REPUBLIC OF KENYA
MINISTRY OF EDUCATION

JUNIOR SCHOOL CURRICULUM DESIGN

PRE-TECHNICAL STUDIES

GRADE 7

FOR LEARNERS WITH PHYSICAL IMPAIRMENT

KENYA INSTITUTE OF CURRICULUM DEVELOPMENT
A Skilled and Ethical Society

First Published in 2017

Revised 2024

ISBN:

Published and printed by Kenya Institute of Curriculum Development

FOREWORD

The Government of Kenya is committed to ensuring that policy objectives for Education, Training and Research meet the aspirations of the Constitution of Kenya 2010, the Kenya Vision 2030, National Curriculum Policy 2019, the United Nations Sustainable Development Goals (SDGs) and the Regional and Global conventions to which Kenya is a signatory. Towards achieving the mission of Basic Education, the Ministry of Education (MoE) has successfully and progressively rolled out the implementation of the Competency Based Curriculum (CBC) at Pre-Primary, Primary and Junior School levels.

The implementation of Competency Based Curriculum involves monitoring and evaluation to determine its success. After the five-year implementation cycle, a summative evaluation of the primary education cycle was undertaken to establish the achievement of learning outcomes as envisaged in the Basic Education Curriculum Framework. The Government of Kenya constituted a Presidential working Party on Education Reforms (PWPER) in 2022 to address salient issues affecting the education sector. PWPER made far reaching recommendations for basic education that necessitated curriculum review. The recommendations of the PWPER, monitoring reports, summative evaluation, feedback from curriculum implementers and other stakeholders led to rationalisation and review of the basic education curriculum.

The reviewed Grade seven curriculum designs for learners with visual impairments build on competencies attained by learners at Primary school level. Emphasis at this grade is the development of skills for exploration and making informed decisions on pathways based on careers.

The curriculum designs present National Goals of Education, essence statements, general and specific expected learning outcomes for the subjects as well as strands and sub strands. The designs also outline suggested learning experiences, key inquiry questions, core competencies, Pertinent and Contemporary Issues (PCIs), values, and assessment rubric.

It is my hope that all Government agencies and other stakeholders in Education will use the designs to plan for effective and efficient implementation of the CBC.

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CABINET SECRETARY,
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PREFACE

The Ministry of Education (MoE) nationally implemented Competency Based Curriculum (CBC) in 2019. Grade seven is the first grade of Junior school while Grade 9 is the final grade of the level in the reformed education structure.

The reviewed Grade seven curriculum furthers implementation of the CBC from Primary Education level. The curriculum provides opportunities for learners to focus in a field of their choice to form a foundation for further education and training and/or gain employable skills. This is very critical in the realisation of the Vision and Mission of the on-going curriculum reforms as enshrined in the Sessional Paper No. I of 2019 whose title is: *Towards Realizing Quality, Relevant and Inclusive Education and Training for Sustainable Development* in Kenya. The Sessional Paper explains the shift from a content-focused curriculum to a focus on **nurturing every learner's potential.**

Therefore, the Grade seven curriculum designs for learners with visual impairments are intended to enhance the learners' development in the CBC core competencies, namely: Communication and Collaboration, Critical Thinking and Problem Solving, Creativity and Imagination, Citizenship, Digital Literacy, learning to Learn and Self-efficacy.

The curriculum designs provide suggestions for interactive and differentiated learning experiences linked to the various sub strands and the other aspects of the CBC. They also offer several suggested learning resources and a variety of assessment techniques. It is expected that the designs will guide teachers to effectively facilitate learners to attain the expected learning outcomes for Grade seven and prepare them for smooth transition to Grade eight. Furthermore, it is my hope that teachers will use the adapted designs to make learning interesting, exciting and enjoyable.

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ACKNOWLEDGEMENT

The Kenya Institute of Curriculum Development (KICD) Act Number 4 of 2013 (Revised 2019) mandates the Institute to develop and review curricula and curriculum support materials for basic and tertiary education and training. The curriculum development process for any level of education involves thorough research, international benchmarking and robust stakeholder engagement. Through a systematic and consultative process, the KICD conceptualised the Competency Based Curriculum (CBC) as captured in the Basic Education Curriculum Framework (BECF) 2017, that responds to the demands of the 21st Century and the aspirations captured in the Constitution of Kenya 2010, the Kenya Vision 2030, East African Community Protocol, International Bureau of Education Guidelines and the United Nations Sustainable Development Goals (SDGs).

KICD receives its funding from the Government of Kenya to facilitate successful achievement of the stipulated mandate and implementation of the Government and Sector (Ministry of Education (MoE) plans. The Institute also receives support from development partners targeting specific programmes. The revised Grade seven curriculum designs for learners with visual impairments were developed and adapted with the support of the World Bank through the Kenya Primary Education Equity in Learning Programme (KPEELP); a project coordinated by MoE. Therefore, the Institute is very grateful for the support of the Government of Kenya, through the MoE and the development partners for policy, resource and logistical support. Specifically, special thanks to the Cabinet Secretary-MoE and the Principal Secretary – State Department of Basic Education,

I also wish to acknowledge the KICD curriculum developers and other staff, all teachers, educators who took part as panellists; the Semi-Autonomous Government Agencies (SAGAs) and representatives of various stakeholders for their roles in the development and adaptation of the Grade seven curriculum designs for learners with visual impairments In relation to this, I acknowledge the support of the Chief Executive Officers of the Teachers Service Commission (TSC) and the Kenya National Examinations Council (KNEC) for their support in the process of developing and adapting these designs. Finally, I am very grateful to the KICD Council Chairperson and other members of the Council for very consistent guidance in the process.

I assure all teachers, parents and other stakeholders that this curriculum design will effectively guide the implementation of the CBC at Grade seven and preparation of learners with visual impairments for transition to Grade eight.

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NATIONAL GOALS OF EDUCATION

Education in Kenya should:

1. **Foster nationalism and patriotism and promote national unity.**
   Kenya's people belong to different communities, races and religions, but these differences need not divide them. They must be able to live and interact as Kenyans. It is a paramount duty of education to help young people acquire this sense of nationhood by removing conflicts and promoting positive attitudes of mutual respect which enable them to live together in harmony and foster patriotism in order to make a positive contribution to the life of the nation.

2. **Promote the social, economic, technological and industrial needs for national development.**
   Education should prepare the youth of the country to play an effective and productive role in the life of the nation.
   a) Social Needs.
      Education in Kenya must prepare children for changes in attitudes and relationships which are necessary for the smooth progress of a rapidly developing modern economy. There is bound to be a silent social revolution following in the wake of rapid modernization. Education should assist our youth to adapt to this change.
   b) Economic Needs.
      Education in Kenya should produce citizens with the skills, knowledge, expertise and personal qualities that are required to support a growing economy. Kenya is building up a modern and independent economy which is in need of an adequate and relevant domestic workforce.
   c) Technological and Industrial Needs.
      Education in Kenya should provide learners with the necessary skills and attitudes for industrial development. Kenya recognizes the rapid industrial and technological changes taking place, especially in the developed world. We can only be part of this development if our education system is deliberately focused on the knowledge, skills and attitudes that will prepare our young people for these changing global trends.

3. **Promote individual development and self-fulfilment.**
   Education should provide opportunities for the fullest development of individual talents and personality. It should help children to develop their potential interests and abilities. A vital aspect of individual development is the building of character.

4. **Promote sound moral and religious values.**
   Education should provide for the development of knowledge, skills and attitudes that will enhance the acquisition of sound moral values and help children to grow up into self-disciplined, self-reliant and integrated citizens.
5. **Promote social equality and responsibility.**
   Education should promote social equality and foster a sense of social responsibility within an education system which provides equal educational opportunities for all. It should give all children varied and challenging opportunities for collective activities and corporate social service irrespective of gender, ability or geographical environment.

6. **Promote respect for and development of Kenya's rich and varied cultures.**
   Education should instill in the youth of Kenya an understanding of past and present cultures and their valid place in contemporary society. Children should be able to blend the best of traditional values with the changing requirements that must follow rapid development in order to build a stable and modern society.

7. **Promote international consciousness and foster positive attitudes towards other nations.**
   Kenya is part of the international community. It is part of the complicated and interdependent network of peoples and nations. Education should therefore lead the youth of the country to accept membership of this international community with all the obligations and responsibilities, rights and benefits that this membership entails.

8. **Promote positive attitudes towards good health and environmental protection.**
   Education should inculcate in young people the value of good health in order for them to avoid indulging in activities that will lead to physical or mental ill health. It should foster positive attitudes towards environmental development and conservation. It should lead the youth of Kenya to appreciate the need for a healthy environment.

LESSON ALLOCATION AT JUNIOR SCHOOL

S/No	Learning Area	Number of Lessons
1.	English	5
2.	Kiswahili / Kenya Sign Language	4
3.	Mathematics	5
4.	Religious Education	4
5.	Social Studies	4
6.	Integrated Science	5
7.	Pre-Technical Studies	4
8.	Agriculture and Nutrition	4
9.	Creative Arts and Sports	5
10.	Pastoral /Religious Instructional Program	1
Total		**40 + 1**

LEARNING OUTCOMES FOR JUNIOR SCHOOL

By end of Junior School, the learner should be able to:

a) Apply literacy, numeracy and logical thinking skills for appropriate self-expression.
b) Communicate effectively, verbally and non-verbally, in diverse contexts.
c) Demonstrate social skills, spiritual and moral values for peaceful co-existence.
d) Explore, manipulate, manage and conserve the environment effectively for learning and sustainable development.
e) Practise relevant hygiene, sanitation and nutrition skills to promote health.
f) Demonstrate ethical behaviour and exhibit good citizenship as a civic responsibility.
g) Appreciate the country's rich and diverse cultural heritage for harmonious co-existence.
h) Manage pertinent and contemporary issues in society effectively.
i) Apply digital literacy skills for communication and learning.

ESSENCE STATEMENT

Pre-Technical Studies is an integrated learning area comprising of Business, Computer and Technical Studies learning areas. It builds on the competencies acquired in Science and Technology, and other related learning areas at the Upper Primary School level. The learning area encompasses Foundations of Pre-Technical Studies, Communication, Materials for Production, Tools and Production, and Entrepreneurship. These components aim to develop critical thinking, problem-solving, creativity, innovation, communication, digital literacy, and financial literacy skills, all considered essential in both personal life and the world of work.

This learning area is anchored on National Goals of Education No. 2 to provide the learners with the necessary skills and attitudes for industrial development, Kenya Vision 2030 on making education responsive to education needs, Sessional Paper No 1 of 2019, which recommend the promotion of technical and vocational education with an emphasis on Science, Technology, and Innovation (ST&I) in the school curriculum. It is also informed by the National ICT Policy of Kenya 2016 (revised 2020), which emphasises on use of ICT as a foundation for the creation of a more robust economy.

GENERAL LEARNING OUTCOMES

By the end of Junior School, the learner should be able to:

1) Communicate effectively through the use of information and communication technology.
2) Select and use tools and materials in the production of goods and services.
3) Use financial and entrepreneurial competencies for prudent decision making.
4) Observe safety in the work environment to promote education for sustainable development.
5) Apply ICT skills to carry out activities in day-to-day life.
6) Create awareness on career choices in regard to career pathways and progression for self-development.

SUMMARY OF STRANDS AND SUB STRANDS

Strands	Sub Strands	Suggested Number of Lessons
1.0 Foundations of Pre -Technical Studies	1.1 Introduction to Pre-Technical Studies	4
	1.2 Safety in the Immediate Environment	6
	1.3 Computer Concepts	6
2.0 Communication in Pre-technical Studies	2.1 Introduction to Drawing	6
	2.2 Free-hand Sketching.	10
	2.3 ICT tools in Communication.	8
3.0 Materials for Production	3.1 Introduction to Materials	6
	3.2 Metallic Materials	10
	3.3 Non-Metallic Materials	10
4.0 Tools and Production	4.1 Measuring and Marking Out Tools	18
	4.2 Computer Hardware.	8
5.0 Entrepreneurship	5.1 Introduction to Entrepreneurship	8
	5.2 Production Unit	10
	5.3 Financial Goals	10
Total Number of Lessons		**120**

STRAND 1.0: FOUNDATIONS OF PRE-TECHNICAL STUDIES

Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Questions
1.0 Foundations of pre-technical studies.	**1.1 Introduction to pre-technical studies. (4 lessons)**	**By the end of the sub strand, the learner should be able to;** a) identify the components of Pre-Technical Studies as a learning area, b) explain the role of Pre-Technical Studies in day-to -day life, c) embrace Pre-Technical Studies in career development.	• In purposive pairs or groups, learners brainstorm on the components of Pre-Technical Studies as a learning area. Learners with speech difficulties could use alternative communication modes as they share their views. • Learners discuss and present the role of Pre-Technical Studies in day-to-day life. Learners with manipulation difficulties could use any functional part of the body or use appropriate assistive devices during presentations. • Learners to debate on the role of pre-technical studies	Why is pre-Technical Studies important in day-to-day life?

			in day-to-day life. Allow more time for learners with speech difficulties to express their views.	

Core competencies to be developed:

- Communication and collaboration: learner develops writing, speaking, listening, reading and teamwork skills when discussing, and presenting on the role of Pre-Technical Studies.
- Critical Thinking and Problem Solving: learner develops open-mindedness and creativity skills when brainstorming on Pre-Technical Studies as a learning area.

Values:

- Unity: learner displays team spirit and collaboration with others when discussing and presenting the role of Pre-Technical Studies in day-to-day life
- Respect: learner displays tolerance for each other's opinion when debating on the role of Pre-Technical Studies in day-to-day life.

Pertinent and Contemporary Issues (PCIs):

Citizenship: Social cohesion is enhanced when debating on the role of Pre-Technical Studies

Link to Other Subjects:

English: As the learner participates in speaking, listening and writing skills as they debate on the role of Pre-Technical Studies in day- to -day life.

Suggested Learning Resources:

Pre-technical Studies curriculum design, Pre-technical Studies handbook. Volunteer resource person, Relevant approved textbooks and reference materials.

STRAND 1.0: FOUNDATIONS OF PRE-TECHNICAL STUDIES

Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Questions
1.0 foundations of pre - technical studies	**1.2 Safety in the Immediate Environment** **(6 lessons)**	By the end of the sub strand, the learner should be able to**;** a) identify potential safety threats in a immediate environment, b) outline safety rules and regulations in the work environment, c) observe safety in a work environment, d) appreciate the importance of observing safety in a work environment.	● Brainstorm in purposive pairs or groups with peers, on potential safety threats in a work environment (*physical and online)* Learners with speech difficulties could use alternative communication modes as they share their views. Adjust light intensity when using the digital device for learners with visual difficulties. ● Use print or digital media by learners to search for information on potential hazards to personal safety in a work environment. ● Learners use print or digital media to search for information on physical threats to digital devices *(theft, natural disasters, hardware failure)* and online threats in a work environment	1. Why is safety in the immediate environment important? 2. How do users safeguard themselves from online threats?

			and list them *(cyber bullying, impersonation, phishing, hacking, friend requests from unknown people).* Learners with manipulation difficulties could use any functional part of the body as they interact with digital devices. ● Share ideas and practice on how to keep personal and sensitive data from public when online with peers. Adjust light intensity on digital devices for learners with visual difficulties. ● In purposive pairs, learners discuss safety rules and regulations in a immediate environment. ● Learners to role play on Safety for self and others in a immediate environment. Create a conducive environment and adequate space for learners with mobility difficulties and ensure safety for all learners as they perform the activity.	

Core competencies to be developed:

- Learning to Learn: learner develops sharing learnt knowledge and skills when they take turns with peers to share ideas on safety for self and others in the immediate environment.
- Self-efficacy: learner develops effective communication skills when taking turns to share ideas when they are searching for information online.
- Digital literacy: learner develops searching, evaluating, using and sharing digital information skills during the use of digital media to search for online threats in a working environment and lists them (cyber bullying, fraud, phishing, eavesdropping, hacking, and friend requests from unknown people).

Values:

- Love: learner develops self-sacrifice and sharing skills during role play on safety for self and others in a immediate environment.
- Respect: learner appreciates diverse opinions while sharing information with peers on the online threats experienced when using a computer.
- Responsibility: learner observes safety while role playing on safety for self and others in a immediate environment.

Pertinent and Contemporary Issues (PCIs):

Socio-economic issues: Safety and security awareness is enhanced when sharing ideas and practices on how to keep personal and sensitive data while online.

Link to other subjects:

Integrated Science when the learner learns about safety in the laboratory.

Suggested Learning Resources

Pre-technical Studies curriculum design, Pre-technical Studies handbook, Volunteer resource person, Charts and pictures on safety, relevant approved textbooks and reference materials, flip charts.

STRAND 1.0: FOUNDATIONS OF PRE-TECHNICAL STUDIES

Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Questions
1.0 Foundations of Pre-Technical studies	**1.3 Computer Concepts (6 lessons)**	By the end of the sub strand, the learner should be able to; a) explain the characteristics of a computer in a user environment, b) classify computers in a user environment, c) use a computer to perform tasks in a user environment d) acknowledge the importance of different types of computers in a user environment.	● In purposive groups /pairs learners brainstorm on the meaning of the terms; computer, data and information. Learners with speech difficulties could use alternative communication modes as they give their views. ● Learners discuss in purposive pairs on characteristics of a computer (*speed, accuracy, versatility, reliability, diligence, storage, consistency*). ● Download and watch a video clip on the classification of computers. Learners with postural limitation could be preferentially positioned for enhanced viewing. Adjust the screen resolution when using the digital device for learners with visual difficulties.	1. Why are there different classes of computers? 2. How are computers classified?

			• Discuss classification of computers (*functionality, purpose and size)* in a user environment. • Match different types of computers to their respective classes • Interact with different types of computers in the user environment to perform tasks. (*calculator, mobile phone, tablet)* Those with manipulation difficulties could use any functional part of the body to perform the task.	
Core competencies to be developed: ● Critical thinking and problem solving: interpretation and inference skills are developed as the learner matches different types of computers to their respective classes. ● Communication and collaboration: teamwork skills are developed as the learner discusses the types of computers in a user environment.				
Values: Peace: the learner displays tolerance when discussing the classification of computers.				
PCIs: Safety and security: Cyber security is enhanced as the learner accesses internet and downloads and watches a video clip on the classification of computers.				

Link to other subjects: Mathematics as the learner uses a calculator.
Suggested Learning Resources Pre-technical Studies curriculum design, Pre-technical Studies handbook

Suggested Assessment Rubric

Level / **Indicator**	**Exceeds Expectations**	**Meets Expectations**	**Approaches Expectations**	**Below Expectations**
Ability to explain the role of Pre-Technical Studies in day- to-day life	Comprehensively explains the role of Pre-Technical Studies in day- to-day life	Explains the role of Pre-Technical Studies in day- to-day life	Explains the role of Pre-Technical Studies in day- to-day life omitting few details	Explains the role of Pre-Technical Studies in day- to-day life omitting many details
Ability to observe safety in the immediate environment	Consistently observes safety in the immediate environment	Often observes safety in the immediate environment	Occasionally observes safety in the immediate environment	Rarely observes safety in the immediate environment
Ability to use a computer to perform tasks in a user environment	Proficiently uses a computer to perform given tasks in a user environment	Uses a computer to perform of the tasks in a user environment	Uses a computer to perform some of the tasks in a user environment	Uses a computer to perform only a few of the tasks in a user environment

STRAND 2.0: COMMUNICATION

Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Questions
2.0 Communication in Pre-Technical Studies	**2.1 Introduction to Drawing** **(10 lessons)**	By the end of the sub strand, the learner should be able to**;** a) explain the importance of drawing as a means of communication, b) distinguish between artistic and technical drawings used in technical fields, c) print letters and numbers in upper and lower cases in drawing, d) draw types of lines used in drawing, e) illustrate symbols and abbreviations used in drawing, f) appreciate the importance of	• Learners are guided to carry out discussion on the importance of drawing as a means of communication and do a presentation. Learners with speech difficulties could use alternative communication modes as they do a presentation. • In purposive groups/pairs brainstorm the meaning of the terms 'technical drawing' and 'artistic drawing'. Learners with speech difficulties could use alternative communication modes as they share their views. • Use print and online resources to search for information on artistic and technical drawing. Learners with manipulation difficulties could use any functional part of the body as they interact with print and digital devices. Adjust the screen resolution when using	How are drawings used in technical communication?

		drawing in work environment.	the digital device for learners with visual difficulties. • Practice printing numbers and letters of the alphabet with peers. • Learners use visual aids to search for information on the types of lines and their application in drawing *(thick and thin continuous, dashed and chain*). • Draw various types of lines *(thick and thin continuous, dashed and chain).* Learners with manipulation difficulties could use appropriate adapted drawing tools or be assisted by peers to perform the task. • Learners are guided to sketch basic symbols (⌀, ℄, R, ⊥, ▢*)* and abbreviations *(*DRG, A/F, A/C, I/D, O/D*)* used in drawing. • Learners to use audio visual aids to study the application of symbols and abbreviations in drawing in purposive pairs.	

Core competencies to be developed: ● Communication and collaboration: the learner acquires speaking, listening, and teamwork skills when brainstorming and giving feedback on the meaning of the terms 'technical drawing' and 'artistic drawing. ● Digital literacy: learner develops the skill of interacting with technology while using online resources to search for information on artistic and technical drawing.
Values: ● Respect: the learner develops etiquette during discussion of basic symbols and abbreviations used in drawing. ● Responsibility: the learner develops accountability skills in completion of printing of letters and numbers in upper and lower case.
Pertinent and Contemporary Issues (PCIs): Safety and security: the learner develops online safety skills during online search for information on different types of drawings used in the technical fields.
Link to Other Subjects: Creative arts and Sports as the learner identify various drawings in a work environment
Suggested Learning Resources Pre-technical Studies curriculum design, Pre-technical Studies handbook, Volunteer resource person, adapted drawing tools, charts, drawing papers

STRAND 2.0: COMMUNICATION

Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Questions
2.0 Communication in Pre-Technical Studies	**2.2 Free-hand sketching** (10 lessons)	By the end of the sub strand, the learner should be able to: a) sketch lines using free-hand, b) sketch 2D shapes using free hand, c) appreciate the importance of free hand sketching in communication.	• Learner is guided to discuss the meaning of free-hand sketching as used in Pre-Technical Studies, Learners with speech difficulties could use alternative communication modes as they share their views. • Learner is guided to use pencils and drawing papers to sketch lines, Learners with manipulation difficulties could use adapted writing materials or type on appropriate adapted digital devices to perform this task. • Learner is guided to use pencils and drawing papers to sketch two-dimensional shapes, ensure the safety of all learners. • Learner is guided to use digital media, to observe how free-	Why is free-hand sketching important?

			hand sketches express artistic ideas in different career fields, Control light intensity for learners who are sensitive to light while using the digital devices. • Learner is guided to take photos of the sketches and drawings for the development of portfolios.	

Core competencies to be developed:

- Communication and collaboration: learner acquires speaking, listening and teamwork skills when discussing the meaning of free-hand sketching as used in Pre-Technical Studies.
- Digital literacy: learner develops the skill of interacting with technology when using digital media to observe how free hand sketches express artistic ideas in different career fields

Values:

Respect: learner demonstrates etiquette during discussion of the meaning of free-hand sketching as used in Pre-Technical Studies

Responsibility: learner demonstrates accountability when using digital media, to observe how free hand sketches express artistic ideas in different career fields

Pertinent and Contemporary Issues (PCI's):

Safety and Security: learner develops online safety skills when using digital media to observe how free hand sketches express artistic ideas in different career fields.

Links to other learning areas:

Creative arts: learner enhances skill of artistic drawing when using pencils and drawing papers to create lines.

STRAND 2.0: COMMUNICATION

Strand	Sub strand	Specific learning outcomes	Suggested learning experiences	Suggested Key Inquiry Question(s)
2.0 Communication in Pre-Technical Studies	**2.3 ICT tools in Communication** (6 lessons)	By the end of the sub strand, the learner should be able to: a) explain the importance of ICT tools in communication, b) describe the ICT tools used in communication, c) use ICT tools to enhance communication, acknowledge the role of communication in Pre-Technical Studies.	• Learner is guided to brainstorm and present on the meaning and importance of ICT tools in communication, Learners with speech difficulties could use alternative communication modes as they share their views. Learners with manipulation difficulties could use any functional part of the body or use appropriate assistive devices during presentations. Allow more time for learners with speech difficulties to express their views. • Learner is guided to use print or digital media to search for information on ICT tools used in	How are ICT tools used in communication?

			communication *(email, mobile phone, computers, video and web conferencing tools, social networking and online collaboration)* and present the findings, Control light intensity for learners who are sensitive to light while using the digital devices. • Learner is guided to communicate using ICT tools (*send and receive; email, texts, calls, chats, audio, animations and video*).	

Core competencies to be developed:

- Communication and Collaboration: learner acquires speaking, writing, listening, and teamwork skills while brainstorming and presenting on the meaning and importance of ICT tools in communication.
- Learning to learn: learner acquires skills of organizing own learning and collaborating with others when using print or digital media to search for information on ICT tools used in communication.
- Digital literacy: learner develops skills of interacting with technology when using ICT tools to communicate.

Values: • Respect: learner shows open-mindedness when brainstorming and presenting the meaning and importance of ICT tools in communication. ● Responsibility: learner shows accountability when handling ICT tools to communicate.
Pertinent and Contemporary Issues (PCIs): Mental Health: learner develops emotional awareness to relate well with peers when brainstorming and presenting on the meaning and importance of ICT tools in communication.
Link to Other Subjects: The learner is able to relate communication concepts to communication skills in English.

Suggested Assessment Rubric

Level / Indicator	Exceeds expectations	Meets expectations	Approaches expectations	Below expectations
Ability to explain the importance of drawing as a means of communication	Comprehensively explains the importance of drawing as a means of communication	Explains the importance of drawing as a means of communication	Explains the importance of drawing as a means of communication leaving out a few details	Explains the importance of drawing as a means of communication leaving out many details
Ability to sketch 2D shapes using free hand.	Sketches 2D shapes using free hand with exceptional clarity	Sketches 2D shapes using free hand.	Sketches 2D shapes using free hand with a few unclear details	Sketches 2D shapes using free hand with many unclear details
Ability to use ICT tools to enhance communication	Proficiently uses ICT tools to enhance communication	Uses ICT tools to enhance communication	Uses some of the ICT tools to enhance communication	Uses only a few of the ICT tools to enhance communication

Ability to explain the importance of drawing as a means of communication	Comprehensively explains the importance of drawing as a means of communication	Explains the importance of drawing as a means of communication	Explains the importance of drawing as a means of communication leaving out a few details	Explains the importance of drawing as a means of communication leaving out many details
Ability to sketch 2D shapes using free hand.	Sketches 2D shapes using free hand with exceptional clarity	Sketches 2D shapes using free hand.	Sketches 2D shapes using free hand with a few unclear details	Sketches 2D shapes using free hand with many unclear details

STRAND 3.0: MATERIALS FOR PRODUCTION

Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Questions
3.0 Materials for Production	**3.1 Introduction to Materials** (6 lessons)	By the end of the sub strand, the learner should be to: a) identify materials used in production, b) distinguish between metallic and non-metallic materials found in the locality, c) describe sustainable ways of using materials in production, appreciate the importance of materials in production.	• Learner is guided to discuss and present on the meaning of materials used in production, Learners with speech difficulties could use alternative communication modes as they share their views. Learners with manipulation difficulties could use any functional part of the body or use appropriate assistive devices during presentations. Allow more time for learners with speech difficulties to express their views. • Learner is guided to use print or digital media to search for information on materials used in production and share with peers, Control light intensity for learners who are sensitive to light while using the digital	How are materials used sustainably?

			devices. • Learner is guided to discuss the differences between metallic and non-metallic materials, • Learner is guided to sort out materials in the locality as either metallic or non-metallic, Create a conducive environment and adequate space for learners with mobility difficulties and ensure safety for all learners as they perform the activity. • Learner is guided to brainstorm and present sustainable ways of using materials in production, discuss and make a presentation on importance of materials used in production.	
Core competencies to be developed: • Self-Efficacy: learner develops effective communication skills when discussing and presenting the differences between metallic and non-metallic materials. • Critical Thinking and Problem Solving: learner develops explanation, evaluation and decision-making skills while sorting out materials in the locality as either metallic or non-metallic.				

Values: • Responsibility: learner shows accountability as they use print or digital media to search for information on materials used in production. ● Peace: learner displays tolerance and respect for diversity when discussing and presenting the importance of materials used in production.
Pertinent and Contemporary Issues (PCIs): Environmental Education: learner acquires skills of protecting natural resources when brainstorming and presenting sustainable ways of using materials in production.
Link to Other Subjects: Social Studies: learner enhances knowledge on economic activities such as mining, fishing and trade as they search for information on materials used in production.

Strand	**Sub strand**	**Specific learning outcomes**	**Suggested learning experiences**	**Suggested Key Inquiry Questions**
3.0 Materials for Production	**3.2 Metallic materials** **(10 lesson)**	By the end of the sub-strand, the learner should be able to; a) identify types of metallic materials used in the immediate environment, b) describe the physical properties of metallic materials found in the immediate environment, c) relate metallic materials to their use in heimmediate environment,	● Use print or digital media to search for information on metallic materials. Adjust the screen resolution for those with visual difficulties. • Prepare a checklist for identifying types of metallic materials. (*steel, aluminium, copper).* Learners with manipulation difficulties	How are metallic materials used in day-to-day life?

		d) appreciate the use of metallic materials in production.	could use any functional part of the body or assistive devices to perform the task. • Perform experiments to examine the physical properties of metallic materials *(magnetism, conductivity of heat and electricity, appearance)* Safety precautions should be observed. • Download and watch a video clip simulating physical properties of metallic materials. Learners with manipulation difficulties could use any functional part of the body as they interact with digital devices. Adjust the screen resolution for those with visual difficulties.	

			• Match metallic materials to their use in the work environment.	

Core competencies to be developed:

- Digital literacy: the learner develops interacting skills when downloading and watching a video clip simulating physical properties of metallic materials.
- Communication and collaboration: the learner acquires speaking, listening, and teamwork skills during discussion and sharing of their findings with peers on the various uses of metallic materials in the locality**.**

Values:

- Unity: learner displays team spirit and collaboration with others during discussion and sharing of their findings with peers on the various uses of metallic materials in the locality**.**
- Responsibility: learner shows accountability by completion of a chart to match metallic materials to their use in the work environment.

Pertinent and Contemporary Issues (PCIs):

Peer education and mentorship: the learner develops inter-personal relationships while sharing findings with peers on various uses of metallic materials in the locality.

Link to Other Subjects:

Integrated Science as learners learn about the periodic table in classification of metals

Suggested Learning Resources

Pre-technical Studies handbook, Volunteer resource person, checklist, metallic materials

Strand	Sub strand	Specific learning outcomes	Suggested learning experiences	Suggested Key Inquiry Questions
3.0 Materials for Production	**3.3 Non-Metallic Materials (10 lessons)**	**By the end of the sub strand, the learner should be able to;** a) Identify non-metallic materials found in the locality, b) categorise non-metallic materials as either synthetic or natural, c) describe the physical properties of non-metallic materials found in the locality, d) relate non-metallic materials to their uses in the locality, e) appreciate the use of non-metallic materials in society.	• Learners use print or digital media to search for information on non-metallic materials. Learners with manipulation difficulties could use any functional part of the body as they interact with digital devices. • In purposive pairs, learners discuss the non-metallic materials and do a presentation. (*wood, stone, plastics, paper, rubber, cement, glass, ceramics).* Learners with speech difficulties could use alternative communication modes, and appropriate assistive technology and devices as they make presentations. • Learners are guided to sort non-metallic materials as	Why are non-metallic materials important?

			either synthetic or natural. Learners with manipulation difficulties could use any functional part of the body or assistive devices to perform the task. • Learners to perform experiments to examine the physical properties of non-metallic materials in purposive pairs. *(colour, texture, hardness, fire resistance)* Safety precautions should be observed while carrying out this experiment. • Learners match non- metallic materials to their use in the work environment.	
Core competencies to be developed: • Digital Literacy: learner develops skills of interacting with technology when searching for information on metallic materials. • Communication and Collaboration: learner acquires speaking, listening, and teamwork skills when discussing the uses of metallic materials				

Values: Unity: learner displays team spirit and collaboration with others while discussing the uses of metallic materials. Responsibility: learner shows accountability by caring for the print or digital media when searching for information on metallic materials.
Pertinent and Contemporary Issues (PCIs): Peer Education and Mentorship: the learner develops inter-personal relationships when performing practical activities to examine the physical properties of metallic materials.
Link to Other Subjects: Integrated Science: learner enhances knowledge on properties of materials during discussion of physical properties of metallic materials.

Suggested Assessment Rubric

Level / Indicator	Exceeding expectations	Meets expectations	Approaching expectations	Below expectations
Ability to identify materials used in production	Identifies materials used in production citing applications	Identifies materials used in production	Identifies materials used in production citing some applications	Identifies materials used in production citing a few applications
Ability to describe the physical properties of metallic materials found in the immediate environment	Describes the physical properties of metallic materials found in the immediate environment citing examples	Describes the physical properties of metallic materials found in the immediate environment	Describes some of the physical properties of metallic materials found in the immediate environment	Describes only a few of the physical properties of metallic materials found in the immediate environment

Ability to relate non-metallic materials to their uses in the locality,	Relates non-metallic materials to their uses in the locality conclusively	Relates non-metallic materials to their uses in the locality	Relates some of the non-metallic materials to their uses in the locality	Relates a few of the non-metallic materials to their uses in the locality
Ability to identify materials used in production	Identifies materials used in production citing applications	Identifies materials used in production	Identifies materials used in production citing some applications	Identifies materials used in production citing a few applications
Ability to describe the physical properties of metallic materials found in the immediate environment	Describes the physical properties of metallic materials found in the immediate environment citing examples	Describes the physical properties of metallic materials found in the immediate environment	Describes some of the physical properties of metallic materials found in the immediate environment	Describes only a few of the physical properties of metallic materials found in the immediate environment

STRAND 4.0: TOOLS AND PRODUCTION

Strand	Sub strand	Specific learning outcomes	Suggested learning experiences	Suggested Key Inquiry Questions
4.0 Tools and Production	**4.1 Measuring and Marking Out Tools** **(18 lessons)**	By the end of the sub strand, the learner should be able to; a) identify measuring and marking out tools to perform tasks, b) select measuring and marking out tools for a given task, c) use measuring and marking out tools to perform a given task, d) care for measuring and marking out tools to minimize damage, e) recognise the importance of measuring and marking out tools when performing tasks.	• Use visual aids and realia to identify measuring tools (*Tape measure, steel rule, callipers, weighing balance, stopwatch, ammeter, voltmeter*) and marking out tools (*divider, try-square, marking gauge, dot punch, scriber, pencil, marking knife*) in the work environment. Learners with manipulation difficulties could use adapted writing materials or type on appropriate adapted digital devices to draw and label. Control light intensity for learners who are sensitive to light while using digital devices. Those who may not turn pages to use page-turners or be supported by peers. • Learners are guided to choose the appropriate measuring and	• Why are measuring and marking out tools important in day-to-day life? • How are measuring and marking out tools used when performing tasks?

			marking out tools to perform a given task. • Learners are guided to use available resources to search for information on the use of measuring and marking out tools to perform specific tasks. • Learners are guided to perform specific tasks using measuring and marking out tools, • Learners demonstrate the use of measuring and marking out tools to perform specific tasks. • Learners care for and maintain measuring and marking out tools in the work environment.	

Core competencies to be developed:

- Critical thinking and problem-solving: the learner develops explanation, evaluation and decision-making skills when choosing the appropriate measuring and marking out tools to perform a given task.
- Self-efficacy: learner develops self-awareness skills by showing a concerted attention to detail when performing specific tasks using measuring and marking out tools.

Values:

- Respect: learner shows open-mindedness when discussing the use of measuring and marking out tools in the work environment.
- Responsibility: learner shows accountability by caring for and maintaining measuring and marking out tools in the work environment.

Pertinent and Contemporary Issues (PCIs):

- Disaster risk reduction: Learner avoids situations that can lead to injuries when caring for and maintaining measuring and marking out tools in the work environment.
- Internet safety and security: learner portrays responsible online behaviour when using a digital device to watch video clips showing the use of measuring and marking out tools to perform specific tasks.

Link to Other Subjects:

- Mathematics as the learner carries out geometric construction.
- Integrated Science as the learner identifies laboratory tools and equipment

Suggested Learning Resources:

Pre-technical Studies curriculum design, Pre-technical Studies handbook, Volunteer resource person, realia, pictures, charts

Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question
4.0 Tools and Production	4.2 Computer Hardware (14 lessons)	By the end of the sub strand the learner should be able to: a) classify computer hardware devices in a user environment, b) use computer hardware devices to carry out a given task, c) value the importance of computer hardware devices in a user environment.	• Learner is guided to brainstorm and present on the meaning of the term 'computer hardware, Learners with speech difficulties could use alternative communication modes as they share their views. Learners with manipulation difficulties could use any functional part of the body or use appropriate assistive devices during presentations. • Learner is guided to use available resources to search for	How are computer hardware used?

			information on categories of computer hardware: input devices (*keying devices, pointing devices, scanning devices, voice input devices, touch screen, digitizer, digital cameras),* output devices (*hardcopy and softcopy),* storage devices *(fixed and removable devices),* ● Learner is guided to match available devices to their respective categories, ● Learner is guided to perform tasks using computer input, output and storage devices. Adjust light intensity when using the digital device for learners with visual difficulties.	
Core competencies to be developed: ● Communication and collaboration: learner acquires speaking, writing, listening, and teamwork skills when brainstorming and presenting on the meaning of the term 'computer hardware' ● Critical Thinking and Problem Solving**:** learner develops skills of interpretation and inference when categorising computer hardware.				

Values:

- Peace: learner displays tolerance when performing tasks using computer hardware.
- Responsibility: learner shows accountability when using available resources to search for information on categories of computer hardware.

Pertinent and Contemporary Issues (PCIs):

Peer Education and Mentorship: learner enhances leadership skills when discussing the categories of computer hardware devices in a user environment.

Link to other subjects:

Integrated Science: learner enhances skills of connecting electric devices when connecting hardware devices.

Suggested Assessment Rubric

Level / Indicator	Exceeds expectations	Meets expectations	Approaches expectations	Below expectations
Ability to identify measuring and marking out tools used to perform tasks	Identifies measuring and marking out tools used to perform tasks distinctively	Identifies measuring and marking out tools used to perform tasks	Identifies measuring and marking out tools used to perform tasks leaving out a few	Identifies measuring and marking out tools used to perform tasks leaving out many
Ability to use measuring and marking out tools to perform a given task	Uses measuring and marking out tools to perform a given task with high precision	Uses measuring and marking out tools to perform a given task	Uses measuring and marking out tools to perform a given task with a few errors	Uses measuring and marking out tools to perform a given task with many errors

Ability to use computer hardware devices to carry out a given task,	Proficiently uses computer hardware devices to carry out a given task	Uses computer hardware devices to carry out a given task	Uses some of the computer hardware devices to carry out a given task	Uses only a few of the computer hardware devices to carry out a given task

STRAND 5.0: ENTREPRENEURSHIP

Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Questions
5.0 Entrepreneurship	**5.1 Introduction to Entrepreneurship (4 lessons)**	By the end of the sub strand, the learner should be able to: a) explain the importance of entrepreneurship to an individual and community, b) describe the qualities of an entrepreneur in business, c) explore sources of business ideas for a business venture, d) appreciate the role of entrepreneurship in a community.	• In purposive groups/pairs, learners brainstorm and present the meaning of the terms '**entrepreneur'** and **'entrepreneurship'.** Learners with speech difficulties could use alternative communication modes as they give their views, and appropriate assistive technology and devices as they make presentations. • Discuss and present on the importance of entrepreneurship in the community. • Download and watch a video clip or use available resources to search for information on qualities of an entrepreneur. Learners with manipulation	1. Why is entrepreneurship important in the community? 2. What are the qualities of an entrepreneur?

			difficulties could use any functional part of the body as they interact with digital devices. Adjust the screen resolution for those with visual difficulties. • Conduct self-assessment on entrepreneurial qualities, • Do a library search and present the meaning and sources of business ideas from the available resources. Learners with manipulation difficulties could use any functional part of the body as they use print media and digital devices. Adjust the screen resolution for learners with visual difficulties. • Learners are guided to discuss the role of entrepreneurship in a community.	

Core Competencies to be developed: • Communication and collaboration: learner acquires speaking, writing, listening, and teamwork skills when brainstorming and presenting on the meaning the meaning of the terms 'entrepreneur' and 'entrepreneurship'. • Critical Thinking and Problem Solving: learner acquires evaluation and decision-making skills when conducting self-assessment on entrepreneurial qualities.
Values: • Unity: learner displays team spirit when discussing and presenting the importance of entrepreneurship to an individual and community. ● Responsibility: learner engages in use of available resources to search for and present the meaning and sources of business ideas.
Pertinent and Contemporary Issues (PCIs): Financial Literacy: learner develops entrepreneurial skills when conducting a self-assessment on entrepreneurial qualities.
Link to Other Subjects: Social Studies: learner enhances knowledge on trading activities when discussing the role of entrepreneurship in a community.
Suggested Learning Resources Pre-technical Studies curriculum design, Pre-technical Studies handbook, Volunteer resource person,

Strand	**Sub Strand**	**Specific Learning Outcomes**	**Suggested Learning Experiences**	**Suggested Key Inquiry Questions**
Entrepreneurship	**5.2 Production Unit** **(6 lessons)**	By the end of the sub strand, the learner should be able to: a) explain the factors considered when locating a production unit,	● Learner is guided to discuss the meaning of the term 'production unit' and present to peers, Learners with speech difficulties could use alternative communication modes as they	How is the size of a production unit determined?

		b) analyse the factors determining the size of a production unit, c) value the importance of locating a production unit in a suitable area.	share their views. Learners with manipulation difficulties could use any functional part of the body or use appropriate assistive devices during presentations. ● Learner is guided to brainstorm and present the factors considered when choosing the location of a production unit, Allow more time for learners with speech difficulties to present their views. ● Learner is guided to visit the local community to assess the factors that influenced the location of a particular production unit (*Posho mill, salon, barber shop, welding, cybercafé*), Ensure barrier free access for learners with mobility difficulties. Safety for all learners should be observed. ● Learner is guided to use print or digital media to search for information on the factors that	

			determine its size and share with peers. Adjust light intensity when using the digital device for learners with visual difficulties.	

Core competencies to be developed:

- Communication and collaboration: learner acquires speaking, writing, listening, and teamwork skills when discussing and presenting on the meaning of the term' production unit'.
- Critical Thinking and Problem Solving: learner acquires interpretation and inference skills when visiting the local community to assess the factors that influenced the location of a particular production unit.

Values:

- Responsibility: learner shows accountability when using print or digital media to search for information on the factors that determine its size and share with peers.
- Respect: learner shows regard for the input of every member when brainstorming and presenting on the factors considered when choosing the location of a production unit.

Pertinent and Contemporary Issues (PCIs):

Financial Literacy: learner develops entrepreneurial skills when brainstorming and presenting the factors considered when choosing the location of a production unit.

Link to Other Subjects:

Social Studies: learner enhances knowledge on trade when brainstorm on factors considered when choosing the location of a production unit.

Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Questions
5.0 Entrepreneurship	**5.3 Financial Goals** **(10 lessons)**	By the end of the sub strand, the learner should be able to; a) explain the importance of setting goals in financial management, b) analyse the factors to consider when setting financial goals, c) formulate financial goals for individual development, d) observe financial discipline in financial management.	● Discuss and present the meaning and importance of setting goals in financial management. Learners with speech difficulties could use alternative communication modes, and appropriate assistive technology and devices as they make presentations. ● Discuss and present the importance of financial discipline, ● Brainstorm and present the factors to consider when setting financial goals, ● Use available learning resources to search for information on setting financial goals. Learners with manipulation difficulties could use any functional part of the body as	1. Why is it important for an individual to set financial goals? 2. What are the factors to consider when setting financial goals?

			they interact with learning resources as well as digital devices. Adjust the screen resolution when using the digital device for learners with visual difficulties. ● Set Specific Measurable Achievable Realistic and Time bound (SMART) financial goals.	

Core competencies to be developed:

- Self-efficacy: learner acquires effective communication skills when discussing and presenting on the meaning and importance of goal setting as used in financial management.
- Critical thinking and problem-solving: learner acquires interpretation and inference skills when using available learning resources to search for information on setting financial goals.
- Learning to learn: learner acquires the skill of sharing learnt knowledge when discussing and presenting on the importance of financial discipline.

Values:

- Responsibility: learner engages in assigned roles and duties when discussing and presenting on the meaning and importance of goal setting as used in financial management,
- Respect: learner shows regard for the input of every member when brainstorming and presenting on the factors to consider when setting financial goals,

Pertinent and Contemporary Issues (PCIs):

Financial Literacy: learner acquires financial skills when setting Specific Measurable Achievable Realistic and Time bound (SMART) financial goals.

Link to Other Subjects: Social studies: As they learn about personal goals.
Suggested Learning Resources • Pre-technical Studies curriculum design, Pre-technical Studies handbook, Volunteer resource person, internet • Assistive technology such as smartphones, tablets, computers with web access software, pens with grip, pencils, extended keyboards, laptops, adjustable tables and chairs with footboards, multi-purpose communication boards, head and mouth pointers, and universal cuffs. • Service providers include learner support assistants, occupational and speech therapists, physiotherapists and nurse aids.

Suggested Assessment Rubric

Level / Indicator	Exceeds expectations	Meets expectations	Approaches expectations	Below expectations
Ability to describe the qualities of an entrepreneur in business	Describes more than five qualities of an entrepreneur in business	Describes four to five qualities of an entrepreneur in business	Describes two to three qualities of an entrepreneur in business	Describes at most one qualities of an entrepreneur in business
Ability to explore sources of generating business ideas for a business venture	Explores three sources of generating business ideas for a business venture	Explores three sources of generating business ideas for a business venture	Explores two sources of generating business ideas for a business venture.	Explores at most one source of generating business ideas for a business venture.
Ability to analyse factors determining the size of a production unit,	Analyses more than four factors determining the size of a production unit,	Analyses four factors determining the size of a production unit,	Analyses two or three factors determining the size of a production unit,	Analyses at most one factor determining the size of a production unit,

APPENDIX 1: GUIDELINES FOR INTEGRATING COMMUNITY SERVICE LEARNING (CSL)

Introduction

Community Service Learning (CSL) is an experiential learning strategy that integrates classroom learning and community service to enable learners reflect, experience and learn from the community. The CSL activity is hosted as a strand in Social Studies. The Social Studies teacher will be expected to coordinate teachers from other learning areas to carry out the integrated CSL class activity. Learners will be expected to apply knowledge, skills, attitudes and values from the different Learning Areas to undertake the integrated CSL class activity. Learners will undertake **one common** integrated class CSL activity following a 6-step milestone approach that is:

Milestone	Description
Milestone 1	**Problem Identification** • Learners study their community to understand the challenges faced and their effects on community members.
Milestone 2	**Designing a solution** Learners create an intervention to address the challenge identified. Learners with speech difficulties could use Alternative and Augmentative modes of Communication-AAC (residual speech/ digital devices with text-to-speech application/ point/sign/write) during the discussion.
Milestone 3	**Planning for the Project** Learners share roles, create a list of activities to be undertaken, mobilise resources needed to create their intervention and set timelines for execution. Learners with manipulation difficulties could use alternative functional parts of the body, appropriate assistive devices or be assisted by peers or teacher to perform the task.

Milestone 4	**Implementation** The learners execute the project and keep evidence of work done.
Milestone 5	Showcasing /Exhibition and Report Writing Exhibitions involve showcasing learners' project items to the community and reflecting on the feedback Learners write a report detailing their project activities and learning from feedback. Learners with manipulation difficulties could be provided with adapted writing materials such as pen/pencils with grip. They could also type on an adapted digital device or be assisted by a scribe or learner support assistant to write the report. Those with postural deformities could require appropriate positioning.
Milestone 6	Reflection Learners review all project work to learn from the challenges faced. They link project work with academic concepts, noting how the concepts enabled them to do their project as well as how the project helped to deepen learning of the academic concepts.

ASSESSMENT OF CSL INTEGRATED PROJECT

Assessment for the integrated CSL activity will be conducted formatively. The assessment will consider both the process and end product. This entails assessing each of the milestone stages of the integrated CSL class activity. It will focus on 3 components namely: skills from various learning areas applied in carrying out the activity, core competencies developed and values nurtured.

APPENDIX 2: SUGGESTED ASSESSMENT METHODS, NON-FORMAL ACTIVITIES AND SUGGESTED ADAPTATIONS FOR A

ASSESSMENT METHODS.

Strands	Sub Strands	Suggested Assessment Methods	Suggested adaptations for assessment methods.	Suggested Non- Formal Activities
1.0 Foundations of Pre - Technical Studies	**1.1 Introduction to Pre-Technical Studies**	• Question and Answer • Observation • Written test/Oral or Aural assessment • Practical work • Peer and self-assessment	• Provision of physical support • Use of assistive technology • Provision of Adapted digital devices and writing/drawing resources • Adjustment of time according to individual needs • Description of how to carry out a practical activity while being audio/video recorded	• Discuss the role of Pre-Technical studies in clubs and societies.

	1.2 Safety in the Work Environment	• Question and Answer • Observation • Written test • Practical work • Peer and self-assessment	• Typing, stamping or signing • Description of the task as a scribe or learner support assistant writes Audio visual recording of the learner as he/she makes oral responses • Provision of Adapted digital devices and writing/drawing resources • Adjustment of time according to individual needs • Providing illustrations to be interpreted for activities that involve drawing • Use of worksheets	• Learners visit workplaces in the locality to observe how workers practice safety as they perform tasks • Debate in clubs and societies on safety in the work environment
	1.3 **Computer Concepts**	• Question and Answer • Observation • Written test • Practical work • Peer and self-assessment	• Provision of physical support • Use of assistive technology • Provision of Adapted digital devices and writing/drawing resources • Adjustment of time according to individual needs • Description of how to carry out a practical activity while being audio/video recorded	• Demonstrate how to use ICT tools (*Calculators, Smartphones, Tablets, DVD players, Digital watches)* during clubs and societies

2.0 Communication	2.1 Fundamentals of Communication	• Question and Answer • Observation • Written test • Peer and self-assessment	• Written responses • Use of AAC (*Augmentative and Alternative modes of Communication) e.g. talking books, gestures, body movement, sign language, alphabet cards, facial expressions* • Adjustment of time according to individual needs	• Financial literacy and other school clubs and societies • Songs on business communication during music festivals • Debates on business communications in planned out of class school programmes
	2.2 Introduction to Drawing	• Question and Answer • Observation • Written test • Peer and self-assessment	• Written responses • Use of AAC (*Augmentative and Alternative modes of Communication) e.g. talking books, gestures, body movement, sign language, alphabet cards, facial expressions* • Adjustment of time according to individual needs	• Learners visit nearby workplaces to observe how different types of drawings are done and how they are used in the community • learners discuss on types of drawing in out of class school programmes
	2.3 Plane Geometry	• Question and Answer • Observation • Written test • Peer and self-assessment	• Typing, stamping or signing • Description of the task as a scribe or learner support assistant writes Audio visual recording of the learner as he/she makes oral responses	• Learners visit nearby workplaces to observe how different combined shapes and how they are used in the community

			• Provision of Adapted digital devices and writing/drawing resources • Adjustment of time according to individual needs • Providing illustrations to be interpreted for activities that involve drawing • Use of worksheets	
3.0 Materials for Production	**3.1 Economic Resources**	• Question and Answer • Observation • Written test • Peer and self-assessment	• Provision of physical support • Provision of Adapted resources (learner specific) • Description of how to carry out a practical activity while being audio/video recorded • Adjustment of time according to individual needs • Rest intervals according to individual needs • Environmental adaptation	• Discuss classification of economic resources in Financial literacy and other school clubs and societies • Organised and planned field visits activities to carry our resource mapping

	3.2 Metallic Materials	• Question and Answer • Observation • Written test • Peer and self-assessment • Practical work	• Provision of physical support • Use of assistive technology • Provision of Adapted digital devices and writing/drawing resources • Adjustment of time according to individual needs • Description of how to carry out a practical activity while being audio/video recorded	• Learners visit local community and collect metallic materials and write down how each is used by the local community • Discuss the uses of metallic materials in clubs and societies
	3.3 Non-Metallic Materials	• Question and Answer • Observation • Written test • Peer and self-assessment • Practical work	• Provision of physical support • Provision of Adapted resources (learner specific) • Description of how to carry out a practical activity while being audio/video recorded • Adjustment of time according to individual needs • Rest intervals according to individual needs • Environmental adaptation	• Learners visit local community and collect non-metallic materials and write down how each is used by the local community • Discuss the uses of non-metallic materials in clubs and societies

4.0 Tools and Production	**4.1 Measuring and Marking Out Tools**	• Question and Answer • Observation • Written test • Peer and self-assessment • Practical work	• Written responses • Use of AAC (*Augmentative and Alternative modes of Communication) e.g. talking books, gestures, body movement, sign language, alphabet cards, facial expressions* • Adjustment of time according to individual needs	• Learners visit local workplaces and observe the use of measuring and marking out tools in performing different tasks • Discuss the uses of measuring and marking out tools in clubs and societies
	4.2 Production of Goods and Services	• Question and Answer • Observation • Written test • Peer and self-assessment	• Typing, stamping or signing • Description of the task as a scribe or learner support assistant writes Audio visual recording of the learner as he/she makes oral responses • Provision of Adapted digital devices and writing/drawing resources • Adjustment of time according to individual needs • Providing illustrations to be interpreted for activities that involve drawing • Use of worksheets	• Discuss the factors of production in Financial literacy and other school clubs and societies • Participate in a talk by a volunteer resource person on the ethical and unethical practices in production

5.0 Entrepreneurship	**5.1 Introduction to Entrepreneurship**	• Question and Answer • Observation • Written test • Peer and self-assessment	• Provision of physical support • Provision of Adapted resources (learner specific) • Description of how to carry out a practical activity while being audio/video recorded • Adjustment of time according to individual needs • Rest intervals according to individual needs • Environmental adaptation	• Discuss business ideas and opportunities in Financial literacy and other school clubs and societies • Organised and planned field visits in the local community to engage with entrepreneurs • Participate in a talk by a volunteer resource person on the qualities of an entrepreneur
	5.2 Money	• Question and Answer • Observation • Written test • Peer and self-assessment	• Written responses • Use of AAC (*Augmentative and Alternative modes of Communication) e.g. talking books, gestures, body movement, sign language, alphabet cards, facial expressions* • Adjustment of time according to individual needs	• Discuss on the security features of the Kenyan currency in Financial literacy and other school clubs and societies • School drama festivals on themes and symbols on the Kenyan currency • Participating in a talk by a volunteer resource

				person on themes, symbols and security features on the Kenyan currency • Posters with messages on symbols and themes of Kenyan currency.
	5.3 **Financial Goals**	• Question and Answer • Observation • Written test • Peer and self-assessment • Practical work	• Provision of physical support • Provision of Adapted resources (learner specific) • Description of how to carry out a practical activity while being audio/video recorded • Adjustment of time according to individual needs • Rest intervals according to individual needs • Environmental adaptation	• Discuss on factors to consider when setting financial goals in Financial literacy and other school clubs and societies • Participating in a talk by a volunteer resource person setting financial goals Posters with messages on SMART financial goals