas.

Disadvantages of price mechanism

1. Price mechanism promotes income inequality. Resource owners earn more incomes than those without. Those with more earn more and those with less earn less.
2. The high cost and inefficient firms are pushed out of business by the most efficient ones. This kind of competition may result in a monopoly in the long run.
3. The desire to maximize profits is high under price mechanisms. This profit oriented motive can make producers supply us with substandard or counterfeit products, or exploit consumers who have little information about the market.
4. Since there is no government control in the price mechanism, there may be introduction of harmful and illegal products to the market.
5. Too much competition may eliminate upcoming and small firms from the market. This may lead to un-exploitation of some resources.
6. Unprofitable but essential commodities may disappear from the market. Private producers aim at making profits and not providing satisfaction or essential commodities. Private producers of much more benefits may overrun public benefits. Producers aim at satisfying their individual interests and not public interest.
7. The price system cannot provide public goods some of which are not profit making. For instance, street lights may not be provided by the private sector which aims at profit making.
8. Price mechanism may bring about price fluctuations. Change in demand and supply result into price changes in the market. When demand exceeds supply, price increases. When supply exceeds demand, price lowers.
 - a) Since this the introductory activity, students will unknowingly give different ideas relating to the effects of price fluctuation. The teacher shall judge whether their ideas are right or wrong. However, for more guidance on the probable answers, on can read student's book on 9.4.3: Effects of price fluctuation.
 - b) Refer to student's book on 9.4.4. Measures to control price fluctuation.

9.5. List of Lessons/sub-heading including assessments

No of lessons	Lesson Title	Learning objectives (from the syllabus including knowledge, skills and attitudes)	Periods
1	Meaning, Advantages and Disadvantages of Price mechanism	<ul style="list-style-type: none"> – Explain the meaning of price mechanism and describe how price mechanism operates – Identify the advantages and disadvantages of price mechanism 	2
2	Solutions to problems of price mechanism	<ul style="list-style-type: none"> – Justify various methods of price controls. 	1
3	Price fluctuations	<ul style="list-style-type: none"> – Analyze the impact of price fluctuations in an economy – Examine the effects of various price controls in Rwanda. 	2
4	End of Unit Assessment & remediation	Analyse the role of price mechanism in the allocation of resources.	1

LESSON 1: Meaning, advantages and disadvantages of price mechanism

a) Learning objective:

- Explain the meaning of price mechanism and describe the advantages and disadvantages of price mechanism.

b) Teaching aids: Basic materials for a class/ lesson to be conducted:

Desks, Learners books, internet, case studies and any other trustworthy and reliable resources to enhance learning.

c) Prerequisites/Revision/Introduction:

Read the Key unit competence in the syllabus to determine what students will learn know and be able to do by the end of the unit. Look at the action verb, concept and context of each learning objective. This will help you see the skills, knowledge and

attitudes embedded in the learning objective. Remember the learning objectives are linked to the key unit competence.

Use K-W-L (What learners already know-What they want to know-What they have learnt) after the introductory activity to assess how much students already know and what they would be interested in learning about business ideas and opportunities.

This lesson seeks to analyse how the price system works, and its outcomes. Students are equipped with the knowledge and understanding of unit 5 on basic economic concepts, therefore, the teacher reflects on them as he/she reviews the previous units / lessons. Students base on this background to analyse the operation of price mechanism. We saw in unit 7 that where demand is greater than supply, there is shortage and where supply is greater than demand there is surplus in the market. All these relate to limited government interference hence operation of the forces of demand and supply in automatic allocation of resources.

Follow the guidance about the introductory activity.

d) Activity 9.1

Learners in small groups, pairs or individual read and analyze the questions, following the instructions given. You may ask learners to search via library or internet for them to manage find out the example of how prices can be determined by forces of demand and supply and discuss on the advantages and disadvantages of price mechanism.

Learners share their findings, responses or answers to the activity using an appropriate method such as group presentation, pair-share, or large group discussion. Ensure all learners are given an opportunity to give their views and should be respected.

Harmonize their findings or answers and help them draw conclusions/summary to the meaning of price mechanism and how it operates. Answer or address any questions or challenges about the activity. Guide them to make notes in their books referring to learners' book.

Possible answers for the activity 9.1

1. On this, learners are expected to give explanations of how supply and demand determine prices at the market. This will be debatable for them since they will have covered a lot under the theory of demand and supply.
2. Learners must provide answers that turn around the disadvantages of price mechanism. Refer, student's book 9.2.2

e) Application Activity 9.1

Learners in manageable groups, discuss and define the term price mechanism and how it operates. They will also analyse the advantages and disadvantages of price mechanism. This activity may be given as a research question or homework.

Depending on the purpose of the application activity, choose an appropriate method to assess learners' findings, answers, or responses. Depending on the performance or results, you may decide to give remedial or extension activities.

Possible answers for application activity 9. 1

For this activity, learners may give reasons and examples using their own words. It is up to the teacher to judge and guide learners so that they maintain appropriate definitions as they provide realistic example of advantages and disadvantages of price mechanism.

For more guidance on the operation of price mechanism, advantages, and disadvantages, you can refer to the student's book 9.1.

LESSON 2: Solutions to problems of price mechanism

a) Learning objective:

- Justify various methods of price controls.

b) Teaching aids: Basic materials for a class/ lesson to be conducted: Desks, Learners books, internet, case studies and any other trustworthy and reliable resources to enhance learning.

c) Prerequisites/Revision/Introduction:

Read the Key unit competence in the syllabus to determine what students will learn know and be able to do by the end of the unit. Look at the action verb, concept and context of each learning objective. This will help you see the skills, knowledge and attitudes embedded in the learning objective. Remember the learning objectives are linked to the key unit competence.

Use K-W-L (What learners already know-What they want to know-What they have learnt) after the introductory activity to assess how much students already know and what they would be interested in learning about business ideas and opportunities.

This lesson seeks to justify methods of price control. Students are equipped with the knowledge and understanding of price system therefore, the teacher reflects on them as he/she reviews the previous lesson. Students base on this background to justify methods of price control.

d) Activity 9.2

Guide learners to come up with solutions that can address the fluctuation disadvantages. Learners will give different proposals, so it is up to the teachers to judge what solution is right or wrong.

The teacher must review all student's proposals since this is an introduction activity, and utilize student's insights to engage them in the second lesson “

Possible solutions to activity 9.2:

The disadvantages of price mechanism can be rectified through the following means:

1. **Taxation:** Differences in incomes created by price mechanism can be corrected through taxation. In this case, the rich may be taxed more than the poor. As a result, the negative outcomes of price mechanism may be reduced.
2. **Price control:** Private producers in most cases cheat consumers by increasing prices. As a result, price control measures are put in place to curb this problem. This is done mainly by the government, through setting the minimum and maximum prices for the commodities. This prohibits producers with monopoly powers from increasing prices unnecessarily so as to maximize profits.
3. **Economic planning:** The government carries out short term and long term economic planning. This planning ensures provision of services and utilities that cannot be provided by private entrepreneurs. This also helps to bring about quick structural changes that price mechanism cannot enforce.
4. **Formation of consumer associations:** This protects consumers against exploitation by the profit motivated private producers. It increases the negotiating capacity of consumers. Consumer associations also provide market information to consumers.
5. **Government support:** The government may subsidize weak firms. This helps the upcoming or weak firms to grow, expand and compete with other firms in the market. Competition improves the quality of products.

- 6. Using anti-monopoly/Anti-Trust laws:** Such laws remove the basis of monopoly created through price system. These prevent firms from merging to become monopolies.
- 7. Nationalization:** The government may take over private firms as a way of controlling the private sector. This reduces private interest that could overrun the public interest in the price system

e) Application Activity: 9.2

Possible answers to application activity (Guidance)

Refer to student's book 9.2 for guidance.

LESSON 3: Price fluctuation

a) Learning objectives.

- Explain the causes and effects of price fluctuations.
- Analyse the impact of price fluctuations in an economy.
- Justify government interference in price mechanisms

b) Teaching resources.

Basic materials for a class/ lesson to be conducted: Desks, Learners books, internet, case studies and any other trustworthy and reliable resources to enhance learning.

c) Prerequisites /revision/introduction.

This lesson seeks to analyse how the price fluctuation come about and its outcomes. We shall also look at the means the government can use to correct the defects of price fluctuation. Students are equipped with the daily life experience on as far as how prices of most commodities change and the resultant effects in the economy. We saw in unit 6 that where demand is greater than supply, there is shortage and where supply is greater than demand there is surplus in the market. All these relate to causes of price fluctuation hence the new lesson about Price fluctuation.

d) Learning activities

Activity 9.3:

The teacher guides students to form new groups or pairs so that they analyse the provided discussion questions, in activity 9.3. They research based on the activity requirements, may be in the library or internet, there-after make presentations in class.

Answers to activity 9.3:

On this activity, students will conduct research either through the internet or through an interview to those who can manage. They will find out the information of price changes of agricultural products in the past two years. Upon their findings, they will give reasons for price changes and suggest solutions for such price changes.

The teacher will judge whether what the students discovered are correct or wrong.

e) Application activity 9.3:

This activity is just to make students to know the causes of price fluctuations with what is on the ground in Rwanda. Refer to 9.3.2 and 9.3.4.1. For the answers.

Skills Lab 9:

For this lab, students will be able to understand the cause and effects of price fluctuations and the role played by the government in handling challenges related to price fluctuation

Guidance to the lab: (This lab may be conducted either by inviting the local Agronomist in your class or by visiting them at offices as a whole class.

Build

Using Think, Pair and Share; ask learners to brainstorm on the way they intend to go through while investigating that agronomist. Provide necessary guiding instructions on what they will do when interviewing the agronomist.

Let learners ask for clarifications where need be.

Emphasize to the learners that this lab will help them understand the cause and effects of price fluctuations and the role played by the government in handling challenges related to price fluctuation

Practice

Learners will interview the agronomist as they avoid asking him/her similar questions. They should avoid unnecessary repetitions

Each pair/ individual student should take noted on the findings from the interview and their views after reflections: they should focus on:

1. Cause and effects of price fluctuation to the community
2. The policies the government can use or has put in place to address the problem of price fluctuation in the agricultural sector in the country.

Move around the pairs and make a follow up whether the learners are on track and taking necessary notes.

Moderate the conversations to allow learners capture more experience from the entrepreneur (just in case this skills lab took place in a class)

iii. Presentation

Communicate the appropriate time for this activity to be done.

Choose the appropriate method they can use to present their findings for example gallery work or one group presenting at a time.

During presentations encourage learners to challenge/supplement each other.

Students should keep their work in the portfolio notebooks or hand on the present boards for future reference.

iv. Conclusion

Randomly call different learners to answer questions on what they have learnt.

9.6. Additional information

In developing countries, the operation of the price mechanism is impaired by too much participation of government agencies in the market which distorts the market. Presence of the government in sectors like agriculture may be justified by need to reduce the market fluctuations and therefore protect both the consumers and producers as well as prevent devastating food shortages occasioned by frequent droughts. The government subsidies are also important in reducing the cost of production hence mitigate the effects of high food prices on inflation and the welfare of the poor citizens. The government is therefore justified to interfere in the market. Operation of the price mechanism is what is called market liberalization.

9.7. END OF UNIT 3 ASSESSMENT

Advantages of price mechanism:

- Price mechanism promotes efficient allocation and use of resources. Due to competition and desire to maximize profits, resource owners allocate them more efficiently to avoid wastages.
 - Under price mechanism, there is economic growth. Producers do research, invention and innovations which leads to increase in production and improvement in technology therefore resulting into economic growth.
 - Efficiency in production: There is competition between producers. These will cut on origination or costs so as to compete favourably in the market.
 - There is speculation under price mechanism. Speculators ensure steady supply of commodities. Consumers are offered a chance to access commodities all the time throughout.
 - Price mechanism encourages acquisition and distribution of commodities from areas where supply is high to areas where there is little or no supply. This also ensures a ready supply of commodities to the consumers
 - Price mechanism answers the following economic questions:
 - **What to produce:** Producers produce commodities that fetch high profits.
 - **How to produce:** The method of production used should be cost effective.
 - **For whom to produce:** Producers manufacture or produce commodities when they are assured of a ready market for the goods.
 - **When to produce:** Commodities are normally produced when needed.
 - It encourages effective distribution and redistribution of resources. Resources are distributed to areas where they are rewarded favorably depending on their demand and prices. Land is used in areas where rent is high, labour goes to where wages are high and capital where interest is maximum.
 - Price mechanism works automatically. It therefore does not require the government to put in a lot of resources for implementation. This makes it cheap to operate. It is the responsibility of the government and gives it a chance to concentrate on other areas.
- 1.
- Different countries have different economic interests and difficulties. Conflicting interests of members especially producers against consumers limit the successful functioning of commodity agreements.

- Sometimes member countries agree on a fixed quota that each member should produce. Some countries however produce beyond the fixed quotas.
- Countries do not produce proportionately equal amounts. Members that produce large amounts dominate others. The agreements tend to favour large producers than small ones.
- Different countries are endowed differently with resources. This brings about differences in costs of production which may bring about disagreements on prices. - If members contribute a small share of the world output, they cannot influence the price on the world market. This comes when some producers of a particular commodity are not members.
- The functioning of these agreements requires independent organs to effectively operationalize them. There is lack of effective supervision to implement the established quotas. Some countries may violate the established quotas

9.8. Additional activities

9.8.1. Remedial Activities

1. Identify any commodities where prices are indicated for the consumer on buying them and no bargaining.
2. Who determines prices under price mechanism?

Possible answers for the remedial activities

1. Airtime cards, newspapers, magazines etc.
2. Forces of demand and supply.

9.8.2. Consolidation activities

1. Explain the dangers associated with price mechanism
2. Explain the factors that limit the success of buffer stock systems in Lesser-Developed Countries (LDCs)

Possible answers

1. Price mechanism presents the following challenges:

- **Price mechanism promotes income inequality.** Resource owners earn more incomes than those without. Those with more earn more and those with less earn less.

- **The high cost and inefficient firms are pushed out of business by the most efficient ones.** This kind of competition may result into a monopoly in the long run.
- **The desire to maximize profits is high under price mechanism.** This profit-oriented motive can make producers to supply us with substandard or counterfeit products or exploit consumers who have little information about the market.
- **Since there is no government control in price mechanism,** there may be introduction of harmful and illegal products to the market.
- **Too much competition may eliminate upcoming and small firms from the market.** This may lead to over exploitation of some resources.
- **Unprofitable but essential commodities may disappear from the market.** Private producers aim at making profits and not providing satisfaction or essential commodities. Private producers of much more benefits may overrun public benefits. Producers aim at satisfying their individual interests and not public interest

2. The factors that limit the success of buffer stock systems in Lesser-Developed Countries are the following:

- Perishability of agricultural commodities. Most commodities are highly perishable. This makes storage difficult.
- Effects of inflation which affect the stabilisation funds as the money kept in the funds lose value
Most developing countries lack efficient storage facilities to keep the surplus output.
- Lack of sufficient funds by marketing boards to run the activities of buying and handling the surplus output. The activities of buffer stock system involve high administrative costs to run.
- Mismanagement and corruption in marketing boards by board members and staff. This affects the proper functioning of buffer stocks.
- The buffer stock system increases government responsibilities. The government directly involves itself in actual buying and selling of commodities. This may have an effect on efficiency in other strategic areas like security.
- The system requires alt of market research. Decisions on how much, when to buy and /or sell require much of research. This makes it costly

9.8.3. Extended Activities

1. Examine the advantages and problems of International Commodity Agreement.

Possible answers for extended activities:

Advantages of ICA:

- It helps to fix buying and selling prices of the commodity in question.
- They help diversify crops so as to reduce dependency on one or few crops.
- Help process agricultural products so as to increase their value and fetch high prices.
- Educate farmers through agricultural extension staff so as to produce high quality products and learn storage methods.
- Improvement and construction of storage facilities thus enable commodities to last longer.
- Introduction of technological innovations so as to reduce reliance on nature e.g. use of fertilizers, irrigation etc.
- Helps in formation of producer cooperatives which helps to increase their bargaining power and provide storage and transport facilities.
- It helps in setting up of stabilization fund and compensates farmers in times of losses, etc.

Problems of ICA

- Sometimes members agree on a fixed quota that each member should produce. However, some member countries over produce beyond the fixed quota.
- Countries do not produce proportionately equal amounts. Members that produce large amounts dominate others the agreement tends to favour large producers than small ones.
- Different countries have different interests and difficulties. Conflicting interests of members especially producers against consumers limit successful functioning of commodity agreements.
- Different countries are endowed differently with resources. This brings about differences in costs of production which may bring about disagreements on prices.
- If members contribute a small share on world output, they cannot influence the price of the world market. This comes when some producers of a particular commodity are not members