

DRAFT

# Table of Contents

Prerequisite of Using the Assessment Framework

Chapter One

Introduction

Quality of Education

The Need for an Assessment Framework

The Purpose of Developing Assessment Framework

The purpose of developing General knowledge Assessment Framework

Defining Assessment

The Cyclic Assessment

Chapter Two

Pre-Assessment

Curriculum Mapping: A Pre-Assessment Strategy

Tables of Specifications

Grade I

Grade II

Grade III

List of Assessment Codes

List of Codes, SLOs and Assessment Strategies

Grade I

Grade II

Grade III

Chapter Three

Assessment during Instruction

Designing Classroom Assessment

Assessment Strategies

Formative Assessment for Deep Learning Approach – Meaningful Examples

Portfolio Assessment

Group Project Assessment

Selected Response - Multiple Choice (Objective Test Item)

Constructed Response –Descriptive Questions (Subjective Test Item)

Assessment Validity

Content Validity

Chapter Four

Supporting Responsive Teaching and Learning through Feedback

Feedback to Students

Feedback to Parents

Chapter Five

Post Assessment: Redefined Goals/Curriculum

Completing the Assessment Loop

Balanced Assessment System

Concluding Remarks – Exit to the Next Cycle

References

Appendices

Bloom's Revised Taxonomy Model – Cognitive Domain

Bloom's Revised Taxonomy Model – Affective Domain

Bloom's Revised Taxonomy Model – Psychomotor Domain

Curriculum Mapping

General Knowledge - Grade I

General Knowledge - Grade II

General Knowledge - Grade III

DRAFT

## **Prerequisite of Using the Assessment Framework**

This Assessment Framework (AF) provides theory and structured conceptual map of how the learning outcomes of a programme of study should be assessed at the primary school level. It contains guidelines and principles of assessment as well as several practical examples to illustrate the application in the classroom.

The framework can be considered a blueprint of an assessment programme at the primary school level. As with all assessment frameworks, its enactment in schools and classrooms will require professional judgement guided by the following prerequisites.

***Teacher and Head Teacher Development*** – Where needed, teachers and head teachers would require short courses on a. formative assessment, b. the progressive notions of cyclic purposeful assessment and their need in Pakistani context, and, c. the importance and conduct of formative feedback, which facilitates learners’ progression from lower-order thinking skills to higher-order thinking abilities. They may also need to learn how to read the curriculum maps and tables of specification to plan for authentic and valid assessment.

***School Based Assessment Planning*** – School based yearly assessment programmes and monthly assessment schemes must be developed taking into account the principles, guidelines and examples from the AF. The framework contains schedules of assessment and assessment weightage. These need to be considered for school level planning.

***School Based Mentoring*** – There is a need to develop mentors who can work with teachers and head teachers in the selected schools to help them translate the AF into various schools’ realities. Pakistan has schools of varying systems – from public to private to madrasah; varying contexts - from rural to urban to semi-urban; varying socio-economic background – from schools for high-income group to low income groups to middle-income groups. Therefore, mentors will be required for at least the first year of the implementation of the AF.

DRAFT

**CHAPTER ONE**  
**INTRODUCTION**

## **Chapter One**

### **Introduction**

This chapter introduces the National Assessment Framework (NAF), developed as an integral component of the National Curriculum Framework (NCF). By drawing on essential information from different national policy documents and from the relevant international literature, the chapter discusses the philosophical positioning of the assessment framework. It presents a brief overview of the quality of education and the need for developing a uniform national assessment framework. It further outlines the basic structure and the principles of various forms of assessment for General Knowledge Grades I to III.

### **Quality of Education**

The basic purpose of any initiative taken at policy and practice level is improving the quality of education imparted by schools to young learners. Quality as a complex and contested notion does not have a single definition; the understanding and the provisions of inputs into quality in education vary from society to society and context to context. National Curriculum Framework (NCF) (Government of Pakistan, 2018b) refers to quality of education as a set of elements containing input, process and output of the education system. Quality also entails all the desirable characteristics of learners, processes, learning materials, content, governance and management, and learning outcomes. Elaborating on the definition, NCF (2018b, p.1) further argues, “Quality education satisfies basic learning needs and enriches the lives of learners and their overall experience of living.” Policy document on Minimum Standards for Quality of Education in Pakistan (Government of Pakistan, 2018a) refers to the definition used in Education for All (EFA) Global Monitoring Report 2005, which draws on two principles. The first principle identifies learners' cognitive development as the major explicit objective of all education systems, and the second emphasizes education's role in nurturing creative and emotional development for promoting the values and attitudes of responsible citizenship. The document on Minimum Standards for Quality of Education (2018) explains the concept of quality in terms of education that is “meaningful, relevant and responsive to the needs of individuals and the society as a whole.” (Government of Pakistan, 2018c, p.5). Similarly, the National Educational Policy (NEP), 2009 recognizes six pillars of quality, which include curriculum, textbooks, assessment, teachers, learning environment and relevance of education to practical life.

### **The Need for an Assessment Framework**

As noted in the definition above, assessment is an integral part of the quality of education offered to the students. Assessment is an essential part of processes at input level, as well as serves as a tool to measure outputs and outcomes of processes and practices. As reflected in

these definitions, assessment, as an important practice in education, is to play a central role in translating the key ideas in the quality definition into practice.

Assessment, as defined by Erwin (1991 cited in NCF (Government of Pakistan, 2018b) is:

...the process of defining, selecting, designing, collecting, analysing, interpreting, and using information to continuously increase students' learning and development. It is the systematic collection, review and use of information about educational programmes to improve student learning. Assessment focuses on what students know, what they are able to do, and what values they have when they receive their education... Assessment is concerned with the collective impact of a series of lessons on student learning. (p.69)

The above definition of assessment implies that on the one hand assessment provides evidence of students' learning of academic content (academic domain) and development in other domains (psychosocial/psycho-emotional, language and affective domains). On the other hand, it supports the collection of relevant information for various purposes such as informing teaching and learning, determining students' progress on an ongoing basis, measuring achievement, and providing information needed for monitoring individual and institutional accountability. These all lead to informed decision-making about improving students' learning outcomes and enhance the overall quality of education focusing on efforts at classroom, school and system levels.

Despite the paramount importance of the student assessment system and the promises made in the successive education policies, Pakistan has not been able to put in place the kinds of policies, structures, mechanisms, processes, practices, and tools that contribute to creating a strong and effective student assessment system in the country. In Pakistan, programmes and efforts of projects (e.g. setting up NEAS, PEAC, conducting standardized tests/exams at Grade 5 & 8) made to improve student assessment have proved to be weak. There is a need for a comprehensive and coherent national policy framework to guide and support education systems, schools and teachers in bringing about improvement in student assessment on a sustainable basis. As pointed out in the policy document on Minimum Standards for Quality Education in Pakistan (Government of Pakistan, 2018a, p.2), "the absence of clearly articulated and agreed upon minimum national standards for quality education leaves the education system without a basic framework for setting targets and for evaluating attempts at improvements in education quality."

NCF (Government of Pakistan, 2018b), considering assessment as an integral component of the teaching process, emphasises on developing different assessment mechanisms to assess students' competence as per curricula through different forms of assessments than the use of conventional methods considering them sporadic and unreliable. Therefore, it calls for a more valid and reliable system that not only addresses the deficiencies in the current assessment and

penalize unfair means in large-scale public assessment, but ensures standardized execution of formative, summative, classroom based assessment, school based assessment and large scale assessment across the board in the country.

Thus, a robust and coherent national assessment system will help in the realization of the aims, goals and purposes of education articulated in NCF and other policy documents.

### **The Purpose of Developing Assessment Framework**

Considering the fact that the use of older and rigid forms of assessment is a hindrance to quality teaching and learning and may impair the effectiveness of NCP, a different assessment framework is developed to provide the basis for reliable, valid and useable for all types of assessment, grades and subjects. The National Assessment of Educational Progress (NAEP) also confirms that creating a nationwide assessment framework will provide all the actors with a blueprint for the content and design of different types of assessments. The framework may further provide a starting point for constructive discourse about high-quality educational standards and assessments.

The purpose of developing an assessment framework is to ensure the standardized implementation of different forms of assessment that includes formative and summative school-based classroom assessments and large-scale assessment. It encompasses a paradigm shift from the traditional ways of assessing to a competency-based assessment considering the implication for its utility, reliability and practicality in different contexts. Underpinning different purposes of assessments, the framework serves as guidance for all the stakeholders in the learning system in developing, implementing and using assessments methodically to instate stronger teaching and learning practices.

### **The purpose of developing General knowledge Assessment Framework**

The General Knowledge Curriculum focuses on departing from the traditional method of evaluating students' learning; rather it emphasises on using alternative assessments in order to determine how well students are learning and progressing. The alternative methods of assessments not only gauge a student's progress but also inform about the process of teaching and learning.

Aligned with the General knowledge curriculum, the General knowledge Assessment Framework is developed to provide different forms of formative and summative assessment along with the purpose with which each assessment is being introduced. It provides a variety of assessment tools to assess all four language skills.

It is constructed in the form of tasks that involve taking into account the developmental levels of students. It entails competency-wise weightage of all the grade levels for all the subjects. It will also present a table of the specification along with the structure of formative



and summative assessment, schedule of assessment, and guidelines for providing feedback for improving performance.

The framework also provides samples/ examples of selected and constructed items for summative and formative tests including marking guidelines, examples of authentic tasks, and rubrics as well as examples of effective feedback

### Defining Assessment

The above discussion signifies that assessment needs to be purposeful. It is a broad process of collecting, synthesising and interpreting information to support student learning and to report on the amount learned. The supporting function is known as formative assessment and the reporting function is known as summative assessment (as shown below).

Assessment Type	Formative	Summative
	Looking back and preparing forward. Feeding back and feeding forward.	Feeding back. Providing a snapshot.
Assessment Objectives & Outcomes	Assessment <i>as and for</i> Learning	Assessment <i>of</i> Learning
	Focusing on constructive feedback from the teacher and on developing students' capacity to self-assess and to reflect on their learning to improve their future learning and understanding.	Making judgments about what the student has learned in relation to the teaching and learning goals; should be comprehensive and reflect the learning growth over the time period being assessed.

Source: (Chappuis & Stiggins, 2017)

### The Cyclic Assessment

Purposeful assessment is cyclic. There are many versions of cyclic assessment. The one presented here is adapted from Margaret Heritage's model.

DRAFT

Source: Adapted from Greenstein, 2016

The cyclic model illustrates how purposeful assessment systematically supports student learning by tracking and enhancing student growth towards standards following the seven steps. The seven step model will be unpacked in the subsequent sections of the framework.

## **CHAPTER TWO**

# **PRE-ASSESSMENT**

## Chapter Two

### Pre-Assessment

#### Curriculum Mapping: A Pre-Assessment Strategy

An important consideration in assessment is how well students have mastered the SLOs, what knowledge, skills and attitudes they have acquired in a particular learning area during an academic year and where they are expected to be at the end of teaching and learning (Greenstein, 2016). The first stage in planning for assessment is, therefore, to develop curriculum maps illustrating the alignment between the SLOs for English language acquisition for grades 1 to 5 with the various domains of knowledge, skills and attitudes using pre-specified criteria based on Bloom's taxonomy (see Appendices A, B & C).

The detailed curriculum maps have been developed for English grades 1 to 3 and are attached as appendices from Appendices D to F. Curriculum mapping is based on Bloom's Cognitive, Affective and Psychomotor Domains. The following levels were used in each of the three domains:

**The Cognitive Domain** comprises six (06) cognitive dimensions, namely remember, understand, apply, analyse, evaluate, create and four (04) knowledge dimensions namely factual, conceptual, procedural, and metacognitive. **The Affective Domain** comprises five (05) dimensions comprising receiving, responding, valuing, organising, and characterising. **The Psychomotor Domain** comprises seven (07) dimensions namely, perception, set, guided response, mechanism, complex overt response, adaptation, and origination.

The description, key words and sample assessment in each dimension are given in Appendices A, B and C. The sources from where the description and examples have been taken are also given underneath the tables in the different appendices.

Curriculum maps were used for the following four purposes:

- Develop topic wise or competency wise weightage
- Develop tables of specifications based on the weightage

- Group SLOs in terms of knowledge, skills, and attitudes they are trying to develop
- Develop assessment codes

The following section presents Tables of Specifications followed by a List of Assessment Codes, SLOs and Assessment Strategies.

### Tables of Specifications

Tables of specifications were prepared for each grade levels to align student-learning outcomes with key competencies or instruction units and calculate the number of assessed items.

#### Grade I

#### Total Percentage Share of the Three Domains for GK

Domains	Share in Percentage
Cognitive	89%
Affective	10
Psychomotor	1%

#### Weightage of Each Domain

No	Domain	Cognitive	Affective	Psychomotor	Weightage
1	Discovering Self and Immediate Environment	15%	5%	-	20%
2	Ethics and Values	7%	4%	-	11%
3	Responsible Citizenship	7%			7%
4	Patriotism and Knowledge of the Country	4%	-	1%	5%
5	Goods and Services	5%	-	-	5%
6	Life Sciences	37%	1%	-	38%
7	Physical Sciences	5%	-	-	5%
8	Earth and Space Science	9%	-	-	9%
	Total (100%)	89%	10%	1%	100%

DRAFT

## Table of Specification

Competency	Discovering Self and Immediate Environment 20%	Ethics and Values 11%	Responsible Citizenship 7%	Patriotism and Knowledge of the Country 5%	Goods and Services 5%	Life Sciences 38%	Physical Sciences 5%	Earth and Space Science 9%	Total 100
<b>Learning Domains</b>									
<b>Remember 43%</b>	9	2	1	2	2	20	2	5	43
<b>Understand 24%</b>	5	2	1	1	1	10	2	2	24
<b>Apply 12%</b>	2	1	1	1	1	4	1	1	12
<b>Analyze 8%</b>	2	1	1	-	-	3	-	1	8
<b>Evaluate 2%</b>	1	-	-	-	-	1	-	-	2
<b>Create 0%</b>	-	-	-	-	-	-	-	-	-
<b>Affective Domain</b>									
<b>Receiving 2%</b>	1	1	-	-	-	-	-	-	2
<b>Valuing 7%</b>	-	4	3	-	-	-	-	-	7
<b>Organizing 1%</b>	-	-	-	1	-	-	-	-	1
<b>Psychomotor Domain</b>									
<b>Mechanism 1%</b>	-	-	-	-	1	-	-	-	1
<b>Total 100%</b>	20%	11%	7%	5%	5%	38%	5%	9%	100

## Grade II

### Total Percentage Share of the Three Domains for GK

Domains	Share in Percentage
Cognitive	90%
Affective	9%
Psychomotor	1%

### Weightage of Each Domain

No	Domain	Cognitive	Affective	Psychomotor	Weightage
1	Discovering Self and Immediate Environment	6%			6%
2	Ethics and Values	16%	6%		22%
3	Responsible Citizenship	12%	3%		15%
4	Patriotism and Knowledge of the Country	11%		1%	12%
5	Goods and Services	7%			7%
6	Life Sciences	15%			15%
7	Physical Sciences	14%			14%
8	Earth and Space Science	9%			9%
	Total (100%)	90%	9%	1%	100%



## Table of Specification

Competency Learning Domains	Discovering Self and Immediate Environment 6%	Ethics and Values 22%	Responsible Citizenship 15%	Patriotism and Knowledge of the Country 12%	Goods and Services 7%	Life Sciences 15%	Physical Science 14%	Earth and Space Science 9%	Total
<b>Cognitive Domain</b>									
Remember 51%	3	10	7	6	4	8	8	5	51
Understand 23%	2	4	2	4	2	3	3	3	23
Apply 10%	1	1	1	1		3	2	1	10
Analyze 5%		1	1		1	1	1		5
Evaluate 1%		1							1
Create %									
<b>Affective Domain</b>									
Receiving 5%		3	2						5
Valuing 2%		1	1						2
Characterizing 2%		1	1						2
<b>Psychomotor</b>									
Perception (1%)				1					1
<b>Total (100%)</b>	<b>6%</b>	<b>22%</b>	<b>15%</b>	<b>12%</b>	<b>7%</b>	<b>15%</b>	<b>14%</b>	<b>9%</b>	<b>100%</b>

## Grade III

### Total Percentage Share of the Three Domains for GK

Domains	Share in Percentage
Cognitive	97%
Affective	3%
Psychomotor	0%

### Weightage of Each Domain

No	Theme	Cognitive	Affective	Psychomotor	Weightage
1	Discovering Self and Immediate Environment	13%	3%		16%
2	Ethics and Values	7%			7%
3	Responsible Citizenship	7%			7%
4	Patriotism and Knowledge of the Country	8%			8%
5	Goods and Services	9%			9%
6	Life Sciences	17%			17%
7	Physical Sciences	13%			13%
8	Earth and Space Science	22%			22%
	Total (100%)	90%	3%		100%

## Table of Specification

Competency	Discovering Self and Immediate Environment 16%	Ethics and Values 7%	Responsible Citizenship 8%	Patriotism and Knowledge of the Country 8%	Goods and Services 9%	Life Sciences 17%	Physical Sciences 13%	Earth and Space Science 22%	Total
<b>Cognitive Domain</b>									
<b>Remember 68%</b>	9	5	5	6	5	12	9	17	68
<b>Understand 13%</b>	2	1	2	1	2	2	1	2	13
<b>Apply 11%</b>	1	1	1	1	1	2	2	2	11
<b>Analyze 5%</b>	1				1	1	1	1	5
<b>Evaluate 0%</b>									
<b>Create 0%</b>									
<b>Affective Domain</b>									
<b>Receiving 2%</b>	2								2
<b>Valuing 1%</b>	1								1
<b>Total 100%</b>	16%	7%	8%	8%	9%	17%	13%	22%	100%

## List of Assessment Codes

The following processes were used to develop codes.

- The first letters of **C**ognitive Domain “C”, **R**emember Cognitive Dimension “R” and **F**actual Knowledge Dimension “F” to form the overall domain code as “**CRF**”. Similarly, the first letters of the Cognitive Domain “C”, **U**nderstand Cognitive Dimension “U” and **C**onceptual Knowledge Dimension “C” were combined to form the overall domain code as “**CUC**”. In this way all the overall domain codes were generated for the cognitive Domain. The same strategy was used for Affective and Psychomotor Domains.
- The overall domain codes were combined with NCP Reference to form specific codes for each SLO. For example, for the first SLO, “Greet others by saying Assalam o Alaikum, Hello, Good Morning etc.” falling in Domain B: Ethics and Values in CRF overall code, the specific code of CRFB-01 was developed. The same procedure was used for developing codes for all the SLOs falling in cognitive, affective, and psychomotor domains.
- Specific assessment strategies for each of the overall domain code suited for assessing specific SLO were also identified.

This exercise was important to identify the specific domain code in which the SLO was falling so that a valid assessment strategy could be used for assessing each SLO. The table below presents the overall domain code, NC reference, list of SLOs and assessment strategies for each grade level. The codes can also be used as a reference point in different types of assessments.

## List of Codes, SLOs and Assessment Strategies

### Grade I

#### Cognitive Domain

Overall Domain Code	NCP Reference	SLO	Codes	Assessment Strategies
<b>CRF</b> Cognitive Remember Factual	GK-01-A-05	Identify some family members (parents, brothers and sisters, grand-parents, aunts, uncles and cousins (paternal and maternal)).	CRFA-05	MCQ,
	GK-01-A-07	Name and identify the people they interact with in school (teachers, students, principal, service providing staff etc.).	CRFA-07	
	GK-01-B-01	Greet others by saying Assalam o Alaikum, Hello, Good Morning etc.	CRFB-01	
	GK-01-D-02	Tell the full name of our country and date of formation.	CRFD-01	
	GK-01-D-03	Recognise that all the countries have a flag	CRFD-02	
	GK-01-C-01	Draw the flag of Pakistan.	CRFD-03	
	GK-01-F-01	Name the games they like to play.	CRFC-01	
	GK-01-F-03	Name and identify e.g., through labelling) major parts of the human body (eyes, nose, ears, mouth, arms, feet, hands, and legs).	CRFF-01	
	GK-01-A-05	Name the five senses.	CRFF-03	
<b>CRC</b> Cognitive Remember Conceptual	GK-01-F-02	Identify the functions of various body parts.	CRCF-02	MCQs, Teacher Observation, Short Questions.
	GK-01-F-ADD	Recognize that some people don't have all the body parts and senses and they are also valuable members of the society.	CRCF-ADD	
	GK-01-F-ADD	Identify the unhealthy habits that cause illnesses (like cough and diarrhea etc.)	CRCF-ADD	

G K - 0 1 - F - 0 9	Recognise living and non-living things around them in nature.	CRCF-09
GK-01-F-11	Identify plants in their environment.	CRCF-11
GK-01-F-13	Identify the things around them that are made up of plants/ trees.	CRCF-13
GK-01-F-15	Identify some common domestic and wild animals.	CRCF-15
GK-01-F-16	Identify the food which different animals eat.	CRCF-16
GK-01-F-18	Identify places where animals are found (desert, jungle, water, mountains etc.)	CRCF-18
GK-01-F-ADD	Identify the differences between common, domestic and wild animals in terms of physical features	CRCF-ADD
GK-01-H-03	Identify Earth as a planet.	CRCH-03
GK-01-H-04	Recognise the shape of the Earth.	CRCH-04
GK-01-H-05	Identify celestial objects in the sky during day and night.	CRCH-05
GK-01-H-07	Recognise that the moon and stars shine at night.	CRCH-07
GK-01-A-08	Describe the activities they engage in at school	CRCA-08

	GK-01-A-ADD	Narrate the special qualities of some of their friends	CRCA-ADD	
	GK-01-F-05	Match the sensory descriptions of each of the five senses	CRFF-05	
	GK-01-E-01	Identify the means of transportation which people use.	CRCE-01	
	GK-01-E-ADD	Identify the places where buses and trains stop, airplanes land and ships berth.	CRCE-ADD	
	GK-01-E-ADD	Describe the activities that take place at a bus stop, railway station, airport, and harbor.	CRCE-ADD	
	GK-01-G-01	Identify what makes objects move.	CRCG-01	
	GK-01-G-04	Recognize from pictures of the past that force applied by humans and animals moved vehicles (Tonga, bullock cart, cycle, pushcart) while today vehicles are moved by machines (bus, motorcycle and car etc.)	CRCG-04	
<b>CRP</b> Cognitive Remember Procedural	GK-01-C-02	Demonstrate the importance of collaboration by participating in group activities and games.		short answers, matching, (quiz), Define different terms and terminologies.
<b>CUF</b> Cognitive Understanding Factual	GK-01-A-ADD	Share and understand the rules they follow in class and school	CUFA-ADD	Short answers, teacher observation
<b>CUC</b> Cognitive Understanding Conceptual	GK-01-E-02	Differentiate between slow & fast means of transportation.	CUCE-02	Close ended Constructed Reponses, CRQs, Choosing words,
	GK-01-C-03	Recognize the importance of following rules.	CUPC-03	
	GK-01-B-ADD	Recognize that they should respect everyone	CRCB-ADD	

	GK-01-A-03	Recognize and explain that individuals have different needs and qualities, and different likes and dislikes.	CUCA-03	binary choice
	GK-01-C-05	Describe the importance of playing games and exercise for better health for girls, boys, and differently abled groups.	CUCC-05	
	GK-01-F-ADD	Recognize the fact that germs can cause diseases and list the ways to avoid germs.	CUCF-ADD	
	GK-01-F-ADD	Discuss the importance of keeping their school clean.	CUCF-ADD	
	GK-01-F-10	Understand that living things need air, water, and food.	CUCF-10	
	GK-01-F-12	Recognise the importance of plants/ trees as a source of food, shade, oxygen, and shelter.	CUCF-12	
	GK-01-F-17	Recognize the importance of animals as a source of food, joy, and transport.	CUCF-17	
	GK-01-H-01	Recognize that the Earth is covered with land and water.	CUCH-01	
	GK-01-H-02	Recognise the concept of planets	CUCH-02	
	GK-01-H-06	Recognise that the sun shines very brightly during the day and gives us heat and light.	CUCH-06	
<b>CUP</b> Cognitive Understanding Procedural	GK-01-F-19	Recognize measures for better care of domestic and wild animals and plants.	CUPF-19	Open ended CRQs; observation through play; quiz; discussion on video
	GK-01-C-04	Observe and identify the rules when playing a game.	CUPC-04	
	GK-01-B-04	Recognise and identify the etiquettes of using the washroom.	CUPB-04	
<b>CAF</b> Cognitive Application	GK-01-G-02	Show that an object moves when we push it or pull it	CAFG-02	Short questions, Matching words, Quiz



Factual				
<b>CAC</b> Cognitive Application Conceptual	GK-01-F-04	Relate their body parts with the five senses (which body part helps them to taste, touch, smell, hear and see).	CACF-04	Listening and responding, reading and explaining a text of an article/video in context
	GK-01-G-03	Understand and explore how push action moves things away from us while a pull action brings things closer to us.	CACG-03	
<b>CAP</b> Cognitive Application procedural	GK-01-F-07	Apply different ways to keep themselves clean (washing hands before and after meals and after using the toilet, clipping/trimming nails, brushing teeth daily, taking bath regularly etc.)	CAPF-07	Role play, group project; observation; CRQ; SAQs; MCQs
	GK-01-F-14	Demonstrate measures for better care of plants.	CAPF-14	
	GK-01-B-03	Demonstrate etiquettes of eating (don't waste food, eat with clean hands, don't drop food around)	CAPB-03	
	GK-01-B-02	Demonstrate aspects of good character (punctuality, speaking politely, kindness, caring, honesty and truthfulness)	CAPB-02	
<b>CANC</b> Cognitive Analysis Conceptual	GK-01-F-ADD	Differentiate between animals that can and cannot be kept at home, with reasons.	CANCF-ADD	Debate, open-ended discussion
	GK-01-F-ADD	Differentiate between the plants around them based on their characteristics.	CANCF-ADD	
<b>CANP</b> Cognitive Analysis Procedural	GK-01-F-ADD	Extend their knowledge to analyze different scenarios like 'if you were given a wild animal to keep as a pet, what steps would you take for your own safety and the care of the animal.	CANPF-ADD	portfolio
	GK-01-F-08	Differentiate between healthy and unhealthy food with	CANPF-08	

		examples and state the hazards of eating unhealthy food.		
	GK-01-A-04	Analyze and describe the ways in which they are same as and different from others with respect to likes and dislikes.	CANPA-04	
CAM Cognitive Analysis Metacognitive	GK-01-A-02	Identify good qualities in themselves and others (telling the truth; respecting elders and listening to their advice; getting up early in the morning etc.)	CRMA-02	Group discussion, Portfolio,

### Affective Domain

Overall Domain Code	NC Reference	SLO	Codes	
ARE Affective Responding	GK-01-A-01	Describe themselves briefly. For example, their name, age, likes, games, favorite food, what they want to be when they grow up, etc.	ARA01	Completion of class tasks/homework; participation in class/group discussion; presentation; observation through chart presentation); Gallery Walk; response to questions; compliance with class rules and certain procedures
AV Affective Valuing	GK-01-A-02	Identify good qualities in themselves and others (telling the truth; respecting elders and listening to their advice; getting up early in the morning etc.)	AVA-02	Write an opinion piece on any issue, explaining one's own stance and reasons supporting that stance; proposing a plan to improve team skills; panel discussion
	GK-01-A-03	Recognize and explain that individuals have different needs and qualities, and different likes and dislikes.	AVA-03	
	GK-01-F-ADD	Recognise that some people don't have all the body parts and senses and they are also valuable members of the society.	F-ADD	
	GK-01-B-02	Demonstrate aspects of good character (punctuality, speaking politely, kindness, caring, honesty and truthfulness	AVB-02	
	GK-01-B-03	Demonstrate etiquettes of eating (don't waste food, eat with clean hands, don't drop food around)	AVB-03	

<b>AO</b> Affective Organizing	GK-01-A-04	Analyze and describe the ways in which they are same as and different from others with respect to likes and dislikes.	AOA-04	Interviews/ Discussion/ Voting
--------------------------------------	------------	---	--------	-----------------------------------

**Psychomotor Domain**

<b>Overall Domain Code</b>	<b>NC Reference</b>	<b>SLO</b>	<b>Codes</b>	
<b>PM</b>	GK-01-D-03	Draw the flag of Pakistan.	PMD-03	Performance test Performance in a game

DRAFT

## LIST OF CODES, SLOs AND ASSESSMENT STRATEGIES

### Grade II

#### Cognitive Domain

Overall Domain Code	NC Reference	SLO	Codes	Assessment Strategies
<b>CRF</b> Cognitive Remember Factual	GK-02-B-02	List the things they can share with others (toys, books, stationery items, lunch with friends etc.) (F)	CRFB-02	MCQ
	GK-02-C-ADD	List any three rights of the citizens (right to food, free education, protection, equality and health care).	CRFC-ADD	CRQ; Column Matching
	GK-02-D-02	Name the provinces and areas (AJK, GB and ICT) of Pakistan.	CRFD-02	
	GK-02-E-05	List the major agricultural crops and livestock in Pakistan	CRFE-02	
	GK-02-F-02	List the functions of root, stem, leaf and flower.	CRFF-02	
	GK-02-F-13	Name different places where animals live (nest, den, barrow etc.)	CRFF-13	SAQs; Open-ended questions
	GK-02-F-09	List the animals they see in their surroundings (land and water).	CRFF-09	
	GK-02-G-08	List the uses of heat and light.	CRFG-08	
<b>CRC</b> Cognitive Remember Conceptual	GK-02-A-01	Recognise that the people of Pakistan live in different types of areas (villages, cities, towns, and kachi abadis).	CRCA-01	MCQs, Teacher observation, short questions, activities
	GK-02-A-03	Identify some common professions and occupations in Pakistan (farmer, butcher, cobbler, teacher etc.)	CRCA-0E	
	GK-02-A-	Identify key characteristics of different types of areas	CRCA-ADD	

ADD	(buildings, facilities, environment and the work people do)		
GK-02-B-03	Identify from given pictures and stories the ways in which people help each other (at home, in classroom, in village/city, at the time of any need or disaster)	CRCB-03	
GK-02-B-05	Identify that all human beings are similar, but differ by religion, family, culture, abilities, ethnicity	CRCB-05	
GK-02-B-06	Identify occasions when it is important to wait for one's turn. For example, while speaking, in the school, on the bus stop, at canteen and ticketing counters etc.	CRCB-06	
GK-02-B-ADD	Identify ways in which we can redress the hurt caused to others (ask for forgiveness, say sorry, do something special for them etc.)	CRCB-ADD	Role play; CRQs; Open-ended questions; discussion
GK-02-B-ADD	Identify ways of making unfair situations fair.	CRCB-ADD	
GK-02-C-01	Identify some traffic rules.	CRCC-01	
GK-02-C-02	Identify the safety rules they should follow while walking on the road, crossing a road, traveling by a bus etc.	CRCC-02	
GK-02-C-04	Recognise the multiple religions in Pakistan.	CRCC-04	
GK-02-C-ADD	Identify masjid in their neighborhood as a place of worship for Muslims.	CRCC-ADD	
GK-02-D-01	Recognise the map of Pakistan.	CRCD-01	
GK-02-D-03	Identify the national capital of Pakistan	CRCD-03	
GK-02-D-04	Recognise some of the national symbols of Pakistan such as the national animal, fruit, flower, bird, and sport	CRCD-04	

GK-02-D-06	Identify what the colors and symbols on the flag represent.	CRCD-06	Match columns; pictures;MCQs; single-sentence answers; fill in the blanks	
GK-02-D-08	Identify festivals celebrated by Muslims in Pakistan and describe how they are celebrated.	CRCD-08		
GK-02-D-09	Identify festivals of other major religions and cultures in Pakistan and describe how they are celebrated.	CRCD-09		
GK-02-D-ADD	Recognise and draw the flag of AJK.	CRCD-ADD		
GK-02-E-01	Identify some professions from pictures (teaching, business, farming, medicine etc.).	CRCE-01		
GK-02-E-02	Recognise the role of some common professions in their daily lives	CRCE-02		
GK-02-E-04	Recognise professional achievements of celebrated Pakistanis including women/ minority groups/ differently abled groups.	CRCE-04		
GK-02-F-01	Identify major parts of a plant (root, stem, leaf and flower).	CRCF-01		
GK-02-F-03	Identify different shapes of leaves found around them	CRCF-03		
GK-02-F-04	Identify the roots, stems, flowers, leaves which are eaten by people.	CRCF-04		
GK-02-F-05	Identify the fruits which have seeds in them.	CRCF-05		Short questions; observations
GK-02-F-06	Recognise that some plants grow from seeds while others grow from stems or roots	CRCF-06		
GK-02-F-07	Identify that soil, light, air and water are needed to grow a plant.	CRCF-07		

GK-02-F-08	Recognise that plants make their own food in the presence of sunlight.	CRCF-08
GK-02-F-11	Recognise different animals and their young ones. For example, horse and foal, cat and kitten, dog and puppy, hen and chick, frogs and tadpoles, butterflies and caterpillars etc.	CRCF-11
GK-02-G-01	Recognise some common materials such as wood, plastic, metal, glass, rock, paper and fabric.	CRCG-01
GK-02-G-02	Identify the materials used in some of the objects around them.	CRCG-02
GK-02-G-05	Identify sources of heat and light in their homes, schools and surroundings.	CRCG-05
GK-02-G-09	Recognise that the intensity of heat and light is felt more as they come nearer to the source.	CRCG-09
GK-02-G-10	Recognise that push & pull moves things fast or slow, (push and pull as a force)	CRCG-10
GK-02-G-11	Recognise that greater the force, the greater the change in the motion of an object.	CRCG-11
GK-02-H-04	Identify the natural sources of water around themselves.	CRCH-04
GK-02-H-06	Recognise that some areas of Pakistan experience shortage of water.	CRCH-06
GK-02-H-07	Identify the ways in which human beings waste water.	CRCH-07
GK-02-H-09	Identify the ways in which the land is destroyed due to human activity (deforestation).	CRCH-09

<b>CUC</b> Cognitive Understanding Conceptual	GK-02-A-04	Recognize that people from different areas, religions, and cultures can be friends.	CUCA-04	Close ended Constructed Reponses, CRQs, Choosing words, binary choice,
	GK-02-B-01	Recognise the importance of sharing things.	CUCB-01	
	GK-02-B-09	Recognise that mistakes are a natural outcome of learning and nothing to be ashamed about or to make fun of.	CUCB-09	
	GK-02-B-ADD	Recognise that when people apologize for their mistake they should forgive them.	CUCB-ADD	
	GK-02-C-02	Recognise what they say and do, can hurt others, and what others do and say, can hurt them (telling lies, making fun of others, pushing others, bullying using derogatory words etc.)	CUCC-02	
	GK-02-C-03	Recognize the role of government and identify some goods and services that the government provides for the people (health, education, clean water, infrastructure, utilities, safety and security, parks, and playgrounds etc.).	CUCC-03	
	GK-02-C-05	Recognise that everyone has a right to practice their own religion freely.	CUCC-05	
	GK-02-C-ADD	Discuss careful use of food, water and other resources, regularity, and hard work towards education, taking care of surroundings and hygiene, treating everyone equally, and following rules and regulations	CUCC-ADD	
	GK-02-D-05	Recognise the significance of the national flag.	CUCD-05	
	GK-02-E-03	State which profession they like the most and why.	CUCE-03	
	GK-02-E-06	Recognise that people process the crops they grow for making products (cotton to thread to cloth to garments)	CUCE-06	
	GK-02-E-07	Discuss the importance of livestock.	CUCE-07	



	GK-02-F-ADD	Highlight the importance of plants for a clean environment.	CUCF-ADD	
	GK-02-F-10	Recognise the animals that live on land (including birds) are different in features from those that live in water.	CUCF-10	
	GK-02-G-06	Group sources of light and heat into natural and human made.	CUCG-06	
	GK-02-G-07	Describe methods of producing heat (burning and rubbing etc.)	CUCG-07	
	GK-02-H-01	Recognise that the planet Earth is a source of all materials we use, and many useful materials and resources come from it.	CUCH-01	
	GK-02-H-02	Recognise that natural resources are essential for survival of human beings (land, forests/plants, water, air, Sun etc.	CUCH-02	
	GK-02-H-03	Recognise that people manufacture different things from natural resources to serve human needs.	CUCH-03	
	GK-02-H-05	Recognise the importance of water resources	CUCH-05	
<b>CUP</b> Cognitive Understanding Procedural	GK-02-F-12	Describe and compare how the offspring of different animals grow into adults, including humans, birds, frogs and butterflies.	CUPF-12	Open ended CRQs
	GK-02-G-12	Observe and describe how motion of an object can be changed by applying force (speed up, slow down, stop, change direction etc.)	CUPG-12	
<b>CAC</b> Cognitive Application Conceptual	GK-02-B-04	Relate with examples from their daily life the ways in which people are interdependent .	CACB-04	Listening and responding, reading and explaining a text of an article/video in context
	GK-02-B-ADD	Accept responsibility for treating others unfairly and manage their behavior accordingly.	CACB-ADD	
	GK-02-C-06	Inquire about places of worship of major religions in Pakistan (masjid, church, Gurdwara, temple).	CACC-06	

	GK-02-C-07	Practice respect for all places of worship and all religions.	CACC-07	
	GK-02-D-07	Depict the cultural diversity of all provinces and areas of Pakistan	CACD-07	
	GK-02-H-08	Suggest ways to save water.	CACH-08	
<b>CAP</b> Cognitive Application Procedural	GK-02-A- ADD	Research (through oral investigation) about different professions that exist in Pakistan.	CAPA-ADD	Role play, group project
<b>CAM</b> Cognitive application meta cognitive	GK-02-B- ADD	Mend their behaviour when it is proven unfair through realization.	CAMB-ADD	Create a blog
<b>CANF</b> Cognitive Analysis Factual	GK-02-B-07	Demonstrate ways in which they can show respect for all.	CANFB-07	Interpretive exercises with brief information followed by short questions, MCQ
<b>CANC</b> Cognitive Analysis Conceptual	GK-02-A-02	Differentiate between lifestyles of people living in different areas (villages, cities, towns, and kachi abadis).	CANFA-02	Debate, mini research project
<b>CEC</b> Cognitive Evaluation Conceptual	GK-02-B-10	Differentiate between fair and unfair behavior in daily live.	CECB-10	Compare and contrast, revision, rewriting and reproducing, constructed and extended response.
	GK-02-G-04	Differentiate between the natural and man-made materials.	CECG-04	
	GK-02-G-03	Explore properties of materials with respect to color, hardness, texture, sink/ floats	CECG-03	
	GK-02-G- ADD	Explore properties of materials with respect to elastic/non-elastic, magnetic/non-magnetic.	CECG-ADD	

<b>CEM</b> Cognitive Evaluation Metacognitive	GK-02-C- ADD	Reflect on their responsibilities towards the natural world.	CEMC-ADD	Writing an opinion based critical response.
--	-----------------	--	----------	---

### Affective Domain

Overall Domain Code	NC Reference	SLO	Codes	Assessment Strategies
<b>ARE</b> Affective Responding	GK-02-C-02	Recognize what they say and do, can hurt others, and what others do and say, can hurt them (telling lies, making fun of others, pushing others, bullying using derogatory words etc.)	ARC-02	Completion of class tasks/homework; participation in class/group discussion; presentation; response to questions; compliance with class rules and certain procedures.
	GK-02-C-ADD	List any three rights of the citizens (right to food, free education, protection, equality and health care).	ARC-ADD	
	GK-02-B-ADD	Recognise that when people apologize for their mistake, they should forgive them.	ARB-ADD	
	GK-02-C-ADD	Identify masjid in their neighborhood as a place of worship for Muslims.	ARC-ADD	
<b>AV</b> Affective Valuing	GK-02-B-07	Demonstrate ways in which they can show respect for all.	AVB-07	Write an opinion piece on any issue, explaining one's own stance and reasons supporting that stance; proposing a plan to improve team skills
	GK-02-C-07	Practice respect for all places of worship and all religions. Mend their behavior when it is proven unfair	AVC-07	

### Psychomotor Domain

Overall Domain Code	NC Reference	SLO	Codes	Assessment Strategies
<b>PS</b> Psychomotor	GK-02-D- ADD	Recognize and draw the flag of AJK.	PSD-ADD	Starting a portfolio,

DRAFT

## LIST OF CODES, SLOs AND ASSESSMENT STRATEGIES

### Grade III

#### Cognitive Domain

Overall Domain Code	NCP Reference	SLO	Codes	Assessment Strategies
<b>CRF</b> Cognitive Remember Factual	GK-3-A-ADD	List the various hazards they can face at home (bare wires, damaged roof, broken glass, fire, scissor etc.)	CRFA-ADD	MCQs
	GK-3-D-03	Introduce Mohtarma Fatima Jinnah as a key figure in the formation of Pakistan.	CRFD-03	
	GK-3-E-02	State types of resources: natural resources, human resources and capital resources.	CRFE-02	
	GK-3-F-07	Name plants and animals that live in each of these different habitats.	CRFF-07	
	GK-3-H-ADD	Name places towards North, South, East, and West of the school/home.	CRFH-ADD	
<b>CRC</b> Cognitive Remember Conceptual	GK-3-A-ADD	Identify how schools, communities, and transportation have changed over time (from the given pictures)	CRCA-ADD	MCQs, Teacher observation, short questions
	GK-3-A-05	Identify some natural disasters and ways to stay safe.	CRCA-05	
	GK-3-B-02	Identify feelings of people in different conflicting situations.	CRCB-02	
	GK-3-B-03	Identify reasons for disagreements with friends and family members.	CRCB-03	
	GK-3-C-01	Recognise that people are members of a local community	CRCC-01	
	GK-3-C-02	Recognise that communities meet people's needs.	CRCC-02	
	GK-3-C-04	Identify ways they can demonstrate good citizenship (playing	CRCC-04	

	fairly, helping others, following rules, taking responsibility for one's actions, sense of ownership of public goods).	
GK-3-C-ADD	Identify key problems in their local area (shortage of drinking water, lack of health and educational facilities, poor sewerage system etc.)	CRCC-ADD
GK-3-D-01	Introduce Quaid-e-Azam Muhammad Ali Jinnah as the founder of Pakistan.	CRCD-01
GK-3-D-02	Narrate the major events in the life of Quaid-e Azam Muhammad Ali Jinnah (date of birth, founder of Pakistan, few major contributions, and the date when he died).	CRCD-02
GK-3-D-05	Narrate the major events in the life of Allama Muhammad Iqbal (date of birth, national poet, some famous poems for children, and the date when he died).	CRCD-05
GK-3-D-04	Introduce Allama Muhammad Iqbal as a personality who expounded the idea of Pakistan.	CRCD-04
GK-3-E-01	Define the term “resources”.	CRCE-01
GK-3-E-03	Identify natural resources (plants, animals, water, air, land, forests and soil), human resources (farmers, builders, painters etc.), capital resources (trucks, computers, factory buildings etc.).	CRCE-03
GK-3-E-04	Define the terms: goods, services, buyers and sellers.	CRCE-04
GK-3-E-05	Identify the main goods and services of their local area.	CRCE-05
GK-3-E-06	Describe the need for interdependence as not all goods and services are available in their area.	CRCE-06
GK-3-E-07	Describe scarcity and recognise that people make economic choices because goods and services are limited.	CRCE-07

GK-3-F-01	Recognise that healthy living requires eating a balanced diet, keeping clean, sleeping well, and exercising regularly, drinking clean water, brushing teeth)	CRCF-01
GK-3-F-02	Identify certain food groups as fruits, vegetables, grains, dairy product, eggs, meat and dry fruit and their relative proportions.	CRCF-02
GK-3-F-03	Recognise that certain diseases are infectious, and vaccinations can help prevent such diseases.	CRCF-03
GK-3-F-04	Describe how good hygiene and healthy habits can control the spread of diseases.	CRCF-04
GK-3-F-05	Recognize the term 'habitat'.	CRCF-05
GK-3-F-06	Recognise the type of habitats for living things (polar, desert, forest, aquatic).	CRCF-06
GK-3-F-08	Identify the environmental factors (temperature, light, water) that support life in a habitat.	CRCF-08
GK-3-F-09	Identify the ways in which human activities affect natural habitats.	CRCF-09
GK-3-G-01	Recognise that energy is required for doing work.	CRCG-01
GK-3-G-03	Identify natural sources of energy (sun, wood, flowing water, wind, coal, oil, gas).	CRCG-03
GK-3-G-05	Identify materials as either solids, liquids or gases.	CRCG-05
GK-3-G-06	Recognise basic differences between states of matter.	CRCG-06
GK-3-G-08	Identify how we use electricity and safety measures.	CRCG-08
GK-3-G-09	Recognise the basic components of a simple circuit: cells, wires, and bulb.	CRCG-09

	GK-3-H-02	Recognise that heat and light of the Sun helps to sustain life on Earth which is the only known planet where life exists.	CRCH-02	
	GK-3-H-04	Identify that on Earth, the direction of sunrise is 'East' and the direction of sunset is 'West'.	CRCH-04	
	GK-3-H-05	Identify South and North with respect to East and West, namely, South and North.	CRCH-05	
	GK-3-H-ADD	Name the eight planets of solar system.	CRCH-ADD	
	GK-3-H-06	Define the term pollution.	CRCH-06	
	GK-3-H-09	Identify the endangered animals of Pakistan (Indus dolphin, markhor, blackbuck etc.).	CRCH-09	
	GK-3-H-ADD	Identify animals, which are extinct (dinosaurs, etc.)	CRCH-ADD	
<b>CRP</b> Cognitive Remember Procedural	GK-3-A-ADD	Sequence events in a narrative in chronological order.	CRPA-ADD	short answers, matching, (quiz), Define different terms and terminologies.
	GK-3-F-ADD	Recognise people who use science in their local area e.g., everyday use of science, restaurant chefs, dietitians, food manufacturers, dairy farmers.	CRPF-ADD	
	GK-3-F-12	Identify the changes in the lifespan of an animal and a plant.	CRPF-12	
<b>CUF</b> Cognitive Understanding Factual	GK-3-D-06	Discuss what they have learnt from the major events/contributions of Quaid-e-Azam Muhammad Ali Jinnah.	CUFD-06	Short answers, teacher observation
<b>CUC</b> Cognitive	GK-3-A-01	Recognise that present time is different from the past in terms of living style, food, communication, clothes etc.	CUCA-01	Close ended Constructed



Understanding Conceptual	GK-3-A-02	Recognise the need for personal safety	CUCA-02	Reponses, CRQs, Choosing words, binary choice,
	GK-3-A-03	Explain the risk and danger associated with the use of electric appliances/ sharp objects/ fire/ strangers, water bodies and animals.	CUCA-03	
	GK-3-A-04	Express feelings of discomfort, confusion, fear, and danger to their parents/ teachers/ guardians to stay safe from any unexpected situation.	CUCA-04	
	GK-3-B-01	Recognise some disagreements/conflicts that occur at home, in school and in the local community.(C	CUCB-01	
	GK-3-C-ADD	Describe the activities that individuals perform for the welfare of the community.	CUCC-ADD	
	GK-3-G-07	Discuss different states of water.	CUCG-07	
	GK-3-H-01	Explain that our solar system is made of a large star and eight planets.	CUCH-01	
<b>CUM</b> Cognitive Understanding Metacognitive	GK-3-H-ADD	Predict what would happen if natural resources were all used up.	CUMH-ADD	Opinionated CRQS
<b>CAF</b> Cognitive Application Factual	GK-3-H-10	Suggest ways to reduce pollution (3 r's)	CAFH-10	Short questions, Matching words, Quiz
<b>CAC</b> Cognitive Application Conceptual	GK-3-C-03	Suggest ways the government and people can work together to meet people's needs in the area.	CACC-03	Listening and responding, reading and explaining a text of an article/video in
	GK-3-H-10	Suggest ways to protect the endangered animals.	CACH-10	

	GK-3-G-04	Demonstrate that energy is present in all matter and in sound, light, and heat.	CACG-04	context
<b>CAP</b> Cognitive Application Procedural	GK-3-A-ADD	Practice safety measures while using electrical appliances.	CAPA-ADD	Role play, group project
	GK-3-B-04	Explore the ways in which people resolve conflicts/ disagreements at home and school.	CAPB-04	
	GK-3-B-ADD	Apply discussion and problem-solving methods to work out disagreement.	CAPB-ADD	
	GK-3-F-10	Research and suggest the ways in which habitats can be protected.	CAPF-10	
<b>CANF</b> Cognitive Analysis Factual	GK-3-G-10	Explore construction of simple circuit	CANFG-10	Interpretive exercises with brief information followed by short questions, MCQ
<b>CANC</b> Cognitive Analysis Conceptual	GK-3-F-11	Compare different stages of lifespan of plants and animals (from pictures, through observation / video etc.)	CANCF-11	Debate, mini research project
	GK-3-G-02	Inquire that sources of energy are used for many things (move an object, heating, lighting, transportation, electric appliances, etc.).	CANCG-02	
<b>CEC</b> Cognitive Evaluation Conceptual	GK-3-H-03	Explain how the rotation of the Earth causes day and night.	CECH-03	Compare and contrast, revision, rewriting and reproducing, constructed and extended response.

### Affective Domain

Overall Domain Code	NC Reference	SLO	Codes	Assessment Strategies
---------------------	--------------	-----	-------	-----------------------

<b>AR</b>	GK-03-B-02	Identify feelings of people in different conflicting situations.	ARB-02	Completion of class tasks/homework; participation in class/group discussion; presentation; response to questions; compliance with class rules and certain procedures
<b>AV</b> Affective Valuing	GK-03-A-04	Express feelings of discomfort, confusion, fear, and danger to their parents/ teachers/ guardians to stay safe from any unexpected situation.	AVA-04	Group discussion; observation; class activity

**Psychomotor Domain**

<b>Overall Domain Code</b>	<b>NC Reference</b>	<b>SLO</b>	<b>Codes</b>	<b>Assessment Strategies</b>
<b>PS</b> Psychomotor Set	GK-03-G-10	Explore construction of simple circuit	PPG-10	Starting a portfolio, undertaking responsibilities

## **CHAPTER THREE**

# **ASSESSMENT DURING INSTRUCTION**

DRAFT

## Chapter Three

### Assessment during Instruction

#### Designing Classroom Assessment

The design of classroom assessment depends on how classroom learning is approached. The three commonly understood approaches to learning are surface learning, strategic learning and deep learning (Entwistle, 2000). Differences between deep, surface and strategic learners are summarised below.

Surface Approach	Strategic Approach	Deep Approach
<b>Reproducing Intention</b> – merely to cope with course requirements by: <ul style="list-style-type: none"><li>- Treating the course as unrelated bits of knowledge</li><li>- Memorizing facts and carrying out procedures routinely</li><li>- Finding difficulty in making sense of new ideas presented</li><li>- Seeing little value or meaning in either courses or tasks set</li><li>- Feeling undue pressure and worry about work</li></ul>	<b>Reflective Organising Intention</b> - to achieve the highest possible grades by: <ul style="list-style-type: none"><li>- Putting consistent effort into studying</li><li>- Managing time and effort effectively</li><li>- Finding the right conditions and materials for studying</li><li>- Monitoring the effectiveness of ways of studying</li><li>- Being alert to assessment requirements and criteria</li><li>- Using previous exam papers and assessments to predict questions</li></ul>	<b>Seeking Meaning Intention</b> - to understand ideas by: <ul style="list-style-type: none"><li>- Relating ideas to previous knowledge and experience</li><li>- Looking for patterns and underlying principles</li><li>- Examining logic and argument cautiously and critically</li><li>- actively interacting with the course content</li><li>- Reading and studying beyond the course requirements</li><li>- Taking interest</li></ul>

Note: Adapted from Entwistle, 1988; Entwistle and Ramsden, 2015

It is the teachers' responsibility to foster deep and/or strategic learning so that students can engage with the subject with the help of purposeful assessment strategies.

#### Assessment Strategies

Literature abounds with the different types of assessment strategies. The important question that perplexes teachers is which strategy to use and for what purposes. The simple response is that teachers must align their assessment with the SLOs. However, this alignment is not easy. Chapter Two presents a list of codes aligned with the SLOs and sample assessment strategies.

This chapter presents an explanation and examples of selected formative and summative assessment strategies.

## **Formative Assessment for Deep Learning Approach – Meaningful Examples**

This framework further elaborates the following four strategies for assessing students' knowledge, skills and dispositions at the primary school level with examples.

1. Portfolio Assessment
2. Group Project Assessment
3. Selected Response (Multiple Choice/Matching/True & False)
4. Constructed Response (Short and long essay questions)

### **Portfolio Assessment**

A portfolio is a record of the development in learners' thinking and ideas. A portfolio enables learners to assemble examples of their work to tell stories of their learning over a period of time. It enables teachers to assess learners' progress in ideas and understanding that cannot be adequately measured in any other way (Chappuis & Stiggins, 2017; Crockett & Churches, 2017). A portfolio can include the following:

- Examples of students' work with feedback about quality – multiple drafts with revisions
- Students' self-assessment
- Student reflections on their growth as learners

### **Portfolio Assessment in General Knowledge**

Portfolio Assessment can prove to be an effective process in General Knowledge as it involves young learners in decision making and problem-solving about social issues, past and present (Adler 1994).

Portfolios may take different forms in a General Knowledge class encompassing various stages of development of a student's work. Portfolios can serve as a means of reflecting on the knowledge learned and on the real-life tasks. It can help students enrich his/her problem solving skills by thinking different doable solutions, recognize; and permit many forms of representation or communication of knowledge and skills (Mathison 1995).

### **Benefits of Portfolios to the Learners**

Portfolios offer opportunities for reflection and the development of self-awareness.

Learners develop a sense of ownership of their writing through having some control over both the conditions for writing and the selection of portfolio contents, which leads to a sense of responsibility.

Learners can self-assess their performance with the help of clear criteria and opportunity to revise their work.

## **Benefits of Portfolios to Teachers**

Portfolio assessment becomes an integral part of the instructional process rather than a separate activity.

Portfolios give teachers more information about the learners' whole performances rather than fragmented skills or scores or grades on tests. The variety of activities within a portfolio can give teachers insights into the learners' strengths and weakness (Murphy & Camp, 1996).

## **Essential Elements of a Portfolio**

- Cover page
- Introduction to the portfolio
- Table of contents
- Entries with dates
- Drafts of your work (writing sample, essays, projects and assignments, science experiments/lab reports, tests and quizzes, etc.)
- Artefacts (awards and certificates, photos, images, concept maps, etc.)
- Reflections

Adapted from: <https://www.slideshare.net/ilovelagrosal/portfolio-assessment-42422639>



**An Introduction to My World of Ideas**

Date: \_\_\_\_\_

I am reading in Grade \_\_\_\_\_ at \_\_\_\_\_ School.

People call me \_\_\_\_\_ and my teacher's name is \_\_\_\_\_.

- There are many interesting things in this portfolio that will take you to another world of fun with learning

---

---

---

---

- The reason of collecting creative pieces of my learning is

---

---

---

---

---

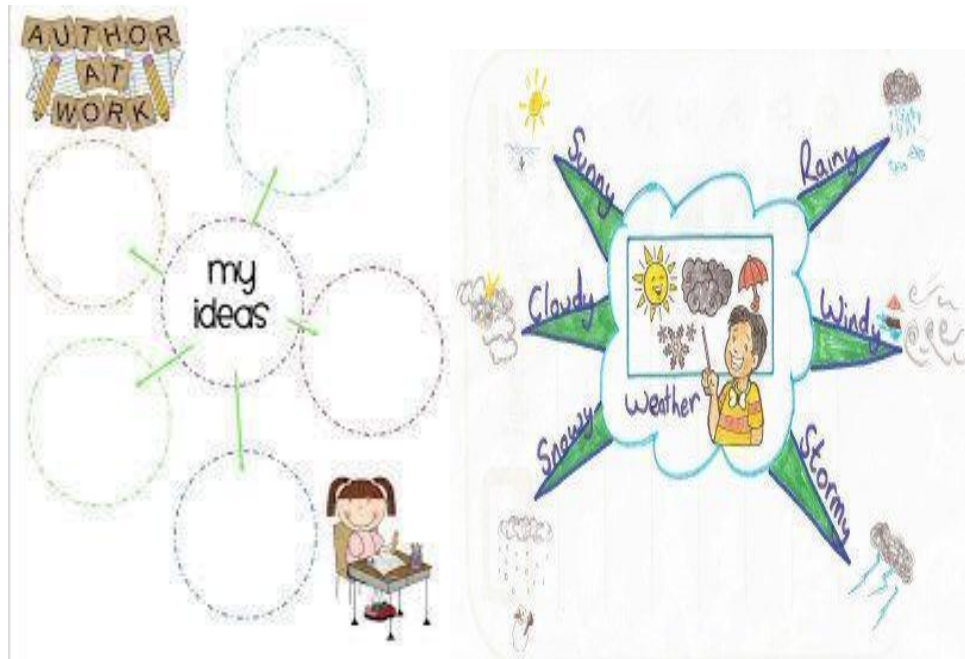
Here is my Autograph: ) \_\_\_\_\_



## A Sample of Concept Mapping

---

### Brainstorming/Mind Mapping



Learners can be encouraged to brainstorm about the topic (s) they wish to write upon and these can be collected in their portfolios. For instance, students will be instructed to write about their ideas on the particular topic such as patriotism, family or their favourite food, and the teacher can play a role of a transparent entity in order to bring out students' creativity in different ways.

## **A Sample of Peer Assessment on a Role Play**

### **Example from NC, Domain2, Ethics and Values**

---

Resolve a class conflict through a role-play with different situations highlighting the traits of tolerance, flexibility, and pluralism. (Group Work)

### **Collection of Drafts**

---

While a group performs their role, the other students are asked to watch carefully and provide feedback.

#### **Peer Review of Role Play (Negative Feedback)**

#### **Teacher's Feedback**

I see. There must also be good things about the role play. Let us make a rule in this class that we will begin with positive feedback (what is good about the role play) and then say what is not so good about it. Let us also help each other by explaining how the role play can improve.

#### **Peer Review of Role Play (Positive Feedback)**

The teacher discusses all feedback and gives time to the group to practice and perform again.

## A Sample of Periodic Student Self-Reflection

---

### Prompts to activate Self-Reflection

Portfolio Type	Starters
Celebration	<p>I am happiest/proudest of _____ because _____ .</p> <p>I really liked doing _____ because _____ .</p> <p>What this portfolio says about me...</p> <p>I have learnt that _____ .</p> <p>I now understand _____ .</p> <p>I can now do _____</p> <p>_____</p> <p>I now feel _____</p> <p>_____</p>
Growth	<p>I have become better at _____, I used to _____, but now I _____</p> <p>_____</p> <p>Here is what has helped me improve: _____</p> <p>_____</p> <p>Here is what has helped me as a learner: _____ .</p> <p>Here is what I learned about myself as a learner: _____</p> <p>_____</p> <p>Here is what gets in my way as a learner: _____</p> <p>_____</p> <p>Here is what is difficult for me: _____ .</p> <p>This used to be hard, but now it is easy: _____ Here is what made it easier: _____ .</p> <p>Here are “before” and “after” pictures of my learning. The first one shows _____ . The second shows _____</p>
Project	<p>Here is what I learnt about myself as a learner while doing this project: _____</p> <p>_____ .</p> <p>I developed the following skills while doing this project: _____</p> <p>Here is what I liked least/most about doing this project _____ .</p> <p>Here’s why: _____</p> <p>Here is how my thinking changed about _____ because of doing this project: _____</p> <p>This project has affected my interest in _____ . It has caused me to _____</p>
Achievement	<p>My selections have shown that I have mastered _____ . Here is how they show that _____ .</p>

My strength in (subjects or learning target) are \_\_\_\_\_ .  
I still need to work on \_\_\_\_\_ .  
Here is how I achieved mastery of \_\_\_\_\_(learning target): \_\_\_\_\_ .  
Here how I would change what I did if I had it to do over: \_\_\_\_\_ .  
Here is what doing \_\_\_\_\_ has taught me about myself as a learner:  
\_\_\_\_\_ .

### **Criterion Referenced Assessment**

Criterion referenced assessment (CRA) is the process of evaluating students' learning against some pre-specified qualities or criteria (Brown, 1998; Harvey, 2004). The criteria are presented to the students in the form of a rubric, so that they know what is being assessed. The teacher can also involve the students in developing rubrics.

DRAFT

CourseNumber(s): \_\_\_\_\_ DateSubmitted: \_\_\_\_\_

**RUBRIC FOR PORTFOLIO-BASED ASSESSMENT**

Assessment Ratings	2	Partially meets expectations (12 points)	3	Meets expectations (18 points)	4	Exceeds expectations (24 points)	2	Partially meets expectations (12 points)	Score
<b>Sources of Learning Experiences relevant to learning outcomes</b>	Documentation and description of learning experiences related to course learning outcomes are <i>lacking or substantially inadequate</i>		Documentation and description of learning experiences related to course learning outcomes are <i>not effectively or completely presented</i>		Documentation and description of learning experiences related to course learning outcomes are <i>appropriate and effectively presented</i>		Documentation and description of learning experiences related to course learning outcomes <i>exceed expectations</i>		
<b>Demonstration of Learning Artifacts</b>	The portfolio's materials and artifacts are <i>not appropriate and/or adequate</i> , and are not supported by the presentation		The portfolio materials and artifacts are <i>not fully supported</i> by or connected to the course's learning outcomes		The portfolio includes <i>appropriate</i> artifacts that support the demonstration of learning outcomes		The presentation of artifacts is <i>convincing</i> , with <i>strong support</i> for the course's learning outcomes		
<b>Evidence of Learning Competencies</b>	The portfolio shows <i>little or no evidence</i> of learning tied to sound educational theory		The portfolio documents some, but <i>not sufficient</i> , learning tied to sound educational theory (or grounded in inappropriate academic frameworks)		The portfolio <i>adequately</i> documents learning tied to sound educational theory (or grounded in appropriate academic frameworks)		The portfolio provides <i>clear evidence</i> of learning tied to sound educational theory (or grounded in appropriate academic frameworks)		
<b>Mastering Knowledge &amp; Skills Application of Learning</b>	The portfolio provides <i>little evidence</i> of the student's ability to use knowledge and skills for the course's learning outcomes in practice		The portfolio demonstrates the student's ability to use the knowledge and skills for the course learning outcomes in practice is <i>limited</i>		The portfolio documents the <i>acquisition</i> of knowledge and skills for the course learning outcomes, with <i>some ability</i> to apply them in practice		The portfolio demonstrates the student has <i>mastered</i> the knowledge and skills for the course learning outcomes and can <i>apply them</i> .		
<b>Reflection on Learning Aligned with course learning outcomes</b>	The portfolio provides <i>little or no evidence of reflection</i> to increase learning aligned with the course learning outcomes for which credit is being sought		The portfolio provides <i>inadequate evidence of reflection</i> to increase learning aligned with the course learning outcomes for which credit is being sought		The portfolio provides <i>evidence of reflection</i> to increase learning aligned with the course learning outcomes for which credit is being sought		The portfolio shows that the student has reflected with <i>substantial depth</i> upon how the prior learning experience is aligned to the course learning outcomes for which credit is being sought		

<b>Presentation</b> <i>Completeness and quality of the portfolio presentation</i>	Assembly instructions have <b>not been followed</b> with critical portfolio elements <b>not</b> included; the quality of written, visual and/or digital presentation <b>does not meet postsecondary standards</b>	<b>Most of the expected elements</b> are included; the quality of written, visual and/or digital presentation does not meet postsecondary standards with <b>too many errors</b> in spelling, grammar and punctuation	The portfolio is <b>well organized</b> with all critical elements included; the quality of written, visual and/or digital the presentation is <b>competent</b> with minor errors in spelling, grammar and punctuation	The portfolio is <b>well organized</b> with all critical elements included; learning is <b>well-documented</b> with writing and production skills that <b>exceed</b> those of most students	
<b>Overall Assessment</b>	The recommended cut score for a successful (i.e., passing) portfolio is <u>12</u> with a score of <u>at least 02</u> in each of the 6 assessment criteria.				<b>TOTAL</b>

Name of Assessor (print): \_\_\_\_\_ Date: \_\_\_\_\_

Source: <https://www.starkstate.edu/wp-content/uploads/2016/02/REVISED-MASTER-RUBRIC.pdf>

DRAFT

### Portfolio Assessment Rubric (Alternative)

Category	Exemplary (20 pts)	Proficient (17 pts)	Partially Proficient (13 pts)	Incomplete (5 pts)
<b>Selection of Artifacts</b>	All artefacts and work samples are clearly and directly related to the social studies content.	Most artefacts and work samples are related to the social studies content.	Few artefacts and work samples are related to the social studies content.	Most artefacts and work samples are unrelated to the social studies content.
<b>Use of Graphics</b>	The use of graphics/ photographs is integrated seamlessly into several different artefacts.	The use of graphics/ photographs is included and appropriate.	The use of graphics/ photographs is included but is used randomly and without purpose.	No use of graphics. The photos are distracting from the content of the portfolio.
<b>Reflections</b>	All reflections clearly describe why artefacts in the portfolio demonstrate achievement.	Most of the reflections describe why artefacts in the portfolio demonstrate achievement.	A few reflections describe why artefacts in the portfolio demonstrate achievement.	Reflections are missing, and those that are there do not describe why artefacts in the portfolio demonstrate achievement.
<b>Creativity and purpose of the Index</b>	The index serves its purpose and shows creativity. The layout and design is attractive and well thought out.	The index serves its purpose and shows some creativity	The index serves its purpose but lacks Style	The index does not serve its purpose and lacks style
<b>Organization</b>	The portfolio is well organized and easy to navigate.	The portfolio is somewhat organized and thus little difficult to navigate.	The portfolio is rather messy and quite challenging to navigate.	The portfolio lacks complete organization.

Source: <https://www.bhprsd.org/cms/lib02/NJ01001930/Centricity/Domain/352/E-portfolio%20Rubric.pdf>

## **Group Project Assessment**

Group projects are based on cooperative learning goals, which are reflected in the diagram below:

In cooperative learning structures, a student can obtain his or her goal only when other students in the group can obtain theirs (Arends, 2007). Project work is a very good example of group work.

According to the Buck Institute of Education (BIK, 2021), students' work on a project over an extended period of time – from a week up to a semester – that engages them in solving a real-world problem or answering a complex question. They demonstrate their knowledge and skills by developing a public product or presentation for a real audience. As a result, students develop deep content knowledge as well as critical thinking, creativity, and communication skills in the context of doing an authentic, meaningful project.

The assessment in the group project can be done at two levels – the whole group presentation and an individual student performance within the project. Rubrics for both levels are given below.

### **Sample Assessment (NC Grade I, Domain 6, Life Sciences)**

*Work in small groups to design messages related to health and cleanliness and share with family and friends.*

#### **Activities:**

- Work in groups to decide upon a message
- Gather information about the message
- Find pictures related to it or draw pictures to make posters or collage
- Have a display wall of posters/collage with the group message in the classroom.
- Group members present their work by talking about their message



The teacher can take photos of students' work. These can be shared with parents and also included in students' portfolios.

### Multimedia Project and Performance Rubrics (Group Performance, e.g. poster/collage)

Criteria	Exceeds Expectations (24 points, 4 for each criteria)	Meets Expectations (18 points, 3 for each criteria)	Almost Meets Expectations (12 points, 2 for each criteria)	Does Not Meet Expectation (6 points 1 for each criteria)
<b>Organisation</b>	Students present information in a logical and creative sequence that the audience can follow.	Students present information in a logical sequence that the audience can follow.	Audience has difficulty following presentation because student does not consistently use a logical sequence.	Audience cannot understand presentation because there is no sequence of information.
<b>Subject Knowledge</b>	Students demonstrate complete knowledge by answering all questions with explanations and elaborations.	Students are at ease and provide expected answers to all questions but do not provide elaborations.	Students are uncomfortable with information and are able to answer only rudimentary questions.	Students do not have grasp of information and are not able to answer many questions.
<b>Graphics</b>	Students' graphics explain and reinforce screen text and presentation.	Students' graphics relate to text and presentations.	Students occasionally use graphics that rarely support text and presentation.	Student uses superficial graphics or no graphics.
<b>Mechanics</b>	Presentation has no misspellings or grammatical errors.	Presentation has no more than two misspellings or grammatical errors.	Presentation has three misspellings or grammatical errors.	Presentation has four misspellings or grammatical errors.
<b>Eye Contact</b>	Students maintain eye contact with audience, seldom returning to notes.	Students maintain eye contact most of the times, but frequently return to notes.	Students occasionally make eye contact but still read most of the report.	Students read all of the report with no eye contact.
<b>Elocution</b>	Students use clear voice and correct, precise pronunciation of words.	Students' voices are clear and most of the words are pronounced	Students' voices are not very clear and they incorrectly pronounce most	Students mumble, incorrectly pronounce words and speak in a

correctly. of the words. low tone.

From: Fisher and Frey (2007)

**Group Project: Rubric on Group Work Performance (Affective Domain)**

(Can serve for self-assessment as well as peer assessment as a group)

Name of group members: \_\_\_\_\_

CATEGORY	Exemplary	Proficient	Partially Proficient	Unsatisfactory	POINTS
<b>Focus on the Task</b>	3 points	2 points	1 point	0 points	___/3
	Stays on task all of the time without reminders.	Stays on task most of the time. Group members can count on each other.	Stays on task some of the time. Group members must sometimes remind this person to do the work.	Hardly ever stays on task. Lets others do the work.	
<b>Work Habits</b>	3 points	2 points	1 point	0 points	___/3
	Members are on time for meetings, turns in all work when it is due. Completes assigned tasks and does not depend on others to do the work.	Members are usually on time for meetings, turns in most work when it is due. Completes most assigned tasks.	Members are sometimes late for meetings, often turns in work late. Does not follow through on most tasks and sometimes counts on others to do the work	Members are late for all or most meetings, and late turning in work. Does not complete tasks. Depends on others to do all of the work.	
<b>Listening,</b>	3 points	2 points	1 point	0 points	___/3

<b>Questioning and Discussing</b>	Members respectfully listens, discusses, asks questions and helps direct the group in solving problems.	Members respectfully listens, discusses and asks questions.	Members have trouble listening with respect, and takes over discussions without letting other people have a turn.	Members does not listen with respect, argues with teammates, and does not consider other ideas. Blocks group from reaching agreement.	
<b>Research and Information-Sharing</b>	3 points	2 points	1 point	0 points	___/3
	Members gather information and share useful ideas for discussions. All information fits the group's goals	Members usually provide useful information and ideas for discussion.	Members sometimes provides useful information and ideas for discussion.	Members almost never provide useful information or ideas for discussion.	
<b>Group/Partner</b>	3 points	2 points	1 point	0 points	___/3

<b>Teamwork</b>	Works to complete all group goals.	Usually helps to complete group goals.	Occasionally helps to complete group goals.	Does not work well with others and shows no interest in completing group goals.
	Always has a positive attitude about the task(s) and the work of others	Usually has a positive attitude about the task(s) and the work of others.	Sometimes makes fun of the task(s) or the work of other group members.	Often makes fun of others' work and has a negative attitude.
	All team members contributed equally to the finished project.	Assisted group/partner in the finished project.	Finished individual task but did not assist group/partner during the project.	Contributed little to the group effort during the project.
	Performed all duties of assigned team role and contributed knowledge, opinions, and skills to share with the team. Always did the assigned work.	Performed nearly all duties of assigned team role and contributed knowledge, opinions, and skills to share with the team. Completed most of the assigned work.	Performed a few duties of assigned team role and contributed a small amount of knowledge, opinions, and skills to share with the team. Completed some of the assigned work.	Did not perform any duties of assigned team role and did not contribute knowledge, opinions or skills to share with the team. Relied on others to do the work.

**Group Project: Rubric on Individual Performance (Affective Domain)**

(Can serve for self-assessment as well as peer assessment in group work)

Name of student: \_\_\_\_\_

Goal	4	3	2	1
	Did a full share of	Did an equal share	Did almost as much work as	Did little or no

<b>Equal Work</b>	work or more	of work	others	work
<b>Cooperation</b>	Took an initiative in helping the group get organized	Worked agreeably with partners	Could be persuaded to cooperate	Did not cooperate
<b>Participation</b>	Provided many ideas	Participated in discussions and made some suggestions	Listened to others but offered few suggestions	Seemed bored with the discussions and offered no suggestions
<b>Support</b>	Assisted other partners	Offered encouragement to other partners	Seemed preoccupied with own work	Took little interest in others' work
<b>Communication</b>	Clearly communicated ideas	Usually shared ideas	Rarely expressed ideas	Never expressed any ideas

Other comments:

Source: <https://www.pinterest.com/pin/371969250449103194/>

### Rubric for Assessing Collaboration Fluency (Individual)

Criteria	Phase 1 (awareness, connection, remembering) (4 points)	Phase 2 (understanding, applying) (8 points)	Phase 3 (analyzing, evaluating) (12 points)	Phase 4 (evaluating, creating) (16 points)
<b>Interacts with others to generate ideas and develop products</b>	Listens to others' input and occasionally combines his or her own and peers' concepts to produce an understanding of the task, problem, or issue.	Frequently, listens to others' input and occasionally combines his or her own and peers' concepts to produce an understanding of the task, problem, or issue. Attempts to make sure team members contribute.	Listens to others' input and combines his or her own and peers' concepts to produce an understanding of the task, problem, or issue. Uses techniques to make sure team members contribute. Explains the task to the team members.	Listens to others' input and effectively combines his or her own and peers' concepts to produce an understanding of the task, problem, or issue. Uses suitable techniques to make sure all team members contribute. Uses effective probing questioning to develop a realistic understanding of the task.
<b>Develops and implements effective plans</b>	Shows an awareness of the process and the current stage of development.	Uses checkpoints to measure progress in the project. Describes problems and develops some solutions.	Uses regular checkpoints to measure progress in the project. Defines each person's tasks within the process.	Manages progress on the assigned task using regular checkpoints. Clearly defines each person's roles and responsibilities within each element of the process. Discusses problems and develops suitable solutions.
<b>Works collaboratively toward a common, shared goal or objective</b>	Sometimes works with peers. Is sometimes on tasks when working collaboratively.	Works with peers collaboratively or individually to achieve the group's goal.	Works with peers collaboratively or individually to achieve the group's goal. Analyses individual or group progress against the goals and objectives and sometimes offers appropriate critique.	Works with peers collaboratively and economically or individually to achieve the group's goal. Analyses individual or group progress against the goals and objectives and offers appropriate critique or undertakes suitable actions as required.
<b>Revisits, reflects and revises group process</b>	Sometimes reflects on overall progress. Struggles to accept feedback.	Reflects on overall progress. Often accept feedback. Sometimes offer useful reflection.	Reflects on overall progress and analyses his or her performance. Accept feedback, sometimes modifies behaviour. Sometimes offer useful reflection.	Reflects on overall progress evaluating his or her contribution and that of peers fairly. Accept feedback, modifying tasks, action and behaviours based on this. Offers critical reflection that are task focussed and appropriate, enabling growth and development.

Source: Adapted from Crockett and Churches (2017)

**Selected Response - Multiple Choice (Objective Test Item)**

Multiple Choice is the most common type of objective test question (Linn & Miller, 2005). They are easy to administer and analyse. Multiple choice questions consist of a stem (question or statement) with several answer choices (distracters).

The table below gives four guidelines of developing multiple choice items with an example and a non-example. These have been borrowed from Classroom Assessment course (2018) at <https://fcit.usf.edu/assessment/selected/response.html>

<b>Guideline One - All answer choices should be plausible and homogeneous.</b>	
<b><u>Example</u></b>	<b><u>Non-Example</u></b>
<p>Read this question and select the appropriate option from the list:</p> <p>1 Which is the largest animal in the world?</p> <p>A. Elephant B. Blue Whale C. Camel D. Shark</p>	<p>Read this question and select the appropriate option from the list:</p> <p>1. Which is the largest animal in the world?</p> <p>A. Cat B. Dog C. Lizard D. Blue Whale</p>
<b>Guideline Two - Answer choices should be similar in length and grammatical form.</b>	
<b><u>Example (All are mammals, so students can easily find the right answer)</u></b>	<b><u>Non-Example</u></b>
<p>Read this question and select the appropriate option from the list:</p> <p>Which animal is known as the ‘Ship of the Desert?’</p> <p>A. Lion B. Cat C. Camel D. Dog</p>	<p>Read this question and select the appropriate option from the list:</p> <p>Which animal is known as the ‘Ship of the Desert?’ ( You can select any TWO options)</p> <p>A. Lion B. Camel C. Dog D. It drinks a lot of water to survive in the hot weather</p> <hr/> <p>Bottom of Form</p>
<b>Guideline Three – List answer choices in logical (alphabetical or numerical) order</b>	
<b><u>Example</u></b>	<b><u>Non-Example</u></b>
<p>Read this question and select the appropriate option from the list:</p>	<p>Read this sentence from the article:</p>

1. How many days do we have in a week?

- A. Nine
- B. Seven
- C. Five
- D. Eight

1. How many days do we have in a week?

- E. Seven
- F. I don't know
- G. 15
- H. Thirty-Two

***Guideline Four – Avoid using “All of the Above” options***

**Example**

How was the Grand Canyon formed?

- A. The canyon once had a waterfall.
- B. Big rainstorms washed rocks out of the canyon.
- C. A flowing river cut into the rocks to form the canyon.
- D. The canyon was formed from rocks that came from other places.

---

Bottom of Form

**Non Example**

How was the Grand Canyon formed?

- A. The wind eroded many of the rocks.
- B. By the movement of large plates of rocks many years ago.
- C. A flowing river cut into the rocks to form the canyon.
- D. All of the above.

---

Bottom of Form

In addition, a checklist for reviewing one-best MCQ is also given.



## One-Best MCQ Review Checklist

#	Overall	Yes*	No*
1	Is appropriate for the level of the learner		
2	Is aligned to the Student Learning Outcome and its number is referenced		
3	Exam specification number is referenced		
4	Concept to be tested is stated appropriately/Item is aligned with the concept being assessed		
5	The item is conceptually correct		
6	The cognitive level of the item is identified appropriately		
7	The difficulty level of the item is identified appropriately		
8	Assesses an essential (Must Know) or an important (Good to Know) item		
9	Can be answered with the options covered (Cover Test)		
10	<b>Cannot</b> be answered with the stem/ case covered (Test for Cognitive Level)		
11	Item author's name is mentioned		
12	An authentic reference is mentioned		
13	There are <b>no</b> spelling or grammar mistakes		
14	Task can be completed by the students in the assigned time		
	<b>Stem/ Case</b>		
1	Clearly defined with no ambiguities		
2	Is contextual and relevant		
3	Contains all essential information, however, avoids irrelevant information		
4	Avoids abbreviations, uncommon terminologies and brand names		
	<b>Lead-in</b>		
1	Focuses on one feature or concept		
2	Avoids negative phrases such as 'Except' and 'Not'		
3	Is clearly understandable at the level of the students		
	<b>Options</b>		
1	Congruent with the lead-in		
2	Aligned with the lead-in in grammar		
3	Are of similar length		
4	Homogenous in content		
5	Distractors are plausible		
6	Listed in an alphabetical order		
7	Use generic and common terms		
8	Mutually exclusive (non-overlapping)		
9	Avoid phrases like 'all of the above' and 'none of the above'		
10	Avoid vague terms such as 'usually' and 'frequently'		
11	Avoids key terms from the stem or lead-in		
12	The key is clearly the best/ correct option for the level of the learners		
13	The key/ correct answer is identified		

Source: Aga Khan University Examination Board.

### **Constructed Response –Descriptive Questions (Subjective Test Item)**

Constructed-response questions are assessment items that ask students to apply knowledge, skills, and critical thinking abilities to real-world, standards-driven performance tasks. Sometimes called “open-response” items, constructed-response questions are so named because there is often more than one way to correctly answer the question, and they require students to “construct” or develop their own answers without the benefit of any suggestions or choices. Therefore, constructed response assessments are suitable for higher level thinking skills. Constructed response assessments may include short quizzes, essays, art projects, personal communication etc.

#### **Sample CRQ 01**

Have you ever visited a village or a farm? If you have, then write about what you saw and what you liked there OR write about where you would like to go in the countryside and why.

#### **Sample CRQ 02**

Constructed-response items can be very simple, requiring students to answer with only a sentence or two, or quite complex, requiring students to read a prompt, reflect on the key points, and then develop a meaningful information of their own. Whether simple or complex, all constructed-response questions measure students' ability to apply, analyze, evaluate, and synthesize the knowledge that they have acquired in a more abstract way.

1. Name any two means of communication which you use the most to communicate with your family.
2. State any two disadvantages of over using the mobile phone.
3. How has the internet made our communication easier during the pandemic situation? Give any two examples.
4. Suppose a student from your class missed his online classes due to electricity breakdown. He has to complete his work. List down any two ways of communication you will use to help him complete his work.

### **Sample CRQ 03**

#### **Fairy Tale Conflict**

**Instructions:** Fairy tales are loaded with conflict. You have Goldilocks breaking into the bears' house, the Big Bad Wolf frightening Red Riding Hood, and Cinderella being treated unfairly by her stepmother. Someone needs to help these characters resolve their conflicts in a healthier way! Choose a fairy tale to examine, and answer the following question

1. What is the conflict in the story?
2. How do the main characters feel about the conflict?
3. What does each of the characters want or need?



Then imagine you could convince the characters to work together to solve their problem. List three possible solutions that would benefit all of the characters. (Remember, we're talking about fairy tales, so you can be as creative as you want!)

**Sample Test**

**Grade Five**

**Theme: Geography Topics: Globe and Map skills; Physical Regions of Pakistan**

## Sample General Knowledge Test Paper

### Grade III

**Max Marks: 30**

**Max Time: 2 Hours**

**Name:** \_\_\_\_\_ **Section:** \_\_\_\_\_ **Roll no:** \_\_\_\_\_ **Date:** \_\_\_\_\_

#### Instructions :

- Read the paper carefully
- Attempt all the questions

#### **Q.1 Choose the correct answer by circling the appropriate alphabet. [05]**

- I. If you stand facing the rising Sun then which cardinal direction will be to your left?
  - A. North
  - B. South
  - C. East
  - D. West
  
- II. Where is the world's second largest salt mine located?
  - A. Khairpur
  - B. Kharian
  - C. Khewra
  - D. Khushab
  
- III. Which of these is the habitat of a camel?
  - A. forest
  - B. desert
  - C. grass lands
  - D. water
  
- IV. Which of these animals do not look like their parents at the time of birth?
  - A. goat
  - B. frog
  - C. cat
  - D. lion

- V. Which matter is found in all three states – solid, liquid and gas?
- A. water
  - B. milk
  - C. tea
  - D. honey

**Q.2 Identify the type of pollution shown in each of the three pictures.**

**[03]**



\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

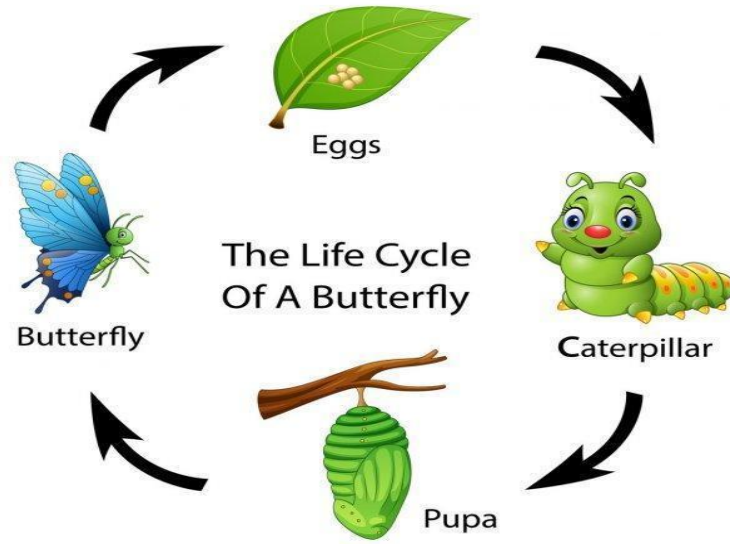
**Q.3 Complete the given chart.**

**[03]**

Religion	Place of worship	Holy book
	Church	
Islam		
	Gurdwara	

**Q.4 The picture below shows the life cycle of a butterfly. Please explain the life cycle in your own words.**

**[04]**



**Q.5 Given** below is the problem faced by Nina. Please read Nina's problem and give her two suggestions for solving her problem. **[05]**

**Q.6** What do you mean by a “Balanced Diet?” Select any 5 food items, which can give you balanced diet, from the picture below. **[5]**



**Q.7** In the space below, draw a map of your neighborhood showing position of your school/home.

**[5]**

DRAFT



## **Assessment Validity**

The assessment must be valid, that is, it should actually measure what it is supposed to measure. There are three kinds of validity evidence considered during assessment. These are:

- Criterion
- Construct
- Content

Criterion and construct validity measures are beyond the scope of a class teacher's work. They should best be done by assessment experts. For the purposes of the purposeful assessment, content validity is extremely important and can be controlled by teachers.

## **Content Validity**

As the name suggests, a valid assessment covers the content completed in the class. This means that a valid assessment covers all relevant parts of a subject. If any part, covered in the subject, is left out or if any irrelevant part, not covered, in the subject is included then it is not a valid assessment. The entire purpose of developing a list of codes and tables of specification and aligning them with the assessment strategies was to ensure content validity of the assessment. The assessment should be written at the level of difficulty required by the standards and student learning outcomes covered in the term. The assessment must also be in a format that allows students to demonstrate the particular ability being assessed. For example, if a teacher wishes to assess how a student has improved her writing abilities, then MCQ is not the best option.

## **Ways to Improve Content Validity**

**Clearly defined objectives.** Student learning outcomes should be clearly defined and operationalised.

**Alignment.** Assessment measures must be matched with student learning outcomes.

**Review by Subject Matter Experts (SMEs).** Subject experts may be asked to rate each question on scale from very relevant/very essential to not relevant/not essential at all. The more SMEs agree that items are essential, the higher the content validity.

**Objective Review.** The test/assessment question/instrument can be reviewed by faculty at other schools to obtain feedback from an outside party who has not been involved in the instrument development.

**Item Analysis.** Item analysis is helpful in analyzing student responses to individual test/exam questions with the intention of evaluating test/exam quality.

**Review and update tests frequently.** Many tests that were valid two years ago, are not valid today. It is important to review and update or retire questions that are no longer relevant.

**Item Bank.** An item bank facility is important to manage and update questions.

## CHAPTER FOUR

# SUPPORTING RESPONSIVE TEACHING AND LEARNING THROUGH FEEDBACK

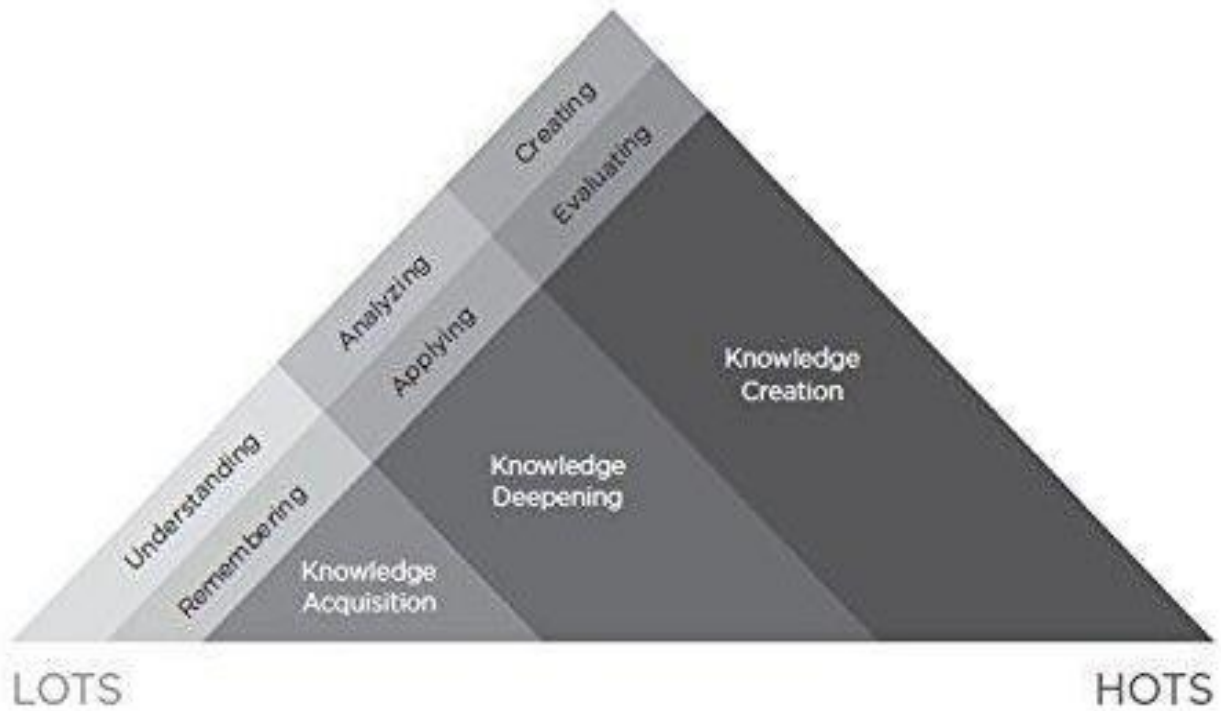
## **Chapter Four**

### **Supporting Responsive Teaching and Learning through Feedback**

#### **Feedback to Students**

In order to help students succeed in the 21st century world, teachers must see their teaching as a response to learning, rather than seeing learning as an outcome of teaching (Crockett & Churches, 2017). This calls for the integration of classroom assessment processes into teaching in ways that enhances students' achievement and their motivation to learn.

The formative feedback cycle helps learners to know where they are now in terms of high quality work and where they ought to be. This gap analysis facilitates learners' progression from Bloom's lower-order thinking skills (LOTS) which focuses on knowledge acquisition to higher-order thinking skills (HOTS) where the learners are able to create knowledge.



Source: Crockett & Churches (2017)

Hattie’s (2012) findings from his meta-analysis of hundreds of education papers indicate that providing formative evaluation and feedback has some of the largest effects on student learning. For an assessment to be formative, student must be receptive to the feedback and use it to adjust their learning. “Without feedback, assessment is not a learning activity; it is a compliance task” (Crockett & Churches, 2017, p. 21).

Churches (nd) outlines five characteristics of high quality feedback. These are:

**Timely:** The end of the task is too late. Feedback must be provided often and in detail during the process.

**Appropriate and reflective:** Feedback must reflect the students’ ability, maturity and age. It must be understandable.

**Honest and supportive:** Receiving a critique that identifies weaknesses of one’s work can be very disheartening. The feedback must provide encouragement to continue and guidance on how to achieve the desired goals.

**Focused on learning:** The feedback should provide information which allows the learner to close the gap between the current and desired performance. The clarity and descriptive nature of the feedback the teacher presents are major influences on students’ achievement (Hattie, 2012).

**Enabling:** Receiving feedback without the opportunity to act on it is frustrating, limiting, and counterproductive. Students must be able to learn from the formative assessments and apply the feedback and corrections.

One of the best models of feedback is developed by Dr. Jodie Nyquist (Crocket & Churches, 2017). This model of effective feedback has five stages going from weakest to strongest.



The teacher who provides feedback at the KCR+e and a specific action or ideally KCR+e and an immediate activity gives the learners opportunity to maximise their learning. Based on the above model, three specific criteria for good and bad feedback can be developed.

## Criteria for Good and Bad Feedback

Good Feedback	Bad Feedback
<ul style="list-style-type: none"> <li>• Being positive</li> <li>• Even when criticizing, being constructive</li> <li>• Making suggestions (not prescriptions or pronouncements)</li> </ul>	<ul style="list-style-type: none"> <li>• Finding fault</li> <li>• Describing what is wrong and offering no suggestions about what to do.</li> <li>• Punishing or denigrating students for poor work</li> </ul>

## Examples of Good and Bad Feedback

Feedback	Good or Bad?
Your answer is the best one in the class.	This is an example of bad feedback. It does not tell the student what is good about the answer.
Your details strongly support your claim that we should recycle newspapers. That's great. Where did you find all those facts?	This is an example of good feedback. It confirms for the students that the work meets one of the targets (strong supporting details) and connects the success to students' effort (the student researched to find out facts, and the teacher noticed).
Your answer was the shortest in the class. You didn't put enough in it.	This is an example of bad feedback. It implies that the student is competing with others (as opposed to aiming for a learning target) and the reason the work is poor is that the student "did something bad." The student ends up feeling judged and not motivated to improve.
The answer probably would not convince a reader who did not already agree we should recycle. I would want to know more about the effects on the environment and the cost of recycling?	This is an example of good feedback for a student who the teacher believes does not know what is missing in his or her answer. It suggests what the student could do to improve the answer.
Your report is late. What is the matter with you?	This is an example of bad feedback. It may not inspire the student to complete his or her work and turn it in for assessment.
[Name], I do not have your answer sheet. Can you tell me what happened?	This is a better example than the previous one of feedback to deliver the message that the work is late.

## **Feedback to Parents**

The most common form of communicating grades to parents is the report card. The report card at the primary level should also provide information on satisfactory or unsatisfactory performance in other dimensions.

A report card is only one way of sharing feedback to parents about their students' performance. Written report is another way of communicating with students. The reports should be written in a positive, direct and easy to understand manner.

The most effective way of communicating with parents is through a conference, generally known as parent-teacher meeting, which allows the parent to ask questions and the teachers to provide explanations. Conferences provide avenues to teachers to learn about students' home environment and to parents to be more involved in their children's learning.

DRAFT



(Front Page)

School's Name

School's Logo

Annual Report Card

[Month] 2022 – [Month] 2023

(First inside Leaflet)

Name: ABC\_\_\_\_\_

Term One:\_[Date]\_\_\_\_\_

Class:\_\_\_\_\_



Rarely







Sometimes







Most of the times



Always

Your child as a learner				
Interested in learning				
Listens carefully				
Works well independently				
Keeps trying even when tasks are difficult				
Teacher's Comment:				

Your child's social and personal development				
				
Happy at school				
Behaves well in the class				
Mixes well with other children				
Behaves well in the playground				
Manages and expresses own feelings well				
Teacher's Comments:				

(Second inside Leaflet – Sample for Grade I)

	Key Themes	Child's Performance			Key Theme	Child's Performance		
		Term I Marks				Term II Marks		
		Formative	Summative	Total		Formative	Summative	Total
1	Discovering self and immediate environment	28 Marks	19 Marks	47 M	Good and services	5 Marks	4Marks	9 M
2	Ethics and	16 Marks	10 Marks	26 M	Life	40 Marks	26 Marks	66 M

	values				sciences			
3	Responsible citizenship	9 Marks	6 Marks	16 M	Physical science	5 Marks	4 Marks	9 M
4	Patriotism and knowledge of the country	7 Marks	5 Marks	12 M	Earth science	10 Marks	6 Marks	16 M
Total Marks Obtained								
Out of Total Marks		60 Marks	40 Marks	100 Marks		60 Marks	40 Marks	100 Marks

**Teacher's Comments (Term I):**

**Teacher's Comments (Term II):**

[Same types of leaflets will be developed for Grades II & III]

(Last inside Leaflet)

**Students Comment (My Learning in School)**

**Parents' Comments (How can you further support your child's learning)**

**Teacher's Overall Comment:**

**Attendance**

**Punctuality**

**Teachers' Signature:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Principal's Signature:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Parent's Signature:** \_\_\_\_\_

**Date:** \_\_\_\_\_

## CHAPTER FIVE

# POST ASSESSMENT: REDEFINED GOALS/CURRICULUM

DRAFT

## Chapter Five

### Post Assessment: Redefined Goals/Curriculum

#### Completing the Assessment Loop

This manual provides a framework of purposeful assessment. It brings forth the philosophy, the principles, the policy and the practice of purposeful assessment for evaluating teaching and learning targets at the classroom level, the school and national level. However, unless the evaluation is constructively utilised to inform changes to curriculum, learning targets and teaching methodology in a balanced manner, its real purpose will not be achieved.

#### Balanced Assessment System

The success of any assessment system will depend on how formative and summative assessments are balanced to meet the need of all stakeholders. The tables below summarize the use of the two types of assessments across three levels – the classroom, school and district/province.

#### Elements of a Balanced Assessment System

Level of Assessment	Purpose of Assessment	User of Information	Type of Assessment
<b>Classroom assessment</b>	To measure the level of student achievement on learning targets taught.	Teacher	Summative: To determine grades for reporting purposes. Formative: To revise teaching plans for next year/semester.
	To diagnose student strengths and areas needing further work.	Teacher student	Formative: To plan further instruction. Formative: To provide feedback to students. Formative: To self-assess and set goals for next steps.
<b>School based exam</b>	To measure the level of student achievement on preset content standards.	Teacher School Leadership District Education Office	Summative: To evaluate the achievement level of each student and summarise across students. Summative: To determine programme or curriculum effectiveness. Formative: To identify programme or curriculum needs.
<b>District, provincial or national large scale assessments</b>	To measure the level of student achievement toward content standards and/or international standards. To identify students and/or portions of the curriculum needing additional/different instruction.	Teacher School Leadership District Education Office	Summative: To evaluate programme effectiveness. Formative: to identify standards in need of more effective programmes. Formative: To plan interventions for groups or individuals.

Source: Chappuis and Stiggins, 2017

Implicit within this balanced assessment system is the cyclic approach to assessment, which emerges as a response to teaching and learning and further informs teaching and learning.

The following section presents schedules of assessment for grades I to V to illustrate how the three streams or levels of assessment can be employed in a balanced manner during an academic year. The schedule is also aligned with the SLOs.

DRAFT



### Balanced Assessment Schedule for GK Grades I, II AND III

Overall Domain Code* Assessment Schedule						
Overall Domain Code*	One Month	Term I (4 Months)	One Month	Term II (4 Months)	One Month	One Month
CRF	Pre-Assessment	<b>Formative Assessment</b> (60% Marks based on Ongoing)	<b>School based Summative Assessment</b> (40% Marks)	Formative Assessment (40% Marks Based Ongoing)	School Base Summative Assessment 60% Marks) And/or Large scale assessments wherever required	Post Assessment - One Month After Term II
CRC						
CRP						
CRP						
CUF						
AR						
PP						
PS						
CUC						
CUP						
CAF						
CAC						
CAP						
CANF						
CANC						
CANP						
CANM						
CEC						
CEP						
CEM						
AV	Pre-Assessment					Post
AO						

							Assessment
	Pre-Assessment						Post Assessment

--	--	--	--	--	--	--	--	--	--

Pre-  
Ass  
ess  
me  
nt

Post  
Asse  
ssme  
nt

	<p>Pre-Assessment - One Month Prior to Term I</p> <p>Pre-Assessment</p>						<p>Post Assessment</p>
--	---	--	--	--	--	--	------------------------

	Pre- Ass ess me nt						Post Asse ssme nt
	Pre- Ass ess me nt						Post Asse ssme nt

	Pre-Assessment							Post Assessment
--	----------------	--	--	--	--	--	--	-----------------

								Post Asse sme nt
	Pre- Ass ess me nt							
								Post Asse

	Pre-Assessment					Assessment

\* This includes all the SLOs contained within the Domain Code



## **Concluding Remarks – Exit to the Next Cycle**

The framework can be considered a blueprint of an assessment programme at the primary school level. It provides the broad overview of policy guidelines for assessment framework 2021 while guiding the alignment of student learning outcomes with assessment strategies. It identifies the learning targets, the deep learning approaches and the strategies for assessing the same. In doing this, it ensures that the assessments are interconnected and purposeful.

While the blueprint is necessary as an overarching guide, its enactment will require professional judgement. Its real purpose will be realised when teachers use it at the classroom level to modify their teaching to match students' learning needs, when school leaders use it to accomplish their goals more effectively by replacing some programmes or practices with better ones (Fullan, 2001) and when the public education departments use it to invest in practices that yield positive results. The education practices, redefined in this manner, are again put to the test and the process of ongoing purposeful assessment continues.

DRAFT

## References

- Anderson, L. W., Krathwohl, D. R., Bloom, B. S., Airasian, P., Cruikshank, K., Richard, M... Wittrock, M. (Eds.). (2001). *A Taxonomy for Learning, Teaching, and Assessing: A Revision of Bloom's Taxonomy of Educational Objectives*. London: Longman.
- Arends, R. I. (2007). *Learning to teach*. New York: McGraw-Hill,
- Buck Institute of Education (BIE). (2021). PBL Works. Retrieved from <https://www.pblworks.org/>
- Brown, S. (1998). Criterion-referenced assessment: *British Journal of Educational Psychology, Monograph Series*, 3, 1-14.
- Chappuis, J., & Stiggins, R. J. (2017). *An introduction to student-involved assessment for learning* (7<sup>th</sup> Edition). New York, NY: Pearson.
- Crockett, L. W., & Churches, A. (2017). *Mindful assessment: The 6 essential fluencies of innovative learning*. Solution Tree Press.
- Dial, E. (2016). *Assessment for Learning: A Practical Approach for the Classroom*. Rowman & Littlefield.
- Entwistle, N. (1988). Motivation and learning strategies: *Effective learning. Educational and Child Psychology*, 5(3), 5–20.
- Entwistle, N. and Ramsden, P. (2015). *Understanding Student Learning*. London: Routledge.
- Erwin, T. D. (1991). *Assessing Student Learning and Development: A Guide to the Principles, Goals, and Methods of Determining College Outcomes*. Jossey-Bass. San Francisco.
- Fisher, D., & Frey, N. (2014). *Checking for understanding: Formative assessment techniques for your classroom*. Association for Supervision and Curriculum Development. Alexandria.
- Fullan, M. (2001). *The New Meaning of Educational Change*. New York: Teachers' College.
- Government of Pakistan (2009). *National Education Policy 2009. Ministry of Federal Education & Professional Training, Islamabad*.
- Government of Pakistan (2018a). *Minimum Standards for Quality Education in Pakistan: Attaining Standards for Improved Learning Outcomes and School Effectiveness*. Ministry of Federal Education & Professional Training, Islamabad
- Government of Pakistan (2018b). *National Curriculum Framework Pakistan*. Ministry of Federal Education & Professional Training, Islamabad.

- Government of Pakistan. (2018c). *National Education Policy Framework (2018/20)*. Ministry of Federal education and Professional training, Islamabad. Retrieved from: <http://www.mofept.gov.pk/SiteImage/Policy/National%20Educaion%20Policy%20Framework%202018%20Final.pdf>
- Greenstein, L. (2016). *Sticky assessment: Classroom strategies to amplify student learning*. London: Routledge.
- Hall, G. E., Quinn, L. F., & Gollnick, D. M. (2017). *Introduction to teaching: Making a difference in student learning*. California: Sage Publications.
- Harvey, L. (2004). *Analytic quality glossary*. Retrieved from <http://www.qualityresearchinternational.com/glossary/#c>
- Hattie, J. (2012). *Visible learning for teachers: Maximising impact on learning*. London: Routledge.
- Linn, R. L. & Miller, M. D. (2005). *Measurement and Assessment in Teaching*. Michigan: Prentice Hall.
- National Center for Education Statistics., National Assessment of Educational Progress (Project), Educational Testing Service., & United States. (1992). *NAEP ... reading report card for the nation and the states*. Washington, D.C: National Center for Education Statistics, Office of Educational Research and Improvement, U.S. Dept. of Education.
- Tully, M. (1996). *Helping students revise their writing*. New York: Professional Books.
- UNESCO. (2005). *Education for All Global Monitoring Report 2005: The Quality Imperative*. Retrieved from: [http://lst-iiiep.iiiep-unesco.org/cgi-bin/wwwi32.exe/\[in=epidoc1.in\]/?t2000=020273/\(100\)](http://lst-iiiep.iiiep-unesco.org/cgi-bin/wwwi32.exe/[in=epidoc1.in]/?t2000=020273/(100)).

DRAFT

## **Appendices**

## Bloom's Revised Taxonomy Model – Cognitive Domain

Cognitive Dimension	The Knowledge Dimension			
	<b>Factual</b> The basic elements a student must know to be acquainted with a discipline or solve problems in it.	<b>Conceptual</b> The interrelationships among the basic elements within a larger structure that enable them to function together.	<b>Procedural</b> How to do something, methods of inquiry, and criteria for using skills, algorithms, techniques, and methods.	<b>Metacognitive</b> Knowledge of cognition in general as well as awareness and knowledge of one's own cognition
<b>Remember</b> Recall or retrieve previous learned information from long-term memory	<b>List</b> primary and secondary colors.	<b>Recognize</b> action words.	<b>Recall</b> how to perform a sum based on four operations.	<b>Identify</b> strategies for retaining information
<b>Key Words (Verbs)</b>	labels, lists, names, outlines, states	Defines, describes, identifies, knows,	Recalls, recognizes, matches,	reproduces, selects,.
<b>Sample Assessment</b>	MCQs, Fill in the blanks, tables, rules,	Comprehension passage, CRQs, problem solving	Solving maths sums, using words in sentences, performing experiments, hands on activities	Retelling stories, word problems
<b>Understand</b> Construct meaning from instructional messages, including oral, written and graphic communication.	<b>Summarize</b> features of a new product.	<b>Explain</b> the main ideas of a play or piece of literature.	<b>Explain</b> in one's own words the steps for performing a complex task.	<b>Predict</b> one's response to a performance.

<b>Key Words (Verbs)</b>	<b>Summarizing</b> (abstracting, generalizing) <b>Explaining</b> (constructing models)	<b>Classifying</b> (categorizing, subsuming) <b>Exemplifying</b> (illustrating, instantiating)	<b>Interpreting</b> (clarifying, paraphrasing, representing, translating) <b>Comparing</b> (contrasting, mapping, matching)	<b>Inferring</b> (concluding, extrapolating, interpolating, predicting)
<b>Sample Assessment</b>	Write an essay	Group Work/Cooperative Learning	Project Work	Story telling
<b>Apply</b> Carry out or use a procedure in a given situation.	<b>Respond</b> to frequently asked questions.	<b>Provide</b> advice to juniors.	<b>Divide</b> one whole number by another whole number, both with multiple digits	<b>Use</b> techniques that match one's strengths. <b>Use</b> class rules in situations in which it is appropriate.
<b>Key Words (Verbs)</b>	Demonstrates, discovers,	Constructs, relates,	Computes, demonstrates, manipulates, operates, prepares, produces, solves	Changes, discovers, modifies, predicts, uses
<b>Samples Assessment</b>	Responds to questions	Match, complete sentences	Solves sums; role play	Create a blog
<b>Analyze</b> Break material into its constituent parts & determine how the parts relate to-one another and to an overall structure or purpose.	<b>Select</b> the most complete list of activities.	<b>Distinguish</b> between relevant and irrelevant numbers in a mathematical word problem	<b>Compare and contrast</b> four ways of serving foods made with apples and examine which ones have the highest health benefits.	<b>Determine</b> the point of view of the author of an essay.
<b>Key Words (Verbs)</b>	Focusing, selecting	Differentiating (discriminating, distinguishing)	Organizing (finding, coherence, integrating, outlining, structuring)	Attributing (deconstructing )
<b>Samples Assessment</b>	Library search	Developing an argument; debating	Summarizing data in the form of graphs, pictures, tables etc.	Review of a written piece of work, oral discourse, story, movie etc.

<b>Evaluate</b> Make judgments based on criteria and standards.	<b>Select</b> the most complete list of activities.	<b>Determine</b> which kinds of apples are best for baking a pie, and why	<b>Judge</b> which of two methods is the best way to solve a given problem	<b>Reflect</b> on one's progress.
<b>Key Words (Verbs)</b>	Describes, explains	Checking (coordinating, detecting, monitoring, testing)	Interprets, justifies, relates, summarizes, supports	critiquing (judging)
<b>Sample Assessment</b>	Group discussion	Survey	Interpreting a graph, a picture etc.	Blogs; self-evaluation
<b>Create</b> Put elements together to form a coherent or functional whole; reorganize elements into a new pattern or structure	<b>Generate</b> a log of daily activities.	<b>Compose</b> a story	<b>Design</b> an efficient project workflow.	<b>Inventing</b> a product
<b>Key Words (Verbs)</b>	Compiles, explains, reorganizes, summarizes,	planning (designing)	producing (construct)	generating (hypothesizing)
<b>Sample Assessment</b>	Game; network with others	Write a story	Create a new model	Create a learning portfolio.

## Bloom's Revised Taxonomy Model – Affective Domain

Affective Domain			
Dimension	Examples	Key words/Verbs	Sample Assessment
<b>Receiving</b> The lowest level. Awareness of feelings, emotions, ideas, material and phenomenon etc. Passively paying attention.	Demonstrates a willingness to participate in the activity	Asks, chooses, describes, follows, gives, holds, identifies, locates, names, points to, selects, replies, uses, acknowledge, attentive, courteous, dutiful, follows, listens, understands	Listening exercises; Listen for and remember the name of newly introduced people; watching a movie or another student's presentation, and then write a summary.
<b>Responding</b> The student actively participates in the learning process, not only attends to a stimulus; the student also reacts in some way.	Shows interest in the objects, phenomena, or activity by seeking it out or pursuing it for pleasure.	answers, assists, aids, complies, conforms, discusses, greets, helps, labels, performs, tells, practices, presents, reads, recites, reports, selects, writes.	Completion of class tasks/homework; participation in class/group discussion; presentation; response to questions; compliance with class rules and certain procedures.
<b>Valuing</b> The worth or value a person attaches to a particular object, phenomenon, or behaviour. This ranges from simple acceptance to the more complex state of commitment.	Simpler acceptance could be being part of the team; while more complex level of commitment may include being responsible for the overall improvement of the team.	appreciates, cherish, treasure, demonstrates, initiates, invites, joins, justifies, proposes, respect, shares, completes, differentiates, explains, follows, forms, initiates, invites, joins, justifies, proposes, reads, reports, selects, studies, works.	Write an opinion piece on any issue, explaining one's own stance and reasons supporting that stance; seeking out information in popular media related to a particular topic; proposing a plan to improve team skills.
<b>Organizing</b> Organizes values into priorities by contrasting different values, resolving conflicts between them, and creating a unique value system. The emphasis is on comparing, relating, and	The student can put together different values, information, and ideas, and can accommodate them within his/her own schema; the student is comparing, relating and elaborating on what has been learned.	compares, relates, synthesizes, adheres, alters, arranges, combines, completes, defends, explains, formulates, generalizes, identifies, integrates, modifies, orders, organizes, prepares,	Explains the role of systematic planning in solving problems. Accepts ethical standards. Spending more time studying than playing sports; organizes and compares different cultures, evaluating the differences between them



synthesizing values.			
<b>Characterizing</b> Highest level. Internalizing values. Student has a value system that controls their behavior. The behavior is pervasive, consistent, predictable.	Shows self-reliance when working independently; cooperates in group activities (displays teamwork); uses an objective approach in problem solving; follows rules and regulations on daily basis.	acts, discriminates, displays, influences, modifies, performs, qualifies, questions, revises, serves, solves, verifies	Group work and group project.

DRAFT

## Bloom's Revised Taxonomy Model – Psychomotor Domain

Affective Domain			
Dimension	Examples	Key words/Verbs	Sample Assessment
<b>Perception (awareness)</b> The ability to use sensory cues to guide motor activity. This ranges from sensory stimulation, through cue selection, to translation.	Detects non-verbal communication cues. Estimate where a ball will land after it is thrown and then moving to the correct location to catch the ball.	chooses, describes, detects, differentiates, distinguishes, identifies, isolates, relates, selects.	A game of dodgeball; reading expressions.
<b>Set</b> Readiness to act. Mental, physical, and emotional dispositions that make one respond in a certain way to a situation.	Knows and acts upon a sequence of steps in a process. Shows desire to learn a new process Attend project exhibition. Observe demonstrations through audio, videos, visuals. Set-up lab equipment for experiments.	Begins, displays, explains, moves, proceeds, reacts, shows, states, volunteers.	Pre-lab assessment; self-criteria; summary of demonstration and set-up process
<b>Guided Response</b> The early stages in learning a complex skill that includes imitation and trial and error. Adequacy of performance is achieved by practicing.	Performs a mathematical equation as demonstrated. Follows instructions to build a model.	Copies, traces, follows, react, reproduce, responds.	Evaluate accuracy with criteria on standard performance. Run for 25 minutes steadily. Determine the density of a group of sample metals with regular and irregular shapes.
<b>Mechanism (basic proficiency)</b> This is the intermediate stage in	Use a personal computer. Repair a toy. Drive a bicycle.	Assembles, calibrates, constructs, dismantles, displays, fastens, fixes,	Performance test (performance indicators). Self-evaluation on

learning a complex skill. Learned responses have become habitual and the movements can be performed with some confidence & proficiency.	Holding a pencil	grinds, heats, manipulates, measures, mends, mixes, organizes, sketches.	performance (based on progress and confidence) Performance in a game (football, hockey). Solving a problem, using pre-set procedures
<b>Complex Overt Response</b> Performs task or objective in a confident, proficient, and habitual manner	Control and use correct movements when playing instruments; drawing with pencil and painting proficiently. Operate and run machines (e.g. computer) efficiently Use equipment with confidence	Assembles, builds, calibrates, constructs, dismantles, displays, fastens, fixes, grinds, heats, manipulates, measures, mends, mixes, organizes, sketches. NOTE: The Key Words are the same as Mechanism, but will have adverbs or adjectives that indicate that the performance is quicker, better, more accurate, etc.	Clinical exams Final project (ex. Create project exhibition) Performance in a role play.
<b>Adaptation</b> Skills are well developed and the individual can modify movement patterns to fit special requirements.	Use tools for situations outside typical discipline Responds effectively to unexpected experiences. Modifies instruction to meet the needs of the learners.	Adapts, alters, changes, rearranges, reorganizes, revises, varies.	Field based tasks. Revise and improve procedures of movements; written responses Portfolio
<b>Origination</b> Creating new movement patterns to fit a particular situation or specific problem. Learning outcomes emphasize creativity based upon highly developed skills.	Constructs a new theory/story. Develops a new teamwork approach. Creates a new project; a new programme	Arranges, builds, combines, composes, constructs, creates, designs, initiate, makes, originates.	Story writing; project work; models; work plans;

DRAFT

**Curriculum Mapping**  
**NATIONAL CURRICULUM OF PAKISTAN**

**General Knowledge - Grade I**

**COGNITIVE DOMAIN**

Low Order Taxonomies (Cognitive)						High Order Taxonomies (Cognitive)						Total
Remember	No	Understand	No	Apply	No	Analyze	No	Evaluate	No	Create	No	
<b>Discovering Self and Immediate Environment</b>												
Identify some family members (parents, brothers and sisters, grand-parents, aunts, uncles and cousins (paternal and maternal). (F)	1	Recognise and explain that individuals have different needs and qualities, and different likes and dislikes. (C)	1			Identify good qualities in themselves and others (telling the truth; respecting elders and listening to their advice; getting up early in the morning etc.) (M)	1	Describe themselves briefly. For example, their name, age, likes, games, favorite food, what they want to be when they grow up, etc.(M)	1			4
Tell the name and location of their school (F)	1	Recognise that they should respect all family members and friends. (p)	1			Analyze and describe the ways in which they are same as						3
Describe the activities they engage in at	1	Share and understand the rules they					1					2

school		follow in class and school(F)	1		and different from others with respect to likes and dislikes.(p)				
Narrate the special qualities of some of their friends(C)	1	Recognize that they should respect everyone. (P)	1						2
<b>Total Frequency</b>	<b>5</b>		<b>4</b>			<b>2</b>		<b>1</b>	<b>11</b>

### Ethics and Values

Greet others by saying Assalam o Alaikum, Hello, Good Morning etc.(f)	1	Recognise and identify the etiquettes of using the washroom. (P)	1	Demonstrate aspects of good character (punctuality, speaking politely, kindness, caring, honesty and truthfulness) (P)	1				3
		Recognize the importance of following rules. (P)	1	Demonstrate etiquettes of eating (don't waste food, eat with	1				2

				clean hands, don't drop food around)(P)			
<b>Total Frequency</b>	<b>1</b>	<b>2</b>	<b>2</b>		<b>5</b>		

### Responsible Citizenship

Name the games they like to play. (F)	1	Observe and identify the rules when playing a game. (P)	1	Demonstrate the importance of collaboration by participating in group activities and games. (P)	1		<b>3</b>
		Describe the importance of playing games and exercise for better health for girls, boys, and differently abled groups. (C)	1	Recognize the importance of following rules.(P)	1		<b>1</b>
<b>Total Frequency</b>	<b>1</b>	<b>2</b>	<b>2</b>		<b>5</b>		

### Patriotism and Knowledge of the Country

Tell the full name of our	1						<b>1</b>
------------------------------	---	--	--	--	--	--	----------

country and  
date of  
formation(F)

Recognise  
that all the  
countries  
have a flag  
Draw the flag  
of  
Pakistan.(F)

1

1

1

1

Total  
Frequency

3

3

### Goods and Services

Identify the  
means of  
transportatio  
n which  
people use.  
(C)

1

Differentiate  
between slow &  
fast means of  
transportation.  
(C)

1

2

Identify the  
places where  
buses and  
trains stop,  
airplanes land  
and ships  
berth. (c)

1

1



Describe the activities that take place at a bus stop, railway station, airport, and harbor.(c)	1							1
<b>Total Frequency</b>	<b>3</b>		<b>1</b>					<b>4</b>

### Life Sciences

Name and identify e.g. through labelling) major parts of the human body (eyes, nose, ears, mouth, arms, feet, hands and legs). (F)	1	Recognise the fact that germs can cause diseases and list the ways to avoid germs. (C)	1	Relate their body parts with the five senses (which body part helps them to taste, touch, smell, hear and see).(C)	1	Differentiate between healthy and unhealthy food with examples, and state the hazards of eating unhealthy food.(p).	1	4
Identify the functions of various body parts. (C)	1	Discuss the importance of keeping their school clean.(C)	1	Apply different ways to keep themselves clean (washing	1	Differentiate between the plants around them based on their		3

Name the five senses. (F)	1	Understand that living things need air, water, and food. (C)	1	hands before and after meals and after using the toilet, clipping/trimming nails, brushing teeth daily, taking bath regularly etc.) (p)	1	characteristics(C)	1
Match the sensory descriptions of each of the five senses (P)	1		1		1	Extend their knowledge to analyze different scenarios like 'if you were given a wild animal to keep as a pet, what steps would you take for your own safety and the care of the animal?'(P)	3
Recognise that some people don't have all the body parts and senses and they are also valuable members of the society. (C)	1	Recognise the importance of plants/trees as a source of food, shade, oxygen, and shelter. (C)	1	Demonstrate measures for better care of plants(P)	1		4
Recognise the importance of keeping themselves,		Recognize the importance of animals as a source of food, joy, and transport. (C)				Differentiate between animals that can and cannot be kept at home, with reasons. (C)	

their clothes and surroundings clean for their health. (p)	1	Recognize measures for better care of domestic and wild animals and plants.(p)	1		2
Identify the unhealthy habits that cause illnesses (like cough and diarrhea etc.) (C)			1	1	
Recognise living and non-living things around them in nature. (C)	1				3
Identify plants in their environment. (C)	1				1
Identify the things around them that are	1				1

made up of plants/ trees. (C)			1
Identify some common domestic and wild animals. (C)	1		1
Identify the food which different animals eat.(C)	1		1
Identify places where animals are found (desert, jungle, water, mountains etc.) (c)	1		1
Identify the differences between common, domestic and wild animals	1		1

in terms of  
physical  
features

Total Frequency	14	6	3	4	27
-----------------	----	---	---	---	----

**Physical Sciences**

Identify what makes objects move.(C)	1		1		2
Recognise from pictures of the past that force applied by humans and animals moved vehicles (Tonga, bullock cart, cycle, pushcart) while today vehicles are moved by machines (bus, motorcycle and car etc.)	1		1		2

(C)

Total Frequency	2		2				4
-----------------	---	--	---	--	--	--	---

**Earth and Space Science**

Identify Earth as a planet. (C)	1	Recognise the shape of the Earth(C)					2
		Recognize that the Earth is covered with land and water. (C)	1				

Identify celestial objects in the sky during day and night. (C)	1	Recognise the concept of planets(C)	1				2
							2

Recognise that the moon and stars shine at night.(C)	1	Recognise that the sun shines very brightly during the day and gives us heat and light.(C)	1				1
--	---	--	---	--	--	--	---

Total Frequency	4	3					7
-----------------	---	---	--	--	--	--	---

Overall Total	32	18	9	6	1		66
---------------	----	----	---	---	---	--	----

DRAFT

AFFECTIVE DOMAIN

From Lower Order Taxonomies to Higher Order Taxonomies										
Receiving	No	Responding	No	Valuing	No	Organizing	No	Characterizing	No of Times	Total
<b>Discovering Self and Immediate Environment</b>										
Describe themselves briefly. For example, their name, age, likes, games, favorite food, what they want to be when they grow up, etc.(R)	1			Identify good qualities in themselves and others (telling the truth; respecting elders and listening to their advice; getting up early in the morning etc.) (V)	1	Analyze and describe the ways in which they are same as and different from others with respect to likes and dislikes.	1			3
				Recognize and explain that individuals have different needs and qualities, and different likes and dislikes.	1					1
<b>Total Frequency</b>	1				2		1			4
<b>ETHICS AND VALUES</b>										
				Demonstrate aspects of good character (punctuality , speaking politely, kindness, caring, honesty and	1					1



truthfulness) (V)  
 Demonstrate  
 etiquettes of eating  
 (don't waste food, eat  
 with clean hands,  
 don't drop food  
 around)

1

1

**Total  
 Frequency**

2

2

**LIFE SCIENCES**

Recognise that some  
 people don't have all  
 the body parts and  
 senses and they are  
 also valuable  
 members of the  
 society.

1

1

**Total  
 Frequency**

1

1

**Overall Total** 1

5

1

7

**PSYCHOMOTOR DOMAIN**

**From Low Order Taxonomies to High Order Taxonomies**

Perception	No	S e t	N o	Guided R e s p o n s e	No o f T i m e s	Mechanis m	No o f T i m e s	Comple x O v e r t R e s p o n s e	No o f T i m e s	Adaptati o n	No o f T i m e s	Originatio n	No o f T i m e s	Tota l
------------	----	-------------	--------	--	---------------------------------------	---------------	---------------------------------------	--	---------------------------------------	--------------------	---------------------------------------	-----------------	---------------------------------------	-----------

**Patriotism and Knowledge of the Country**

**Draw the  
 flag of  
 Pakistan.**

1

1

(F)  
**Total** 1  
**Frequency**  
**Overall** 1  
**Total**

1  
1

**NATIONAL CURRICULUM OF PAKISTAN**

**General Knowledge - Grade II**

**CURRICULUM MAPPING**

**COGNITIVE DOMAIN**

Low Order Taxonomies (Cognitive)						High Order Taxonomies (Cognitive)						
Remember	No	Understand	No	Apply	No	Analyze	No	Evaluate	No	Create	No	Total
<b>Discovering Self and Immediate Environment</b>												
Recognise that the people of Pakistan live in different types of areas (villages, cities, towns, and kachi abadis). (c)	1	Recognise that people from different areas, religions, and cultures can be friends(c)	1	Research (through oral investigation) about different professions that exist in Pakistan. (P)	1	Differentiate between lifestyles of people living in different areas (villages, cities, towns, and kachi abadis).(C)	1					4
Identify some common professions and occupations in												1

Pakistan (farmer, butcher, cobbler, teacher etc.) (c)	1							
Identify key characteristics of different types of areas (buildings, facilities, environment and the work people do) (C)	1							1
Total Frequency	3	1	1	1	1			6

### Ethics and Values

List the things they can share with others (toys, books, stationery items, lunch with friends etc.) (F)	1	Recognise the importance of sharing things. (C)	1	Relate with examples from their daily life the ways in which people are interdepende nt (C)	1	Differenti ate between fair and unfair behavior in daily live(C)	1	4
Identify from given pictures and stories the ways in which	1	Recognise that mistakes	1	Demonstrate ways in which	1			3

people help each other (at home, in classroom, in village/city, at the time of any need or disaster) (C)

are a natural outcome of learning and nothing to be ashamed about or to make fun of. (C)

they can show respect for all. (F)

Accept responsibility for treating others unfairly and manage their behavior accordingly. (C)

Identify that all human beings are similar, but differ by religion, family, culture, abilities, ethnicity(C)

1

Recognise that when people apologize for their mistake they should forgive them.(C)

1

1

3

Identify occasions when it is important to wait for one's turn. For example, while speaking, in the school, on the bus stop, at canteen and ticketing counters

1

Recognise what they say and do, can hurt others, and what

Mend their behaviour when it is proven unfair through realization.(M)

1

3

etc.(C)  
 Identify ways in which we can redress the hurt caused to others (ask for forgiveness, say sorry, do something special for them etc.) (C)

1

others do and say, can hurt them (telling lies, making fun of others, pushing others, bullying using derogatory words etc.)(C)

1

Identify ways of making unfair situations fair. (C)

1

1

Total Frequency

6

4

4

1

15

**Responsible Citizenship**

Identify some traffic rules. (C)

1

Recognize the role of government and identify some goods

1

Inquire about places of worship of major religions in

1

Reflect on their responsibilities towards

1

4

Identify the safety rules they should follow while walking on the road, crossing a road, traveling by a bus etc.(C)	1	and services that the government provides for the people (health, education, clean water, infrastructure, utilities, safety and security, parks and playgrounds etc.). (C)	Pakistan (masjid, church, Gurdwara, temple). (C)	Practice respect for all places of worship and all religions.(C)	1	the natural world.(M)	2
Recognise the multiple religions in Pakistan.(C)	1	Recognise that everyone has a right to practice their own religion freely. (C)			1		2
List any three rights of the citizens (right to food, free education, protection, equality and health care).(F)	1	Discuss careful use of food, water and other resources, regularity and hard work towards education, taking care of surroundings and hygiene,			1		2
Identify masjid in their neighborhood as a place of	1						1

worship for Muslims.(C)

treating everyone equally, and following rules and regulations(C)

<b>Total Frequency</b>	<b>5</b>	<b>3</b>	<b>2</b>	<b>1</b>	<b>11</b>
------------------------	----------	----------	----------	----------	-----------

**Patriotism and Knowledge of the Country**

Recognise the map of Pakistan. (C)	1	Recognise the significance of the national flag. (C)	1	Depict the cultural diversity of all provinces and areas of Pakistan(C)	1	<b>3</b>
Name the provinces and areas (AJK, GB and ICT) of Pakistan. (F)	1					<b>1</b>
Identify the national capital of Pakistan(C)	1					<b>1</b>

Recognise some of the national symbols of Pakistan such as the national animal, fruit, flower, bird, and sport (C)	1	1
Identify what the colors and symbols on the flag represent. (C)	1	1
Identify festivals celebrated by Muslims in Pakistan and describe how they are celebrated. (C)	1	1
Identify festivals of other major religions and cultures in Pakistan and describe how they are	1	1



celebrated. (C)

Recognise and draw the flag of AJK.()

1

1

Total Frequency	8	1	1	10
-----------------	---	---	---	----

**Goods and Services**

Identify some professions from pictures (teaching, business, farming, medicine etc.). (C)	1	State which profession they like the most and why. (C)	1	2
Recognise the role of some common professions in	1	Recognise that people process the crops they	1	2

their daily lives(C)		grow for making products (cotton to thread to cloth to garments) (C)			
Recognise professional achievements of celebrated Pakistanis including women/ minority groups/ differently abled groups. (C)		Discuss the importance of livestock.(C)	1		<b>2</b>

List the major agricultural crops and livestock in Pakistan (F)					<b>1</b>
---	--	--	--	--	----------

Total Frequency	4		3		<b>7</b>
-----------------	---	--	---	--	----------

**Life Sciences**

Identify major parts of a plant (root, stem,	1	Highlight the importance of plants for a	1		<b>2</b>
--	---	--	---	--	----------

leaf and flower). (C)		clean environment. (C)	
List the functions of root, stem, leaf and flower. (F)	1	Recognise the animals that live on land (including birds) are different in features from those that live in water. (C)	2
Identify different shapes of leaves found around them(C)	1	Describe and compare how the offspring of different animals grow into adults, including humans, birds, frogs and butterflies.(P)	2
Identify the roots, stems, flowers, leaves which are eaten by people. (C)	1		1
Identify the fruits which have seeds in them.(C)	1		1
Recognise that			

some plants  
grow from  
seeds while  
others grow  
from stems or  
roots(C)

1

1

Identify that  
soil, light, air  
and water are  
needed to  
grow a plant(C)

1

1

Recognise that  
plants make  
their own food  
in the presence  
of sunlight. (C)

1

1

List the animals  
they see in  
their  
surroundings  
(land and  
water). (F)

Recognise  
different  
animals and  
their young  
ones. For  
example, horse  
and foal, cat

1



sources of heat and light in their homes, schools and surroundings. (C)	1	Observe and describe how motion of an object can be changed by applying force (speed up, slow down, stop, change direction etc.) (P)	1	hardness, texture, sink/floats. (C)	2
List the uses of heat and light. (F)				Explore properties of materials with respect to elastic/non-elastic, magnetic/non-magnetic. (C)	2
Recognise that the intensity of heat and light is felt more as they come nearer to the source. (C)	1				1
Recognise that push & pull moves things fast or slow, (push and pull as a force) (C)	1				1
Recognise that greater the force, the greater the change in the motion of an	1				

object. (C)

Total Frequency	7	3	3	13
-----------------	---	---	---	----

**Earth and Space Science**

Identify the natural sources of water around themselves. (C)	1	Recognise that the planet Earth is a source of all materials we use, and many useful materials and resources come from it. (C)	1	Suggest ways to save water(C)	1	3
Recognise that some areas of Pakistan experience shortage of water. (C)	1	Recognise that natural resources are essential for survival of human beings (land, forests/plants, water, air, Sun etc.(C)	1			2
Identify the ways in which human beings waste water. (C)	1	Recognise that people manufacture different things from natural	1			2

Identify the ways in which the land is destroyed due to human activity (deforestation). (C)	1	resources to serve human needs. (C)	1							2
Total Frequency	4	Recognise the importance of water resources.	4	1						9
Overall Total	48		22	9	5			1		85

**AFFECTIVE DOMAIN**

From Lower Order Taxonomies to Higher Order Taxonomies										
Receiving	No of Times	Responding	No of Times	Valuing	No of Times	Organising	No of Times	Characterizing	No of Times	Total
<b>Discovering Self and Immediate Environment</b>										

**Total Frequency**

<b>Ethics and Values</b>									
--------------------------	--	--	--	--	--	--	--	--	--



Recognise what they say and do, can hurt others, and what others do and say, can hurt them (telling lies, making fun of others, pushing others, bullying using derogatory words etc.) (R)

1

Demonstrate ways in which they can show respect for all. (V)

1

Accept responsibility for treating others unfairly and manage their behavior accordingly. (C)

1

3

Recognise that when people apologize for their mistake they should forgive them.(R)

Identify occasions when it is important to wait for one's turn. For example, while speaking, in the school, on the bus stop, at canteen and ticketing counters etc.(C)

1

Mend their behaviour when it is proven unfair through realization.(C)

1

2

**Total Frequency** 2

1

2

5

**Responsible Citizenship**

List any three rights of the citizens (right to food, free education, protection, equality and health care).(F)	<b>1</b>	Practice respect for all places of worship and all religions.(v)	<b>1</b>	<b>2</b>
Identify masjid in their neighborhood as a place of worship for Muslims.(C)	<b>1</b>			<b>1</b>
Total	<b>2</b>		<b>1</b>	<b>3</b>
Overall Total	<b>5</b>		<b>2</b>	<b>9</b>

**PSYCHOMOTOR DOMAIN**

From Low Order Taxonomies to High Order Taxonomies														
Perception	No of Times	Set	No of times	Guided Response	No of Times	Mechanism	No of Times	Complex Overt Response	No of Times	Adaptation	No of Times	Origination	No of Times	Total
<b>Patriotism and Knowledge of the Country</b>														
Recognise and draw the flag of AJK.														

**Total  
Frequency  
Overall  
Total**

**1**

**1**

**1**

DRAFT

## NATIONAL CURRICULUM OF PAKISTAN

### General Knowledge - Grade III

#### CURRICULUM MAPPING

##### COGNITIVE DOMAIN

Low Order Taxonomies (Cognitive)						High Order Taxonomies (Cognitive)						Total
Remember	No of times	Understand	No of times	Apply	No of times	Analyze	No of times	Evaluate	No of times	Create	No of times	
<b>Discovering Self and Immediate Environment</b>												
Identify how schools, communities, and transportation have changed over time (from the given pictures) (C)	1	Recognise that present time is different from the past in terms of living style, food, communication, clothes etc.(C)	1	Practice safety measures while using electrical appliances(P)	1							3
Sequence events in a narrative in chronological order. (P)	1	Recognise the need for personal safety(C)	1									2
Identify how												

<p>schools, communities, and transportation have changed over time (from the given pictures). (C)</p>	1	<p>Explain the risk and danger associated with the use of electric appliances/ sharp objects/ fire/ strangers, water bodies and animals. (C)</p>	1	2
<p>Identify some natural disasters and ways to stay safe. (C)</p>	1	<p>Express feelings of discomfort, confusion, fear, and danger to their parents/ teachers/ guardians to stay safe from any unexpected situation. (C)</p>	1	2
<p>List the various hazards they can face at</p>	1	)		1

home (bare wires, damaged roof, broken glass, fire, scissor etc.) (F)

Total Frequency	5		4		1				<b>10</b>
-----------------	---	--	---	--	---	--	--	--	-----------

**Ethics and Values**

Identify feelings of people in different conflicting situations. (C)	1	Recognise some disagreements/conflicts that occur at home, in school and in the local community.(C)	1	Explore the ways in which people resolve conflicts/ disagreements at home and school. (P)	1				<b>3</b>
--	---	---	---	---	---	--	--	--	----------

Identify reasons for disagreements with friends and family members. (C)	1			Apply discussion and problem-solving methods to work out disagreement. (P)	1				<b>2</b>
---	---	--	--	--	---	--	--	--	----------

Total Frequency	2		1		2				<b>5</b>
-----------------	---	--	---	--	---	--	--	--	----------

**Responsible Citizenship**

Recognise that people are members of a local community(C )	1	Describe the activities that individuals perform for the welfare of the community(C)	1	Suggest ways the government and people can work together to meet people's needs in the area.(C)	1	<b>3</b>
Recognise that communities meet people's needs(C)	1					<b>1</b>
Identify ways they can demonstrate good citizenship (playing fairly, helping others, following rules, taking responsibility for one's actions, sense of ownership of public goods).(C)	1					<b>1</b>
	1					<b>1</b>

Identify key problems in their local area (shortage of drinking water, lack of health and educational facilities, poor sewerage system etc.)(C)

Total Frequency	4	1	1	6
-----------------	---	---	---	---

### Patriotism and Knowledge of the Country

Introduce Quaid-e-Azam Muhammad Ali Jinnah as the founder of Pakistan(C)	1	Discuss what they have learnt from the major events/contributions of Quaid-e-Azam Muhammad Ali Jinnah. (F)	1	2
--	---	--	---	---

Narrate the major events in the life of	1			1
---	---	--	--	---



Quaid-e  
Azam  
Muhammad  
Ali Jinnah  
(date of  
birth,  
founder of  
Pakistan, few  
major  
contributions  
, and the  
date when he  
died). (C)

1

1

Introduce  
Mohtarma  
Fatima  
Jinnah as a  
key figure in  
the  
formation of  
Pakistan(F)

1

1

Narrate the  
major events  
in the life of  
Allama  
Muhammad  
Iqbal (date of  
birth,  
national  
poet, some  
famous  
poems for

children, and  
the date  
when he  
died).(c)

1

1

Introduce  
Allama  
Muhammad  
Iqbal as a  
personality  
who  
expounded  
the idea of  
Pakistan.(c)

5

1

6

Total  
Frequency

### Goods and Services

Define the  
term  
“resources”.  
(C)

1

1

State types of  
resources:  
natural  
resources,  
human  
resources  
and capital  
resources. (F)

1

1

Identify  
natural  
resources  
(plants,

1

1

animals, water, air, land, forests and soil), human resources (farmers, builders, painters etc.), capital resources (trucks, computers, factory buildings etc.).(C)

Define the terms: goods, services, buyers and sellers. (C) 1

Identify the main goods and services of their local area. (C) 1

Describe the need for interdependence as not all goods and 1



1

1

1

services are available in their area. (C)

Describe scarcity and recognise that people make economic choices because goods and services are limited. (C)

1

1

Total Frequency

7

7

Life Sciences

Recognise that healthy living requires eating a balanced diet, keeping clean, sleeping well, and exercising regularly, drinking

1

Research and suggest the ways in which habitats can be protected. (P)

1

Compare different stages of lifespan of plants and animals (from pictures, through observation / video

1

3

clean water,  
brushing  
teeth) (C)

etc.)(C)

Identify  
certain food  
groups as  
fruits,  
vegetables,  
grains, dairy  
product,  
eggs, meat  
and dry fruit  
and their  
relative  
proportions.  
(C)

1

1

Recognise  
that certain  
diseases are  
infectious,  
and  
vaccinations  
can help  
prevent such  
diseases. (C)

1

1

Describe how  
good hygiene  
and healthy  
habits can  
control the  
spread of  
diseases. (C)

1

1

DRAFT

Recognise people who use science in their local area e.g., everyday use of science, restaurant chefs, dietitians, food manufacturers, dairy farmers. (P)

1

1

Recognize the term 'habitat'. (c)

Recognise the type of habitats for living things (polar, desert, forest, aquatic). (C)

1

1

Name plants and animals that live in each of these different habitats. (F)

1

1

DRAFT

Identify the environmental factors (temperature, light, water) that support life in a habitat. (C)

1

1

Identify the ways in which human activities affect natural habitats. (C)

1

1

Identify the changes in the lifespan of an animal and a plant. (P)

1

1

1

1

DRAFT

Total Frequency	11			1		1		<b>13</b>
-----------------	----	--	--	---	--	---	--	-----------

**Physical Sciences**

Recognise that energy is required for doing work. (C)	1	Discuss different states of water. (C)	1	Demonstrate that energy is present in all matter and in sound, light, and heat.(C)	1	Inquire that sources of energy are used for many things (move an object, heating, lighting, transportation, electric appliances, etc.). (F)	1	<b>4</b>
Identify	1							



natural sources of energy (sun, wood, flowing water, wind, coal, oil, gas). (C)

2

Explore construction of simple circuit(C) 1

Identify materials as either solids, liquids or gases. (C)

1

1

Recognise basic differences between states of matter(C)

1

1

Identify how we use electricity and safety measures(C)

1

1

Recognise the basic components of a simple circuit: cells, wires, and bulb(C)

1

1



Total Frequency	6	1	1	2	10
-----------------	---	---	---	---	----

**Earth and Space Science**

Recognise that heat and light of the Sun helps to sustain life on Earth which is the only known planet where life exists. (C)	1	Explain that our solar system is made of a large star and eight planets. (C)	1	Suggest ways to reduce pollution (3 r's) (F)	1	Explain how the rotation of the Earth causes day and night(C)	1	4
---	---	--	---	--	---	---	---	---

Identify that on Earth, the direction of sunrise is 'East' and the direction of sunset is 'West'. (C)	1	Predict what would happen if natural resources were all used up.(M)	1	Suggest ways to protect the endangered animals. (C)	1			3
---	---	---	---	---	---	--	--	---

Identify South and North with respect to East and	1							1
---	---	--	--	--	--	--	--	---

West,  
namely,  
South and  
North. (C)

1

1

Name the  
eight planets  
of solar  
system(F)

Name places  
towards  
North, South,  
East, and  
West of the  
school/home  
. (F)

1

1

Describe the  
formation of  
shadows(C)

1

1

Recognize  
that the size  
and direction  
of the  
shadow can  
be used to  
estimate  
(guess)  
time(C)

1

1

1

1

Define the term pollution(C)

List different types of pollution (land, water, air, noise). (F)

Identify the endangered animals of Pakistan (Indus dolphin, markhor, blackbuck etc.). (C)

Identify animals, which are extinct (dinosaurs, etc.) (C)

Total 11

Frequency

Overall Total 50

1

1

1

2

2

1

16

10

8

4

72

AFFECTIVE DOMAIN

From Lower Order Taxonomies to Higher Order Taxonomies										
Receiving	No of Times	Responding	No of Times	Valuing	No of Times	Organising	No of Times	Characterizing	No of Times	Total
Discovering Self and Immediate Environment										
Identify feelings of people in different conflicting situations. ( )				Express feelings of discomfort, confusion, fear, and danger to their parents/ teachers/ guardians to stay safe from any unexpected situation.(V)						1
Total Frequency	1			1						2
Overall Total	1				1					2