CURRICULUM GRAPHIC DESIGNING (I & II) GRADE IX-X

2020



GOVERNMENT OF PAKISTAN Ministry Of Federal Education and Professional Training ISLAMABAD

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Introduction

Graphic designing is the art, profession and academic discipline whose activities consist in projecting visual communications intended to transmit specific messages to social groups, with specific objectives. Therefore, it is an interdisciplinary branch of design whose foundations and objectives revolve around the definition of problems and the determination of objectives for decision-making, through creativity, innovation and lateral thinking along with digital tools, transforming them for proper interpretation. This activity helps in the optimization of graphic communications. It is also known as visual communication design, visual design or editorial design.

The role of the graphic designer in the communication process is that of encoder or interpreter of the message. She works on the interpretation, ordering and presentation of visual messages. The design work always starts from a client's demand, a demand that ends up being established linguistically, either orally or in writing, that is, that graphic design transforms a linguistic message into a graphic manifestation.

Graphic design has, as a field of application, different areas of knowledge focused on any visual communication system. For example, it can be applied in advertising strategies, or it can also be applied in the aviation world. In this sense, in some countries graphic design is related as only associated with the production of sketches and drawings, this is incorrect, since visual communication is a small part of a huge range of types and classes where it can be applied.

Given the rapid and massive growth in information sharing, the demand for experienced designers is greater than ever, particularly because of the development of new technologies and the need to pay attention to human factors beyond the competence of the engineers who develop them.

Rationale

Well-designed pieces of graphic design enable its creators to boost up sales, establishing its name and earning goodwill in the market, and thereby maximizing the profitable base of the business. A well-crafted design of graphics seeks to attract the attention of a large amount of people. Without a good design the company may not be able to highlight its product and increase its customer-base on the site which ultimately affects the business and profitability of the company.

Aims

- Equip learners with a set of transferable formal and conceptual tools for "making and communicating"
- Make the learner skilled enough to fulfill the industry requirement
- Give the learners enough knowledge, skills, and courage to startup their own business

• Develop skills, promote personal business and entrepreneurship

Objectives

- Familiarize the students with basic principles and fundamentals in visuals art and design.
- Able to create effective and innovative designs to convey desire idea.
- Develop basics skills using tools and theory using in design process.
- Understand creative process, develop techniques and method of creative problem solving.
- Create communication solutions that address audience and context by recognizing the human factors that determine design decisions.

Grade-IX

Grade 171		es and Students' Learning Out	comes							
		ledge, Skills and Attitude Chapter 01 uction to Computing	1							
T= 4, P= 9, Total=13										
Content	Students' Learning Outcome	Activities/Practical	Duration	Tools	Workpla ce					
Basic Concepts of Computer	The student will be able to: Define Computer Define types of Computer Describe importance of computer Describe usage of computer Know about components of computer and their applications	Group presentation on components of computer and their applications Demonstration of Hardware Components	01 Periods(T) 03 Periods(P)	Computer and its accessories	Lab					
Windows Operations	Define operating system Working with Files and Folders (copy, move, delete, recycle bin, personalize desktop etc.) Internet browsing Searching from internet Downloading from internet Sending / receiving emails	Create, Copy and Move files and Folders Delete and restore the file and folder from recycle bin	01 Periods(T) 01 Periods(P)	Computer and its accessories, office software	Lab					
MS Office	Define MS Office Describe applications of MS Office (Word, PowerPoint Excel) Knowledge about working in MS word Knowledge about working in PowerPoint Knowledge about working in MS word	Prepare document on MS word Prepare presentation on components of computer by using power point Prepare an excel sheet on class data (Student, Furniture, Number of computers)	02 Periods(T) 05 Periods(P)	Computer and its accessories, office software	Lab					
	Doc	Chapter 02	_							
	Basi	cs of Graphic Design	1							
		2, P=09, Total= 11								
Content	Students' Learning Outcome	Activities/Practical	Duration	Tools	Workpla ce					
Introduction & Scope of Graphic Designing	The student will be able to: define graphic designing describe importance of graphic designing	Group presentation on graphic designing concepts	01 Periods(T) 03 Periods(P)	Computer and its accessories	Lab					

	•	understand industrial usage of graphic designing describe opportunities for employment and advancement in graphic designing field	•	Demonstration on scope of graphic designing			
Graphic Software and Installation	•	describe graphic software Adobe photoshop Adobe illustrator Adobe XD In Page Corel draw adobe in design learn about installation steps of each software	•	Install graphic software under supervision of teacher	01 Periods(T) 06 Periods(P)	Computer and its accessories, graphic software	Lab

Chapter 03 Adobe Photoshop-I

T= 13, P= 21, Total= 34

T= 13, P= 21, Total= 34					
Content	Students' Learning Outcome	Activities/Practical	Duration	Tools	Workpla ce
Introduction to Adobe Photoshop	The student will be able to: define adobe photoshop describe applications of photoshop explain basic tools of adobe photoshop (selection tools, burn tool, history, pen tools, smudge gamut, crop tool, blur, dodge and sponge etc. describe popular file formats in photoshop(jpeg,gif & png etc.)	Group presentation on basic tools and formats of adobe photoshop.	02 Periods(T) 04 Periods(P)	Computer and its accessories, office software	Lab
Work area concept	define home screen understand workspace understand about user interface of photoshop describe properties of different tool describe about panels and panel location define how to import and export files understand concept of save files for web and print	Create a new document, and import 2 images and change the background of images Save the file for web and print	02 Periods(T) 03 Periods(P)	Computer and its accessories, software	Lab
Installation and Use of Presets, Brushes & Fonts	 define presets describe brushes define type faces and font learn installation of new brushes and fonts learn about usage of presets, brushes, and fonts 	 Download and install new brushes and Fonts Make an artistic background by using newly installed brushes and fonts 	02 Periods(T) 03 Periods(P)	Computer and its accessories, software	Lab
Painting with the mixer brush	 understand mixer brush know about brush setting learn about mixing of colors describe color mixing with photograph explain painting and mixing colors with brush presets 	Apply mixer bush on provided image.	02 Periods(T) 03 Periods(P)	Computer and its accessories, software	Lab
Working with Camera raw	describe camera raw understand advance color correction learn techniques of using camera raw	Adjust color tone, shadows and highlights of an image using camera raw	02 Periods(T) 02 Periods(P)	Computer and its accessories, software	Lab
Layer Basics	define layers understand layer panel	Make a composition using multiple layers,	02 Periods(T) 03 Periods(P)	Computer and its accessories, software	Lab

	 know about arrangement of layers learn about grouping of layers understand layer style comprehend updating the layer style understand about the adjustment layer understand smart objects 	use proper naming convention. Import an image, Apply smart object on it.			
Quick fixing and Retouching	 define snapshot improvement adjust facial features with liquify blur a background understand panorama understand image cropping and slicing define working of content-aware move tool define perspective adjustment of an image 	Import an image, improve facial features using liquefy, blur the background, save the file in different format.	01 Periods(T) 03 Periods(P)	Computer and its accessories, software	Lab
		Chapter 04			

Chapter 04 Adobe Illustrator-I

T = 10, P = 21, Total = 31

Content	Students' Learning Outcome	Activities/Practical	Duration	Tools	Workp lace
Introduction of Adobe Illustrator	The student will be able to: define adobe illustrator describe uses of adobe illustrator define home screen understand workspace configure the workspace understand art boards Explore default presets in illustrator	Create a custom size art board.	02 Periods(T) 02 Periods(P)	Computer and its accessories, software	Lab
Basic Tools & Properties	enlist basic tools of adobe illustrator describe selection tool vs. direct selection tool understand shapes, stroks and fill define pen tool understand pathfinder tool understand shape builder tool use eyedropper tool understand align panel understand pencil and paintbrush tool	Draw a Dog. Tools: Rectangle, Ellipse and Polygon Practice – Shape builder Tool Practice image tracing of Fox / bunny using Pen tool	02 Periods(T) 07 Periods(P)	Computer and its accessories, software	Lab
Portrait & landscape illustrations	define portrait & landscape illustrations understand align panel understand pathfinder tool	Make a portrait/landscape illustration of an image Make different shapes using pathfinder	02 Periods(T) 06 Periods(P)	Computer and its accessories, software	Lab
Rulers	know about techniques of rulers, grid, guides and measure tool define smart guides	Set objects by using rulers, grids, guides and measure tools	02 Periods(T) 02 Periods(P)	Computer and its accessories, software	Lab
Clipping Mask	define clipping mask describe use of clipping mask learn about technique of clipping mask Export files in different formats	Clip an image using different shapes.	02 Periods(T) 04 Periods(P)	Computer and its accessories, software	Lab

Chapter 05

		Adobe XD-I			
	T	= 03, P = 15, Total = 18			
Content	Students Learning Outcome	Activities/Practical	Duration	Tools	Workpla ce
Basic Concept of Adobe XD	The student will be able to: define adobe XD describe purpose of adobe XD define home screen understand workspace Create and use artboards define design view understand prototype view	Create an artboard Choosing presets for iPhone	02 Periods(T) 05 Periods(P)	Computer and its accessories, software	Lab
Prototype project	Learn fundamental aspects of adobe XD Work with user interface and wireframe kits Understand the usage of masks Work with point and are type Create and edit vector shapes use the repeat grid function Create and work with symbols Export assets Use comments to get feedback	Design a multipage responsive UI for mobile app and export it as per requirement.	01 Periods(T) 10 Periods(P)	Computer and its accessories, software	Lab
		Chapter 06 CorelDraw-I			
	T= (03, P= 12, Total=15			
Introduction of CorelDraw	The student will be able to: Define CorelDraw Describe applications of CorelDraw Understand the difference between vector image and bitmap image Define resolution	Presentation on introduction of CorelDraw	01 Periods(T) 03 Periods(P)	Computer and its accessories, software	Lab
Basic Tools	Define home screen Understand workspace Configure the workspace Understand CorelDraw interface Describe viewing modes and customizing options Create and manipulate objects Understand drawing, outline, fill, and transform objects Understand usage and installation of fonts Use layers and special effects Bitmap and vector effect Letter head and data merge Use tools, palettes, symbols, clipart, and work with bitmaps Save, and print design layouts Apply styles and templates Create animations, sprites, and interactive movies	Create a three-panel brochure using photographs for a student business Create slides of presentation using script and macros to create a calendar	02 Periods(T) 09 Periods(P)	Computer and its accessories, software	Lab
		Chapter 07			
	A	dobe InDesign-I			

T= 08, P= 18, Total= 26

Introduction to Adobe InDesign Master Page Style, Text & Type The	Understand InDesign workspace	•	Design a 2-page document Design a 1-page activity related to classroom Design a Magazine Cover using master page setting.	02 Periods(T) 03 Periods(P) 02 Period (T) 05 Period (P)	Stationary items, multimedia, computer system/laptop	Classroo m/Lab
Style, Text & Type	Understand hierarchy of master pages Define page sizes Define master page creation and formatting	•	Cover using master	` '	•	
Type	numbering Understand incorporation of text and images in master frames					
•	Define text formation Understand text frame creation Understand (font, character attributes, line spacing & paragraph attributes) Style loading from another document Define how to organize styles into group	•	Design a 5 pages magazine by using different styles, text, and formats.	02 Periods(T) 05 Periods(P)		
Working with Multipage	Understand multipage document organization Know application of page	•	Add page number on the previous 5 pages magazine	02 Periods(T) 05 Periods(P)		

Chapter 08 Communication Skills

	T= 17, P= 15, Total=32								
Content	Students' Learning Outcome	Activities/Practical	Duration	Tools	Workpla ce				
Introduction to communication	The Student will be able to: Define communication Learn about process of communication Understand about importance of communication for graphic designing and media production Know about types of communication Comprehend about level of communication (intrapersonal and interpersonal) Understand about barriers (physical, perceptual, emotional, language, gender and cultural) of communication	Group presentation on process of communication for graphic designing and media production Group presentation on barriers of communication for graphic designing and media production	08 Periods(T) 06 Periods(P)	Computer and its accessories, software	Lab				
Verbal Communication	Describe verbal Communication Learn about types of verbal communication Describe purpose of written skills Knowledge of data presentation Learn about email(business) writing	Prepare a template for email writing for business proposal Prepare a template for communication with client for project. Write a comprehensive welcome note for your client.	06 Periods(T) 06 Periods(P)	Computer and its accessories, software	Lab				

Non-Verbal communication	Define non-verbal communication Learn about components of non-verbal communication Learn about body language Understand personal presentation (clothing style etc.) Know about audience awareness (online, face to face)	in details.	03 Periods(T) 03 Periods(P)	Computer and its accessories, software	Lab
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Grade-X

		nes and Student's Learning Out wledge, Skills and Attitudes Chapter 01 InPage	comes			
Content	T= Students' Learning Outcome	03, P= 06, Total=09 Activities/Practical	Duration	Tools	Workpla	
Introduction to InPage	The student will be able to: Define InPage Describe purpose of InPage Define Home Screen Describe the menu bar, property bar, status bar	Create a page with default setting	02 Periods(T) 01 Periods(P)	Computer and its accessories, software	ce Lab	
Basic Concepts of InPage	1 1 2	Write an application to HOD for sick leave in Urdu. Prepare a document having tables, bullets, images, columns, etc. as per requirement	01 Periods(T) 05 Periods(P)	Computer and its accessories, software	Lab	
		Chapter 02 Production and Prin	nting			
		T = 10, P = 16, Total = 3	0			
Content	Students Learning Outcome	Activities/Practical	Duration	Tools	V	Vorkplace
Introduction to Production and Printing	The student will be able to: define production and printing understand printing requirements define how to prepare files for printing Learn about resolution. describe color management setting, image proofing on screen	 Prepare a brochure for printing using CMYK mode. Design a letterhead for a company. 	01 Periods(T) 04 Periods(P)	Computer a its accessori software	es,	
Color Setting for printing	differentiate CMYK and RGB convert image to CMYK for commercial printing convert image to different formats	Prepare PS file for printing and for uploading on social media as per required color mode.	01 Periods(T) 02 Periods(P)	Computer ar its accessori software		

Papers in Printing Process	 Define types of papers. Size of paper for different print media. Learn about paper weightage used for different print media. Learn about color printing papers 	Explore different type of papers in nearby market.	01 Periods(T) 02 Periods(P)	Computer and its accessories, software	Lab
Portfolio	(mate, glossy).Learn about portfolioLearn about branding	Design branding collaterals as per requirement	01 Periods(T) 02 Periods(P)	Computer and its accessories, software	Lab

	Chapter 03 Adobe Photoshop-II								
	T = 12, P = 21, Total = 33								
Content	Students' Learning Outcome	Activities/Practical	Duration	Tools	Workplace				
Mask and channels	Student will be able to: understand working with masks and channels understand quick mask define manipulation of images with puppet warp, vanishing point define alpha channel to create a shadow	Manipulate an image using mask and channels.	01 Periods(T) 02 Periods(P)	Computer and its accessories, software	Lab				
Color theory	define primary, secondary, and tertiary colors understand color harmony understand color combinations and meaning of colors understand RGB vs CMYK	Make a group presentation on types of colors with Pictorial representation	02 Periods(T) 02 Periods(P)	Computer and its accessories, software	Lab				
Typography	 understand complete typography techniques according to products and industry requirements define major classifications of typefaces understand clipping mask from type. define warping print type, type on a path, paragraph of type, type on a rectangle and vertical test. enlist characteristics of the various families of typefaces identify the anatomical aspects of type. 	 Write a paragraph on school Type your name on different shapes. Type on an image by using clipping mask. 	01 Periods(T) 02 Periods(P)	Computer and its accessories, software	Lab				
Vector drawing technique	 understand bitmap image and vector graphics define path and pen tool understand use of custom shapes and importing a smart object. understand color and depth to a shape using layer style 	Draw shapes with pen tool	01 Periods(T) 03 Periods(P)	Computer and its accessories, software	Lab				
UI Designing	Know Game, mobile, and website UI designing Understand Different side scrolling parallax images Understand 2D game art and icons. Understand website navigation bar, slider sizes, and product images etc. creation	•	01 Periods(T) 02 Periods(P)						

Advance Compositin g	 learn about low and high resolution understand layer arrangement, smart filters, painting a layer, adding a background, using the history panel to undo edits and upscaling low-resolution images. 	sn a l • Uj re:	ainting a layer using mart filters, and add background in it. pscale a low- solution image into gh resolution.	01 Periods(T) 02 Periods(P)	Computer and its accessories, software	Lab
Editing video and Gifs	 understand about timeline panel, creating new video project and animate text with key frame. learn effects, transitions, audio effects, muting unwanted audio and rendering video. recognize about gif timeline 	te	reate a video, apply xt animation and v as GIF.	02 Periods(T) 02 Periods(P)	Computer and its accessories, software	Lab
Preparing files for web	 understand layer groups to create button graphics comprehend automation of multistep task know designing with artboards 		esign a web layout or your school.	01 Periods(T) 02 Periods(P)	Computer and its accessories, software	Lab
Infographics	 define infographics understand text and image manipulation learn to exhibit the idea in different ways. 		esign a CV using fographic concepts.	02 Periods(T) 03 Periods(P)	Computer and its accessories, software	Lab

	Chapter 04 Adobe Illustrator-II							
		T = 07, P = 24, Total = 30						
Content	Students' Learning Outcome	Activities/Practical	Duration	Tools	Workplace			
Logo design and Golden ratio	The student will be able to: understand basic logo concepts define logo types describe golden ratio	Design a logo by using golden ratio Design a Monogram for your school	02 Periods(T) 07 Periods(P)	Computer and its accessories, software	Lab			
Vector and character design	understand basic vector concept know vector tracing define flat character designing	Design a human character.	02 Periods(T) 05 Periods(P)	Computer and its accessories, software	Lab			
CC Libraries	understand downloading assets from cc libraries learn installation of assets from cc libraries	Download and install brushes and font libraries.	01 Periods(T) 05 Periods(P)	Computer and its accessories, software	Lab			
Typography	understand complete typography techniques according to products and industry requirements define major classifications of typefaces understand clipping mask from type. describe warping print type, type on a path, paragraph of type, type on a rectangle and vertical test. enlist characteristics of the various families of typefaces classify the anatomical aspects of type.	Write a paragraph on school and type on different shapes. Type on an image by using clipping mask.	01 Periods(T) 05 Periods(P)	Computer and its accessories, software	Lab			
Stationary Design	define stationary components learn to design business card, brochure, letter head, and flyers etc. Export files in different formats	Design a complete Stationary for school. Design Business card, brochure, letter Head, and Flyer for a business	01 Periods(T) 05 Periods(P)	Computer and its accessories, software	Lab			

		Chapter 05			
		Adobe XD-II			
		T = 8, P = 15, Total =	= 23		
Content	Students' Learning Outcome	Activities/Practical	Duration	Tools	Workplace
Adobe XD Overview	The student will be able to: Understand XD Interface Define artboard and grid usage Understand import and export	Create multiple art boards to design UI kits	02 Periods(T) 02 Periods(P)	Computer and its accessories, software	Lab
Advance Adobe XD	Understand layouts, Designs, creation, and preview Using UI kits Define add and edit artboard Understand Grids to set columns and margins. Understand designing landing pages with XD and PS.	Design a Game UI with XD.	02 Periods(T) 04 Periods(P)	Computer and its accessories, software	Lab
UI Designing	Understand importing graphics, text and facts, multiple screen layouts for games, mobile and web Using grids repeating elements Explain single interaction, content scrolling and record an interactive prototype.	Design a Website UI with XD.	02 Periods(T) 06 Periods(P)	Computer and its accessories, software	Lab
Responsive layout grid	Describe purpose of layout grid Understand making of responsive layout in Adobe XD Export files in different formats	Design a responsive single layout using grids	02 Periods(T) 03 Periods(P)	Computer and its accessories, software	Lab
		Chapter 06 Adobe InDesign-	II		
		T = 07, P = 12, Total	= 19		
Content	Students' Learning Outcome	Activities/Practical	Duration	Tools	Workplace
Adobe InDesign Overview	The students will be able to: define InDesign understand InDesign workspace understand pages panel describe paragraph styles, character styles and object styles	Design a 10 pages fashion magazine by using different style, text, and format	01 Periods(T) 03 Periods(P)	Computer and its accessories, software	Lab
Working with Graphics	define InDesign graphics, how to handle InDesign graphics define working and customizing the link panels, locate missing images, and adding graphic layout. define auto fitting, using adobe bridge to import graphics, multiple graphics using mini bridge, object style, wrapping text, clipping path and alpha channels understand to import PS file	Design a magazine by customizing the link panels, locate missing images, and adding graphic layout.	02 Periods(T) 03 Periods(P)	Computer and its accessories, software	Lab
Working with tables	understand table creation, copy/paste information into tables, converting text to table and table to text.	Design a table of content for a book.	02 Periods(T) 04 Periods(P)	Computer and its accessories, software	Lab

	 understand formation of row/column, and borders know formation of cells, text alignment, merging cells, and header cells. comprehend working with tables in story editors. 				
Color documents	 comprehend coloring to frame and text, live corner effects, new swatch creation, and tint reduction explain gradient (radial/ linear) know use of eyedropper tool to copy frame attribute Export files in different formats 	Make a colorful magazine keeping in mind color harmony	02 Periods(T) 04 Periods(P)	Computer and its accessories, software	Lab

		Chapter 7 Freelancing			
		T= 04, P= 11, Total=15			
Content	Students' Learning Outcome	Activities/Practical	Duration	Tools	Workplace
Introduction to freelancing	The student will be able to: define freelancing describe importance of freelancing enlist top freelancers worldwide in graphic designing and media production	Prepare a list of top Freelancers worldwide in graphic designing and media production	02 Periods(T) 02 Periods(P)	Computer and its accessories, software	Lab
Types of Freelancing	 define offline freelancing define online freelancing describe platforms of freelancing 	Presentation on types of freelancing	02 Periods(T) 03 Periods(P)	Computer and its accessories, software	Lab
Portfolio	Understand about portfolio Know about creating Facebook pages/ Instagram account/ Bedance profile / Flicker profile	Visit the profiles of top-rated freelancer			
Freelancing Profiles	 Learn about creating profile on different freelancing platforms Understand gig creation in Fiverr Understand Niche selection Understand the process of bidding 	Presentation on freelancing profile Creation on different freelancing platform Create gigs on Fiverr Create Fiverr / Upwork profiles under observation of teacher.	02 Periods(T) 04 Periods(P)	Computer and its accessories, software	Lab
		Chapter 08			
		Entrepreneurship			
Cartant		T = 09, P = 10, Total = 19	D. office	m I.	XX7 . 1 . 1
Content	Students' Learning Outcome	Activities/Practical	Duration	Tools	Workplace
Introduction to Entrepreneurs hip	The students will be able to: define entrepreneurship know key concepts of entrepreneurship understand main component of entrepreneurship learn types of entrepreneurship	Group discussion on entrepreneurship	03 Periods (T) 03 Periods (P)	Multimedia Presentation and virtual exposure	Classroom
Feasibility and Business Plan	know how to identify business opportunity.	Design a business plan keeping in view skills of cosmetology	03 Periods (T) 04 Periods (P)		Classroom

	 know how to develop feasibility and business Plan for startup. prepare a business plan. 					
Marketing and Marketing Mix	 learn about concept of marketing and marketing mix understand 6 P's of marketing calculate costing and pricing 	•	Develop a marketing strategy for your business model developed in previous activity	03 Periods (T) 03 Periods (P)	Multimedia and White Board	Classroom

Assessment and Evaluation

The technical subject curriculum for matric tech emphasizes on a classroom environment in which students will be encouraged to learn technical processes and knowledge of graphic designing within meaningful contexts. It is important that assessment strategies reflect this emphasis and are consistent in approach. An assessment program, which provides regular feedback, and is part of the learning process, is important to both student and teacher. Feedback tells students if they demonstrate understanding of concepts and if their actions display expected performance levels for inquiry, decision making, and problem solving. Regular feedback inspires confidence in learning graphic designing and becoming technically literate.

Therefore the assessment of students' learning must be aligned with curriculum outcomes. The curriculum provides suggestions for developing student learning across the general curriculum outcome areas: knowledge, skill and attitude. These outcomes describe a balance of inquiry problem solving, and decision making, within a suggested social-environmental context, for a given set of technical knowledge.

Incorporating assessment into the learning process

Assessment of students' learning must be part of every teaching and learning experience. Students should learn to evaluate their own learning. Traditional student testing programs, which rely on final, one-time evaluations, provide data that is of limited use to students as they construct knowledge. Meaningful assessment, like meaningful learning, must be authentic and connected to real-life problems.

A constructivist approach to learning and teaching has profound implications for the way learning is measured. Traditional classroom practice relies heavily on paper-and-pencil tests to measure students' learning and ability to apply knowledge. Learning is a processor connecting prior understanding with new learning. Consequently, an assessment strategy that measures the acquisition of facts and elements cannot serve a constructivist model.

To allow students to construct learning in the classroom through authentic experiences, assessment must be:

- Valid, leading to attainment of multi-dimensional technical learning
- Open-ended, allowing for discussion and revision of new understanding
- Tolerant of divergent thinking and promote the notion of no "one right answer"
- Presented in alternative modes, not just paper-and-pencil responses to limiting questions
- Designed to promote analysis, comparison, generalization, prediction, and modification
- Capable of promoting collaboration and team effort in demonstration of competence; and ongoing and cumulative, showing development over time.

Types of assessment

Assessment serves many important purposes. Some of them are given below:

- Diagnostic (to plan instruction to fit the student's prior knowledge)
- Formative (to improve performance and adapt instruction)
- Summative (to report on final performance)

Classroom assessment

The primary purpose of classroom assessment is not only to evaluate and classify students' performance but also to inform of teaching methods and learning environment, and to monitor student progress in achieving year-end learning outcomes. Therefore, classroom assessment is used for various purposes:

- Assessment as Learning
- Assessment for Learning
- Assessment of Learning

Traditionally, the focus of classroom assessment has been on assessment of learning (summative assessment). Assessment for learning has been used only for diagnostic processes and for feedback. In order to enhance learning of all students, the role of assessment as learning must provide an opportunity to students whereby they become critical and analysts of their own learning.

Assessment strategies

Teachers learn about students' progress not only through formal tests, examinations, and projects, but also through moment-by-moment observation of students. To assess students' knowledge, skills, competencies and attitudes, teachers require a variety of tools and approaches, such as:

- **Selected Response**: Multiple-choice, matching, completion tests, etc.
- Self-constructed Response Questions: Fill-in-the-blank phrase(s), essay (restricted and extended response), reports, procedures, explanations, short answer sentence(s), paragraph(s), label diagram, and graph/table, etc.
- **Performance and Activity Based Assessment:** Portfolios, presentation, illustrations, lab, workshops, workstations, field visits, demonstration, process skills, enactment, project, group discussion, exhibition, table, graph, portfolios, etc.
 - Note: Rubrics for all assessment tools must be prepared before administration.
- Communication, Attitudes and Values Assessment: Oral questioning, observation, interview, conference, process description, checklists, rating scales, anecdotal records etc.

Students' self-assessment

Students recognize the relationship between content achievement, skill proficiency, and assessment opportunities by setting their sights on their own demonstration. They can do self-assessment if they are provided with the knowledge-related checklists as well as checklists specific to applications and attitudes. Students assume the role of a researcher and use critical thinking skills as they find facts and make inferences to reach more conclusions about their learning. They are not receiving information passively and then simply giving it back to the teacher after memorizing it. Assessment should allow students to monitor their progress in various technical skills: initiating and planning; performing and recording; analyzing and interpreting; communication and teamwork. The curriculum calls for students to be actively involved in their learning, using the tools of dress making during classroom, laboratory, and workshop activities.

Quality in assessment

Assessment of professional and vocational learning must change as technical instruction moves from a focus on facts to a focus on in-depth understanding of major concepts and processes. Whereas the Quality Assessment will have the following major objectives:

- Measurement of what students should know and are able to do according to the Learning Outcomes
- Objective verification of the application of technical principles to familiar and unfamiliar situations; and
- Alignment with the Learning Outcomes and the Teaching/Learning Strategies.

Therefore, assessment and evaluation of the students' learning of technical aspects according to predetermined objectives and learning outcomes will ensure the quality of their academic achievements.

CONSTRUCTION OF TEST ITEMS

Written test items (selected response and creative response) should adhere to the following criteria:

- Items should be clearly written according to domain and depth of concept.
- Each test items should be written on the understanding level of learners.
- Test items should cover what learners have had opportunities to learn.

Too frequently, these test items measure students' gains in recall of factual information. There are other relevant facts for students to acquire. These are higher levels of thinking and competency that students should also develop.

These test items should measure students' achievement in:

- Understanding basic technical education concepts of graphic designing and acquired learning;
- Evaluating contents in terms of criteria or learning outcomes
- Problem-solving skills
- Analytical and creative thinking
- Positive attitudes developed toward methods of thinking
- Ability to work together with others
- Relevant concepts and generalizations developed
- Ability to manipulate and utilize techniques and technical equipment
- Understanding the concepts of design development
- Developing the software commands

Guidelines for Writing a Textbook

A textbook is an important teaching and learning resource and one of the most extensively used resources in classrooms. To reflect national needs and aspirations the needs and aspirations, the textbooks should be written in accordance with this curriculum. This curriculum meets not only the general aims and objectives but also fulfills the specific requirements of the individual subject. As the textbook serves as a framework for teaching, the author/authors should consider the following features:

- A textbook must include an introduction to the textbook, explaining how to use the textbook
- The textbook must be in line with the national curriculum, covering all SLOs of each content.
- Content and illustrations must be culturally, contextually and age appropriate.
- All text and material must be accurate, up-to-date and error-free.
- The continuity of the concepts, their integration and logical development should be ensured.
- Horizontal and vertical overlapping of the concepts should be avoided.
- The textbook should be informative and interactive with questions to be put at suitable intervals to provoke the students to think.
- The language used should be simple, clear, straight forward, unambiguous and easily comprehensible by the students of the particular level.
- Simple questions may be asked within the chapter, which requires students to recall, think, and apply what they have just learnt as well as to reinforce the learning of the concepts and principle.

- The examples and applications should be from everyday life and be supportive of our cultural values.
- Photographs and illustrations should be clear, labeled and supportive of the text. Tables, flow charts and graph may be given wherever needed.
- Key points at the end of each chapter should provide a summary of the important concepts and principles discussed in the chapter.
- End-of-the-chapter exercises must include a variety of assessment styles based on levels of Bloom's Taxonomy. These should encourage students to think, develop skills, and use information for a variety of purposes.
- Textbooks should be free from all kinds of biases including, gender, religion, occupation, social background etc.
- To make the students self-learner use of IT based resources may be encouraged. Relevant internet links and other online resources may be included.
- Glossary of the new vocabulary must be included.

Guideline for planning and writing a chapter

The textbook author may decide the titles of each chapter and can choose to cover students' learning outcomes (SLOs) from any themes in developing the content of the chapter. The textbook author must also keep in mind that a number of SLOs cannot be addressed in the text (as if this is done it would lead students to simply memorize the text and not serve the realization of the curriculum). These SLOs could be realized through questions and practical activities within and at the end of the chapter exercises.

- Learning outcomes must be given at beginning of each chapter.
- Decide on key ideas, facts, concepts, skills and values that can be developed.
- Illustrations must clearly convey the desired concept.
- Activities must demand from students to do inquiry and problem solving according to grade level.
- Ensure that the content is up to date, accurate and developmentally appropriate.
- Contents must be in line with chapter outcomes.
- Language must be consistent, culturally appropriate and grammatically correct (as if talking to a group).
- Language must engage and hold reader's attention.
- Recall previous learning, where possible.
- Structure the writing so that the sentence is simple, paragraphs deal with single ideas etc.
- Interesting information in the form of tidbits, fact file, point to ponder etc. must be given.
- Write a summary/concept map at end of each chapter, reviewing key knowledge and skills.
- End-of-chapter exercises
- Recall and integrate previous learning
- Engage students and develop their creativity
- Move from lower to higher order thinking
- Focus on multiple intelligences
- Keep the text contextually relevant in line with local teaching and learning.
- Provide website links for further research

Guidelines for Writing Learner Workbook

Workbooks are books that contain writing activities and exercises that build upon each chapter in the textbook. Workbook exercises help students to develop conceptual understanding of the concepts dealt with in the text, to develop skills and to apply knowledge to new situations. Basic features of a workbook A workbook should have:

- Various exercises and activities for each chapter, topic, subtopic.
- Exercises and activities that will enable student to develop and practice the content knowledge, skills and higher order thinking.
- Accurate and variety of exercises.
- Clear illustrations/ examples/ explanations to show what students are supposed to do, and/or what product looks like.
- Exercises and activities with a variety of purposeful, stimulating, challenging and innovative items to encourage students to review and practice the knowledge and skills they have learnt.
- Exercises that include both constructed and restricted response items.
- Activities, which requires readily available, acceptable, and affordable materials and resources.

Basic Requirements for Lab (Tools/Equipment)

S. No.	Items
1.	Computer System
2.	Internet Connection
3.	Web Browser
4.	Search Engines
5.	Internet or Intranet Connectivity
6.	UPS
7.	Operating System (Windows,Linux)

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