Competency Based Learning Materials

(CBLM)

Competency Based Training and Assessment (CBT&A) Methodology

Level-5

Module: Developing Digital Learning Materials

Code: CBLM-OU-TAM-09-L5-EN-V1

National Skills Development Authority
Prime Minister's Office
Government of the People's Republic of Bangladesh

Copyright

National Skills Development Authority
Prime Minister's Office
Level: 10-11, Biniyog Bhaban,
E-6 / B, Agargaon, Sher-E-Bangla Nagar Dhaka-1207, Bangladesh.
Email: ec@nsda.gov.bd
Website: www.nsda.gov.bd.
National Skills Portal: http:\\skillsportal.gov.bd

This Competency Based Learning Materials (CBLM) on "Developing Digital Learning Materials" under the CBT&A Methodology for Trainers &Assessors, Level-5 qualification is developed based on the national competency standard approved by National Skills Development Authority (NSDA)

This document is to be used as a key reference point by the competency-based learning materials developers, teachers/trainers/assessors as a base on which to build instructional activities.

This Competency Based Learning Materials is a document for the development of curricula, teaching and learning materials, and assessment tools. It also serves as the document for providing training consistent with the requirements of industry in order to meet the qualification of individuals who graduated through the established standard via competency-based assessment for a relevant job.

This document has been developed by NSDA in association with industry representatives, academia, related specialist, trainer and related employee.

Public and private institutions may use the information contained in this CBLM for activities benefitting Bangladesh.

List of Abbreviations

CS	-	Competency Standard
ISC	-	Industry Skills Council
NSDA	-	National Skills Development Authority
NSQF	-	National Skills Qualifications Framework
BNQF	-	Bangladesh National Qualifications Framework
OSH	-	Occupational Safety and Health
PPE	-	Personal Protective Equipment
SCVC	-	Standards and Curriculum Validation Committee
STP	-	Skills Training Provider
SOP	-	Standard Operating Procedure
TNA	-	Training Need Analysis
FGD	-	Focus Group Discussion
KIIs	-	Key Informant Interviews
UoC	-	Unit of Competency
EC	-	Executive Committee
CBT&A	-	Competency based Training & Assessment
CBC	-	Competency based Curriculum
CAD	-	Course Accreditation Document
CBLM	-	Competency Based Learning Materials
OER	-	Open Educational Resources
VR	-	Virtual Reality
AR	-	Augmented Reality
TPACK	-	Technological Pedagogical Content Knowledge

How to use this Competency Based Learning Materials (CBLMs)

The module, Developing Digital Learning Materials contains training materials and activities for you to complete. These activities may be completed as part of structured classroom activities or you may be required you to work at your own pace. These activities will ask you to complete associated learning and practice activities in order to gain knowledge and skills you need to achieve the learning outcomes.

1. Review the **Learning Activity** page to understand the sequence of learning activities you will undergo. This page will serve as your road map towards the achievement of competence.

2. Read the **Information Sheets.** This will give you an understanding of the jobs or tasks you are going to learn how to do. Once you have finished reading the **Information Sheets** complete the questions in the **Self-Check.**

3. **Self-**Checks are found after each **Information Sheet**. **Self-Checks** are designed to help you know how you are progressing. If you are unable to answer the questions in the **Self-Check** you will need to re-read the relevant **Information Sheet**. Once you have completed all the questions check your answers by reading the relevant **Answer Keys** found at the end of this module.

4. Next move on to the **Job Sheets. Job Sheets** provide detailed information about *how to do the job* you are being trained in. Some **Job Sheets** will also have a series of **Activity Sheets**. These sheets have been designed to introduce you to the job step by step. This is where you will apply the new knowledge you gained by reading the Information Sheets. This is your opportunity to practice the job. You may need to practice the job or activity several times before you become competent.

5. Specification **sheets**, specifying the details of the job to be performed will be provided where appropriate.

6. A review of competency is provided on the last page to help remind if all the required assessment criteria have been met. This record is for your own information and guidance and is not an official record of competency

When working though this Module always be aware of your safety and the safety of others in the training room. Should you require assistance or clarification please consult your trainer or facilitator.

When you have satisfactorily completed all the Jobs and/or Activities outlined in this module, an assessment event will be scheduled to assess if you have achieved competency in the specified learning outcomes. You will then be ready to move onto the next Unit of Competency or Module

Approved by

27th Authority Meeting of NSDA

Held on 24.07.2023

Table of Content

MODULE CONTENT

Unit of Competency: Develop Digital Learning Materials

Module Title: Developing Digital Learning Materials

Module Description: This module discusses the aspects that must be given attention when developing digital learning materials. It shows the knowledge and skills requirements for arranging learning recourses to be digitized, planning for digital learning contents development, collecting media elements, preparing digitally formatted contents, testing digitally formatted learning resources and uploading & using digital contents.

Nominal Duration: 30 Hours

Learning Outcomes:

Upon completion of this module the trainees must be able to:

1. Arrange learning recourses to be digitized
2. Plan for digital learning contents development
3. Collect media elements
4. Prepare digitally formatted contents
5. Test digitally formatted learning contents
6. Upload and use digital contents

Assessment Criteria:

1.1 Contents need to be digitized are selected
1.2 **Learning resources specifications** are established in line with target learners' requirements

2.1 Lesson plan is prepared incorporating **pedagogy aspect**
2.2 Digital contents to be developed are structured and segmented according to **lesson/ session plan steps and sequences**
2.3 **Types of presentation** are planned
2.4 **Content development software** and **content development tools** are selected and collected
2.5 **Media elements** of the presentation are planned
2.6 **Technology**, pedagogy and content knowledge (TPACK) principles are followed during the plan of content development

3.1. **Sources of media elements** for the presentation are selected and collected.
3.2. Media elements are downloaded or collected from appropriate source.
3.3. Media elements are **manipulated and edited** as required.
3.4. Video is cut and appended as required to use in presentation.
3.5. Open educational resources (OER) are selected and collected
4.1 Media elements are organized and appended with content development software as per lesson/ session plan.
4.2 Proper action verbs are used and maintained during the preparation of the objectives of the session / lesson.
4.3 Media elements used in digital content are formatted.
4.4 Appropriate **animation** is used to make the presentation attractive and interactive
4.5 OER are accessed and used during the content development process if required
5.1 Test criteria and instruments are developed in line with learning material specification.
5.2 Test sites and reviewers are identified in line with established target users
5.3 Testing of learning contents are undertaken in line with plan
5.4 Feedback and suggestions are addressed in line with plan and development cycle.
5.5 Developed digital contents are preserved in appropriate **storage**
6.1 Appropriate online media is selected for uploading digital contents
6.2 Digital content uploading **formalities** are done
6.3 Digital contents are uploaded in online media for users

Learning Outcome 1: Arrange Learning Recourses to be Digitized

Assessment Criteria:

1. Contents need to be digitized are selected
2. Learning resources specifications are established in line with target learners' requirements

Content:

1. **Digital Content**
2. **Type of digital content**
    - Text
    - Computer Graphic
    - Video
    - Audio
    - Interactive Multimedia
3. **Learning Resources**
4. **Some common types of learning resources**
    - Textbooks and Reference Books
    - E-Learning/ Learning Management Systems (LMS) Platforms
    - Educational Web & Mobile Application
    - Multimedia Presentations
    - Simulation and Virtual Labs
    - Open Educational Resources (OER)
    - Libraries and Digital Archives
    - Collaborative Tools and Online Communities:
5. **Learning resource vs Learning Materials**
6. **Learning resources specifications**
7. **Learners' requirements**

Resources Required/ Conditions:

The trainees must be provided with the following:

- Handouts or reference materials/books/ CBLMs on the above stated contents
- PCs/printers or laptop/printer with internet access
- Digital projector and Screen
- Bond paper
- Ball pens/pencils and other office supplies and materials
- Relevant learning materials
- Workplace or simulated environment

Methodologies

- Lecture/discussion
- Demonstration/application
- Presentation
- Blended delivery methods

Assessment Methods

- Written test
- Demonstration
- Observation with checklist
- Oral questioning
- Portfolio

Learning Experience 1: Arrange Learning Recourses to be Digitized

In order to achieve the objectives stated in this learning guide, you must perform the learning steps below. Beside each step are the resources or special instructions you will use to accomplish the corresponding activity.

Learning Steps	Resources specific instructions
1. Trainee will ask the instructor about Arranging Learning Recourses to be Digitized	1. Instructor will provide the learning materials "**Developing Digital Learning Materials"**
2. Read the Information sheet/s	2. Information Sheet No:1 Arrange Learning Recourses to be Digitized
3. Complete the Self Checks & Check answer sheets.	3. Self-Check/s Self-Check No: 1 Arrange Learning Recourses to be Digitized Answer key No. 1 Arrange Learning Recourses to be Digitized
4. Read the Job Sheet and Specification Sheet and perform job	4. Job- Sheet No:1- Arrange Learning Recourses to be Digitized Specification Sheet1 – Arrange Learning Recourses to be Digitized

Information Sheet 1: Arrange Learning Recourses to be Digitized

Learning Objectives:

After completion of this information sheet, the learners will be able to:

1. Select contents need to be digitized
2. Establish Learning resources specifications in line with target learners' requirements

1. Digital content

Digital content refers to any type of media or information that is created, distributed, and consumed in digital formats. It encloses a wide range of formats, including text, images, videos, audio, and interactive multimedia. Digital content can be accessed and transmitted through various electronic devices, such as computers, smartphones, tablets, and e-readers.

2. Type of digital content

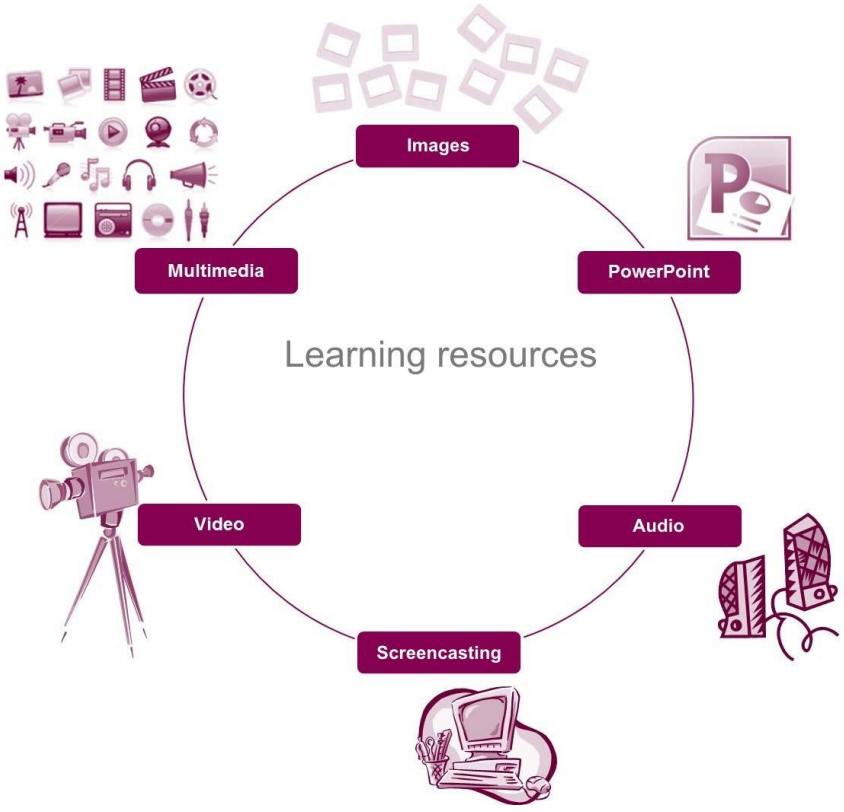
There are various types of digital content based on the format and purpose. Here are some common types:

- **Text**: Text is primarily composed of written words and is often used for conveying information, expressing opinions, storytelling, and providing educational or promotional material. This includes articles, blog posts, ebooks, quiz, online news, website content, social media posts, and email newsletters.
- **Computer Graphic**: Computer graphics are visual representations captured or created digitally. They can include photographs, illustrations, graphics, logos, memes, and infographics. Images are widely used for visual storytelling, branding, advertising, and enhancing the visual appeal of websites, social media posts, and other digital platforms.
- **Video:** Video content involves moving visuals and audio. It includes online videos, movies, TV shows, documentaries, tutorials, webinars, video blogs (vlogs), and advertisements. Videos are a popular medium for entertainment, education, marketing, and sharing information due to their ability to engage and captivate viewers.
- **Audio:** Audio content allows users to listen and consume information while engaged in other activities, making it a convenient and portable medium. This type of digital content includes sound tracks, podcasts, audiobooks, radio programs and sound effects.
- **Interactive Multimedia:** Interactive digital content engages users by allowing them to actively participate and interact with the content. This can include games, simulations, virtual reality (VR) experiences, augmented reality (AR) applications, and interactive educational content. Interactive multimedia offers immersive and engaging experiences that often blend elements of text, images, videos, and audio.

These are just a few examples of the diverse types of digital content available. The digital landscape continues to evolve, and new forms of content emerge as technology advances and user preferences change.

3. Learning resources

Learning resources are materials, tools, or platforms that are designed/ developed to facilitate and support the process of learning. They provide learners with information, instruction, and activities to acquire knowledge, develop skills, and enhance understanding in a particular subject or field. Learning resources can be used in various educational settings, including schools, universities, online courses, and self-directed learning environments.



4. Some common types of learning resources:

- **Textbooks and Reference Books:** Printed or digital books that provide structured information, explanations, and examples related to specific subjects or disciplines. Textbooks are commonly used in formal education settings to support curriculum objectives.

- **E-Learning/ Learning Management Systems (LMS) Platforms:** Web-based platforms for delivering educational content, lessons, assessments, and interactive activities. LMSs often include features such as course organization, content management, communication tools, and assessment capabilities such as ebook, videos, quizzes, H5P, assignment and discussion forums.
- **Educational Web & Mobile Application**: Websites that offer educational content, articles, tutorials, videos, and resources on various topics. These sites can provide supplemental learning materials, research sources, and interactive tools to support learning. Besides mobile applications designed specifically for learning purposes. These apps can provide interactive exercises, quizzes, flashcards, language learning tools, and educational games.
- **Multimedia Presentations:** Visual presentations, such as slideshows, videos, and animations, that convey information and concepts in a dynamic and engaging manner. Multimedia presentations are commonly used in classrooms and online learning environments.
- **Simulation and Virtual Labs**: Interactive software applications that simulate real-world scenarios, experiments, or processes and experience. Simulations allow learners to experiment, make decisions, and observe outcomes in a controlled virtual environment.
- **Open Educational Resources (OER):** These are freely accessible learning resources available online, including textbooks, lecture notes, multimedia materials, and interactive modules. OER promotes open sharing and collaboration in education.
- **Libraries and Digital Archives:** Libraries and digital repositories offer access to a wide range of books, journals, research papers, and other scholarly resources. Digital archives provide digitized historical documents, artifacts, and cultural materials for educational purposes.
- **Collaborative Tools and Online Communities:** Platforms that facilitate collaboration, discussion, and knowledge-sharing among learners. Online communities, forums, and social media groups allow learners to connect, ask questions, and exchange ideas.

5. Learning resource vs Learning Materials

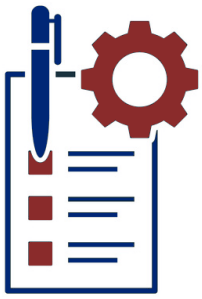
Learning resources and learning materials are closely related but have slightly different meanings.

Learning Resources	Learning Materials
A broader category of materials, services, tools, or platforms	Subset of learning resources
Used to facilitate learning	Directly used by learners
Encompasses physical and digital materials	Can be tangible or digital resources

Learning Resources	Learning Materials
Designed to support the learning process	Used for hands-on practice, exploration, or reference
Examples include textbooks, online courses, educational websites, multimedia presentations, simulations, etc.	Examples include worksheets, textbooks, workbooks, manipulatives, online quizzes, interactive modules, multimedia presentations, etc.
Provide a range of tools and platforms	Provide content, activities, and exercises
Support the learning process as a whole	Facilitate acquisition of knowledge or skills
Can be used by educators to create learning environments	Offer learners opportunities for engagement and practice

In summary, learning resources are a broader category of materials and tools that support the learning process, while learning materials specifically refer to the resources that learners directly interact with for acquiring knowledge or practicing skills. Learning materials are a subset of learning resources and provide content, activities, and exercises necessary for learning to occur.

6. Learning resources specifications:



Text, digital images, digital video, web content (including social media), data and databases, digital audio and e-book content are all examples of learning resources. Whatever the subject, the following components should be considered while developing learning resources.

- **Quality of the presentation:**
  The learning resources should be of high quality, with clear and concise content, engaging visuals, and appropriate multimedia elements. The presentation should be well-structured, easy to navigate, and free of errors.

- **Format of the lesson plan:**
  The lesson plan should be organized in a logical and easy-to-follow format, including clear objectives, detailed content, and assessment methods. The format should be consistent throughout the learning resources.

- **Presentation software to be used:**
  The learning resources should be designed to be delivered using a popular and user-friendly presentation software, such as PowerPoint, Keynote, or Google Slides. The software should be compatible with various devices and operating systems.

- **Software tools for developing contents:**
  The learning resources should be developed using software tools that are appropriate for the subject matter and the target audience. For example, for multimedia content,

Adobe Creative Suite or video editing software like Final Cut Pro or Premiere Pro can be used.

- **Type of the presentation:**
  The learning resources should be designed to be delivered in a variety of formats, such as video lectures, interactive simulations, and quizzes. The type of presentation should be appropriate for the subject matter and the target audience.
- **Teaching aids for delivery of the lessons:**
  The learning resources should include teaching aids such as diagrams, charts, and images to support the delivery of the lessons. The aids should be relevant to the subject matter and help to reinforce key concepts.

7. Learners' requirements:

When developing digital content, consider diverse learner needs (cultural backgrounds, language proficiency, age, and educational levels) by using inclusive language, appropriate font sizes, and accessible colors. Accommodate different learning styles (VARK) and abilities for maximum comprehension and retention.

For preparing digital content we need to consider the following points

- Content such as images and videos must have a clear relationship to the topics.
- The content must be relevant to the learner's environment and life
- The content of the picture or video need to be from his / her own country and cultures
- The contents must not be contradictory with the social values, cultures, religion and nationally agreed universal political views
- It should be developed considering the age of the learners.
- The content will be such type that it will increase the eagerness of the learner and inspire the learners to learn more.

Self-Check Sheet 1: Prepare for Validation

1. What exactly constitutes digital content? Provide examples of different types of digital content.

2. What is learning resources?

3. Write the name of some common types of learning resources:

4. What are the components should be considered while developing learning resources?

5. What should digital content developers consider when creating content for diverse learners?

6. Why is it important to use images and videos that are relevant to the learner's environment and life?

Answer Key 1: Prepare for Validation

1. What exactly constitutes digital content? Provide examples of different types of digital content.

Answer: Digital content refers to any type of media or information that is created, distributed, and consumed in digital formats. It encloses a wide range of formats, including text, images, videos, audio, and interactive multimedia. Digital content can be accessed and transmitted through various electronic devices, such as computers, smartphones, tablets, and e-readers.

There are various types of digital content based on the format and purpose. Here are some common types:

- Text
- Computer Graphic
- Video
- Audio
- Interactive Multimedia

These are just a few examples of the diverse types of digital content available. The digital landscape continues to evolve, and new forms of content emerge as technology advances and user preferences change.

2. What is learning resources?

Answer: Learning resources are materials, tools, or platforms that are designed/ developed to facilitate and support the process of learning. They provide learners with information, instruction, and activities to acquire knowledge, develop skills, and enhance understanding in a particular subject or field. Learning resources can be used in various educational settings, including schools, universities, online courses, and self-directed learning environments.

3. Write the name of some common types of learning resources:

Answer: Some common types of learning resources are:

- Textbooks and Reference Books
- E-Learning/ Learning Management Systems (LMS) Platforms
- Educational Web & Mobile Application
- Multimedia Presentations
- Simulation and Virtual Labs
- Open Educational Resources (OER)
- Libraries and Digital Archives
- Collaborative Tools and Online Communities

4. **What are the components should be considered while developing learning resources?**

   Answer: The following components should be considered while developing learning resources:

   - Quality of the presentation
   - Presentation software to be used
   - Software tools for developing contents
   - Type of the presentation
   - Teaching aids for delivery of the lessons

5. **What should digital content developers consider when creating content for diverse learners?**

   Answer: Digital content developers should consider diverse learner needs, such as cultural backgrounds, language proficiency, age, and educational levels, by using inclusive language, appropriate font sizes, and accessible colors. They should also accommodate different learning styles and abilities for maximum comprehension and retention.

6. **Why is it important to use images and videos that are relevant to the learner's environment and life?**

   Answer: Using images and videos that are relevant to the learner's environment and life can help learners connect the content to their own experiences and make it more meaningful and engaging.

Activity Sheet 1.1:

Activity Sheet 1.0: Identify Learning Resources
Title: Identify Learning Resources
Performance Objective: At the end of this task, the trainee should be able to:
1. Identify and select the learning resources that need to be digitized based on their relevance and importance for the target learners.
2. Justify their selection based on target learners' needs and subject matter importance.
Policy and Documents Required:
• Training Need Analysis report
• Curriculum Outline
• Course Syllabus
Tools and Materials Required:
• List of available learning resources
• Knowledge of target learners
• Notebook/Paper for note-taking
• Pens/Markers
Equipment:
• Laptop/Computer
• Internet connection for research
Steps/Procedures:
1. **Review the List of Available Learning Resources:**
• Examine the existing list of learning resources that may be considered for digitization. These resources could include textbooks, handouts, presentations, videos, and other relevant materials.
2. **Refer to the Training Need Analysis Report, Curriculum Outline, and Course Syllabus:**
• Study the Training Need Analysis (TNA) report to understand the specific needs and preferences of the learners. Analyze the curriculum outline and course syllabus to identify key topics and learning objectives.
3. **Determine Relevant and Important Resources:**
• Based on the information from the TNA report, curriculum outline, and course syllabus, determine which learning resources are most relevant and important for the target learners. Focus on materials that align closely with the learning objectives.
4. **Justify Selections:**
• For each selected resource, provide a justification explaining its relevance to the course objectives and learner needs. Highlight how the chosen materials can effectively support the learning process and enhance understanding.
Assessment Method: Submission of a detailed report including the list of identified resources and the justification for their selection. The report should demonstrate the trainee's ability to critically evaluate learning resources, prioritize based on relevance, and align them with the needs of the target learners and the course's subject matter. The report will be assessed based on the clarity of the trainee's reasoning and the appropriateness of the selected resources for digitization.

Specification Sheet 1.1

A. Policy and curriculum documents required

- Bangladesh National Qualifications Framework (BNQF)
- National Skills Development Policy
- National Quality Assurance Document
- Competency Standard Document

B. Tools and Materials required

- Notebook
- Handbook
- Office Stationeries
- List of available learning resources

C. Equipment

- Laptop/Computer with Internet connection

Learning Outcome 2: Plan for digital learning contents development

Assessment Criteria:

2.1 Lesson plan is prepared incorporating pedagogy aspect
2.2 Digital contents to be developed are structured and segmented according to lesson/ session plan steps and sequences
2.3 Types of presentation are planned
2.4 Content development software and content development tools are selected and collected
2.5 Media elements of the presentation are planned
2.6 Technology, pedagogy and content knowledge (TPACK) principles are followed during the plan of content development

Content:

1. **Digital Transformation of Learning Material**
   - Ideology and Purpose|
   - ADDIE Model
   - Audience Centric Material Design
   - Training Modality
   - Universal Design and Accessibility
   - Simulations and Real-World Examples
   - Impact of Storytelling
2. **Session Plan**
3. **Learning Domain**
4. **Pedagogy Aspect for Planning Digital Learning Content**
5. **Learning Materials Digitalization steps and sequences**
6. **Session plan preparing Procedure**
7. **Work Plan**
8. **Study Guide**
9. **Course Blue Print**
10. **Instructional design**
11. **Courseware:**
12. **Structure and segmentation of digital contents**
    - Clear Organization
    - Chunking Information
    - Sequential Flow
    - Navigation and Signposting
    - Visual Hierarchy
    - Interactive Elements
    - Consistent Design

13. **Technology, Pedagogy and Content Knowledge (TPACK) principles**
14. **Digital Learning Materials/Media Elements**

    Types of Media Elements
    - Text
    - Images (Graphics)
    - Videos
    - Audio
    - Interactive Content
15. **Types of presentation for digital learning production**
16. **Digital Learning Production Phase: Preproduction**
    - Preproduction
    - Production
    - Post Production
17. **Content Development Software**
    - Word Processors
    - Image Editors
    - Video Editors
    - Audio Editors
    - Screen casting Software
18. **Content Development/Authoring Tools**

Resources Required/ Conditions:

The trainees must be provided with the following:

- Handouts or reference materials/books/ CBLMs on the above stated contents
- PCs/printers or laptop/printer with internet access
- Digital projector and Screen
- Bond paper
- Ball pens/pencils and other office supplies and materials
- Relevant learning materials
- Workplace or simulated environment

Methodologies

- Lecture/discussion
- Demonstration/application
- Presentation
- Blended delivery methods

Assessment Methods

- Written test
- Demonstration
- Observation with checklist
- Oral questioning
- Portfolio

Learning Experience 2: Plan for digital learning contents development

In order to achieve the objectives stated in this learning guide, you must perform the learning steps below. Beside each step are the resources or special instructions you will use to accomplish the corresponding activity.

Learning Steps	Resources specific instructions
1. Student will ask the instructor about planning for digital learning contents development.	1. Instructor will provide the learning materials "**Developing Digital Learning Materials"**
2. Read the Information sheet/s	2. Information Sheet No: 2 Plan for digital learning contents development
3. Complete the Self Checks & Check answer sheets.	3. Self-Check/s Self-Check No: 2 Plan for digital learning contents development Answer key No. 2 Plan for digital learning contents development
4. Read the Job Sheet and Specification Sheet and perform job	4. Job- Sheet No:2- Plan for digital learning contents development Specification Sheet: 2 – Plan for digital learning contents development

Information Sheet 2: Plan for Digital Learning Contents Development

Learning Objectives:

After completion of this information sheet, the learners will be able to:

1. Lesson plan is prepared incorporating pedagogy aspect
2. Digital contents to be developed are structured and segmented according to lesson/ session plan steps and sequences
3. Types of presentation are planned
4. Content development software and content development tools are selected and collected
5. Media elements of the presentation are planned
6. Technology, pedagogy and content knowledge (TPACK) principles are followed during the plan of content development

1. Digital Transformation of Learning Material

- **Ideology and Purpose** The initial phase in the digital transformation of learning materials involves establishing a clear ideology and purpose. This foundational step involves articulating the overarching vision and instructional philosophies that underpin the digital learning environment. The purpose is a detailed, well-articulated set of objectives and outcomes you aim to achieve with your digital content.
- **ADDIE Model:** The ADDIE model (Analysis, Design, Development, Implementation, Evaluation) is a tried and tested instructional system design (ISD) framework used by educators and instructional designers worldwide. It offers a systematic, step-by-step roadmap to creating high-quality, effective digital learning materials.
- **Audience Centric Material Design:** Designing digital learning materials that cater to the needs, preferences, and abilities of your target audience enhances the overall learning experience. It contributes to personalizing the learning process, which increases content relevance and accessibility.
- **Training Modality:** The choice of training modality, i.e., the mode or method in which the learning content is delivered, plays a crucial role in shaping the learning experience. Digital learning can occur through various modalities, such as self-paced e-learning modules, virtual instructor-led training, webinars, blended learning, and more. The chosen modality should align with the learning objectives, learner needs, and logistical considerations.
- **Universal Design and Accessibility**
  Universal Design refers to a broad-spectrum of ideas meant to produce buildings, products and environments that are inherently accessible to older people, people without disabilities, and people with disabilities.

- **Simulations and Real-World Examples**
  Simulations and real-world examples help students apply their learning in practical, meaningful ways. They offer safe spaces for learners to practice skills and make mistakes without real-world consequences.

- **Impact of Storytelling**
  Storytelling can significantly impact learning by making content more engaging, memorable, and relatable. Through stories, abstract or complex concepts can be made more understandable, and learning can be more enjoyable and impactful.

2. Session Plan

A session plan, also known as a lesson plan, is a detailed outline or guide that outlines the structure, objectives, activities, and resources for a specific learning session. It provides a roadmap for trainers, instructors, or facilitators to effectively deliver instruction and engage learners.

Session plan serves as a guide for educators to organize their teaching and ensure a structured and effective learning experience for their learners. It helps maintain focus, provides a clear framework for instruction, and ensures that the session aligns with the desired learning outcomes.

3. Learning Domain

A domain is a particular field of thought, activity, or interest, especially one over which someone has control, influence, or rights.

The three domains of learning are cognitive (knowledge), affective (attitudes), and psychomotor (skills).

This categorization is best explained by the Taxonomy of Learning Domains formulated by a group of researchers led by Benjamin Bloom along with in 1956.

Bloom's Taxonomy:

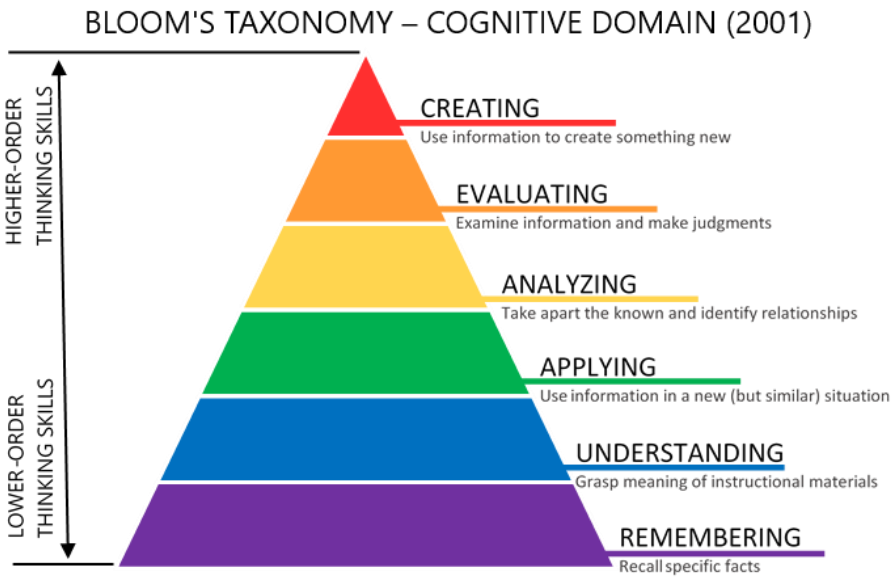
Bloom's Taxonomy model (1956) is in three parts:

1. **Cognitive domain** (intellectual capability, i.e., **knowledge**, or **'think'**)
2. **Affective domain** (feelings, emotions and behavior, i.e., **attitude**, or **'feel'**)
3. **Psychomotor domain** (manual and physical skills, i.e., **skills**, or **'do'**)


Benjamin S. Bloom

Bloom's Taxonomy was primarily created for academic education; however, it is relevant to all types of learning.

Bloom's Taxonomy Cognitive domain (2001)



The cognitive domain contains learning skills predominantly related to mental (thinking) processes. According to the newer version (2001) of Bloom's taxonomy of learning, there are six levels of cognitive complexity: remembering, understanding, applying, analysing, evaluating and creating. The six categories under this domain are:

i) **Remembering** is the ability to recall data and/or information. Example: A children recites a rhythm in different language without understanding anything

ii) Understanding is the ability to understand the meaning of what is known. Example: a student interprets the ohm's law to his teacher.

iii) **Applying** is the ability to utilize an abstraction or to use knowledge in a new situation. Example: Calculate current, voltage and resistance what he learned about ohm's law and interpreted to his teacher.

iv) **Analysing** is the ability to differentiate facts of the relationship of current, voltage and resistance

v) **Evaluating** is the ability to come up with judgments about the importance of concepts and integrate different elements or concepts. Examples: Explain the reasoning of variation of values of the electrical quantities in different situation

vi) **Creating** is the ability to form a new pattern/ structure / theory so a new meaning can be established. A PhD students discover or invented a new and improved theory of current flow

Bloom's Taxonomy

LEARNING OUTCOME VERBS

Levels of Knowledge	Action Verb
Remembering: Can the student recall or remember the information?	**Key Words**: define, duplicate, list, memorize, recall, repeat, reproduce, state
Understanding: Can the student explain ideas or concepts?	**Key Words**: classify, describe, discuss, explain, identify, locate, recognize, report, select, translate, paraphrase
Applying: Can the student use the information in a new way?	**Key Words**: choose, dramatize, demonstrate, employ, illustrate, interpret, operate, schedule, sketch, solve, use, write
Analyzing: Can the student distinguish between the different parts?	**Key Words**: appraise, compare, criticize, differentiate, discriminate, distinguish, examine, experiment, question, test
Evaluating: Can the student justify a stand or decision?	**Key Words**: appraise, argue, judge, defend, select, support, value, evaluate
Creating: Can the student create a new product or point of view?	**Key Words**: assemble, construct, create, design, develop, formulate, write

Dave's psychomotor domain taxonomy (1975)

The psychomotor domain involves development of hands on skills it performs. According to Dave (1975) this taxonomy contains five levels that are illustrated below.

1. **Imitation -** Observing and copying someone else, like teacher demonstrate a task and students practice the same task as per the demo of the teacher.
2. **Manipulation –** Doing task in presence of original source guided via instruction to perform a skill
3. **Precision -** Accuracy, proportion and exactness exist in the skill performance without the presence of the original source.
4. **Articulation -** Two or more skills combined, sequenced, and performed consistently.
5. **Naturalization -** Two or more skills combined, sequenced, and performed consistently and with ease. The performance is automatic with little physical or mental exertion; this level is also treated as neutralization.

Level	**Category or 'level'**	**Behavior descriptions**	**Examples of experience, or demonstration and evidence to be measured**	**'key words' (verbs which describe the activity to be trained or measured at each level)**
1	Imitation	copy action of another; observe and replicate	watch teacher or trainer and repeat action, process or activity	copy, follow, replicate, repeat, adhere
2	Manipulation	reproduce activity from instruction or memory	carry out task from written or verbal instruction	re-create, build, perform, execute, implement
3	Precision	execute skill reliably, independent of help	perform a task or activity with expertise and to high quality without assistance or instruction; able to demonstrate an activity to other learners	demonstrate, complete, show, perfect, calibrate, control,
4	Articulation	adapt and integrate expertise to satisfy a non-standard objective	relate and combine associated activities to develop methods to meet varying, novel requirements	construct, solve, combine, coordinate, integrate, adapt, develop, formulate, modify, master

5	Naturalization	automated, unconscious mastery of activity and related skills at strategic level	define aim, approach and strategy for use of activities to meet strategic need	design, specify, manage, invent, project-manage

Affective domain:

Most people think of learning as an intellectual or mental function. However, learning is not a just a cognitive (mental) function. You can also learn attitudes, behaviours, and physical skills. The affective domain involves feelings, emotions and attitudes. This domain includes the manner in which we deal with things emotionally, such as feelings, values, appreciation, enthusiasms, motivations, and attitudes. This domain is categorized into 5 sub-domains, which include:

(1). Receiving (2) Responding (3) Valuing (4) Organization (5) Characterization

i) Receiving: The receiving is the awareness of feelings, emotions, and the ability to utilize selected attention. Example: Listening attentively to a friend. Listening attentively to someone; watching a movie, listening to a lecture; watching waves crash on the sand.

ii) **Responding to Phenomena:** Responding is active participation of the learner. Example: Participating in a group discussion. Having a conversation; participating in a group discussion, giving a presentation, complying with procedures, or following directions.

iii) **Valuing:** Valuing is the ability to see the worth of something and express it. Valuing is concerned with the worth you attach to a particular object, phenomenon, behaviour, or piece of information. This level ranges from simple acceptance to the more complex state of commitment. Simpler acceptance may include your desire for a team to improve its skills, while more complex level of commitment may include taking responsibly for the overall improvement of the team. Examples: Proposing a plan to improve team skills, supporting ideas to increase proficiency, or informing leaders of possible issues. It is the ability to see the worth of something and express it. Example: An activist shares his ideas on the increase in salary of laborers.

iv) **Organization:** ability to prioritize a value over another and create a unique value system. Example: A teenager spends more time in her studies than with her boyfriend.

v) **Characterization:** the ability to internalize values and let them control the person`s behaviour. Example: A man marries a woman not for her looks but for what she is.

Level	**Category or 'level'**	**Behaviour descriptions**	**Examples of experience, or demonstration and evidence to be measured**	**'key words' (verbs which describe the activity to be trained or measured at each level)**

1	Receive	open to experience, willing to hear	listen to teacher or trainer, take interest in session or learning experience, take notes, turn up, make time for learning experience, participate passively	ask, listen, focus, attend, take part, discuss, acknowledge, hear, be open to, retain, follow, concentrate, read, do, feel
2	Respond	react and participate actively	participate actively in group discussion, active participation in activity, interest in outcomes, enthusiasm for action, question and probe ideas, suggest interpretation	react, respond, seek clarification, interpret, clarify, provide other references and examples, contribute, question, present, cite, become animated or excited, help team, write, perform
3	Value	attach values and express personal opinions	decide worth and relevance of ideas, experiences; accept or commit to particular stance or action	argue, challenge, debate, refute, confront, justify, persuade, criticise,
4	Organise or Conceptualize values	reconcile internal conflicts; develop value system	qualify and quantify personal views, state personal position and reasons, state beliefs	build, develop, formulate, defend, modify, relate, prioritise, reconcile, contrast, arrange, compare
5	Internalize or characterise values	adopt belief system and philosophy	self-reliant; behave consistently with personal value set	act, display, influence, solve, practice,

4. Pedagogy aspect for preparing session plan

Pedagogy refers to the theory and practice of teaching, including the methods and strategies used to impart knowledge and skills to learners. In the context of competency-based training, pedagogy is an essential aspect that helps ensure the training is effective and aligned with the learners' needs.

Some Pedagogy Aspect for Planning Digital Learning Content are describing bellow:

1. Use of appropriate lesson / session plan
2. Use of appropriate action verb for writing instructional objectives /learning outcome
3. Maintaining learning domains and their levels
4. Sequencing the learning contents
5. Using proper method, strategies and approach

- **Use of appropriate lesson/session plan:**

  In developing digital content for competency-based training, it is essential to have a clear and well-structured lesson plan or session plan. This plan should outline the learning objectives, the activities and resources required to achieve those objectives, and the assessment methods to measure learner progress. A well-planned lesson or session helps ensure that learners stay engaged and motivated throughout the training, and that the training is delivered efficiently and effectively.

- **Use of appropriate action verb for writing instructional objectives/learning outcomes:**

  When writing instructional objectives or learning outcomes for digital content, using appropriate action verbs is crucial. Action verbs help to describe the intended outcome of the training and provide a clear target for learners to aim for. Examples of appropriate action verbs for competency-based training include "analyze," "evaluate," "create," and "apply." These verbs help to ensure that learners are able to demonstrate their competence in performing specific tasks or skills.

- **Maintaining learning domains and their levels:**

  Learning domains are the different areas of knowledge or skills that learners need to acquire during their training. Maintaining these domains and their levels is essential to ensure that learners receive comprehensive training that covers all the necessary knowledge and skills.

- **Sequencing the learning contents:**

  Sequencing the learning contents is crucial to ensure that learners progress logically and gradually through the training. The content should be organized in a way that builds on previously learned concepts and skills. For example, in a digital marketing course, learners might start with basic content creation techniques, then progress to more advanced techniques, and finally learn how to analyze and optimize their campaigns.

- **Using proper method, strategies, and approach:**
  Using a proper method, strategy, and approach is essential to ensure that learners receive effective training that meets their needs and learning styles.

5. Learning Materials Digitalization steps and sequences

This area focuses on the detailed steps and sequences that should be followed to digitize learning materials effectively and efficiently.

- **Introductions**
  Introductions are an important first step in any digital learning resource. They provide an opportunity to engage learners, introduce the subject, and set expectations.

- **Outline of Objectives/Content to be Addressed**
  Creating an outline of objectives and content helps to structure your digital learning material and ensure that it covers all necessary areas.

- **Ice Breakers to be used**
  Ice breakers are activities designed to get learners engaged and comfortable. They are especially useful in a digital learning environment where learners may initially feel isolated.

- **Delivery Methods for Each Part of the Session**
  Different parts of your digital learning material may be best suited to different delivery methods.

- **Plan of Learning Activities to be Used Within the Session**
  Learning activities are opportunities for learners to engage with the content, apply their knowledge, and build their skills.

- **Timelines/Duration for Each Learning Activity**
  Effective timing can enhance the flow of your digital learning material and ensure that learners have adequate time for each activity.

- **Formative assessment points/opportunities**
  Formative assessment is essential to ensure that learners have acquired the necessary knowledge and skills to progress to the next level of training. It provides an opportunity to identify any gaps in learning and address them before moving on to more advanced topics. Additionally, formative assessment helps to reinforce learning and promote retention of the material, making it a valuable tool for both the learners and the trainers.

- **Learning Materials Required**
  In addition to the digital learning material itself, learners may need additional resources or materials to support their learning.

- **Summary/overview/wrap-up:**
  It is essential to ensure learners understand the key takeaways and can apply the skills and knowledge in their work. It provides a concise recap of the main points covered during the session, helping learners review and retain the information.

6. Session plan preparing Procedure

Preparing a session plan involves several steps.

1. **Define Learning Objectives:** Start by clearly identifying the desired learning outcomes or objectives for the session. What specific knowledge, skills, or attitudes do you want participants to acquire or demonstrate? Ensure that your objectives are specific, measurable, achievable, relevant, and time-bound (SMART).
   Several factors need to be considered when writing the objectives of a learning outcome such as
   a. Clearly state intentions through outcomes (general and specific);
   b. The objectives will be determined and stated at the beginning of the lesion/ session with the common statement "At the end of the session the students/ trainee will able to:"
   c. Each of the specific objective will be start with appropriate action verb considering the levels of cognitive, psychomotor and affective learning domain
   d. The learning objectives should be Specific, Measurable, Achievable, Realistic and Time bound (SMART)
   e. The non-measurable and non-observable verb like know, understand, appreciate, value, develop should not be used during writing the learning objectives.
2. **Understand Your Audience:** Consider the characteristics of your audience, such as their age, educational background, prior knowledge, and learning preferences. This information will help you tailor the session content and activities to their needs and ensure maximum engagement.
3. **Gather Relevant Resources:** Collect the necessary resources, materials, and equipment required for the session. This may include textbooks, handouts, audiovisual aids, props, or technology tools. Ensure that these resources align with your learning objectives and support the planned activities.
4. **Determine Session Duration:** Decide on the duration of the session, considering the content complexity, participants' attention span, and available time. Allocate sufficient time for each activity while allowing for transitions, breaks, and interaction.
5. **Structure the Session:** Divide the session into segments or sections based on the content and learning objectives. Outline the flow and sequence of activities, ensuring a logical progression that maintains participants' interest and engagement.
6. **Plan Introduction and Prepare learner:** Begin the session with an engaging introduction to capture participants' attention and establish the session's purpose. Include an icebreaker activity or a brief warm-up exercise to create a positive and interactive learning environment.

7. **Develop Content Delivery Strategies:** Determine the most appropriate instructional strategies to deliver the content and engage participants. Consider a mix of methods, such as lectures, discussions, multimedia presentations, case studies, demonstrations, or hands-on activities. Align these strategies with your learning objectives and the audience's preferences.
8. **Design Interactive Activities:** Incorporate interactive activities throughout the session to encourage active participation and reinforce learning. These activities could include group work, role plays, brainstorming sessions, problem-solving exercises, or debates. Ensure that they align with the learning objectives and promote critical thinking and collaboration.
9. **Incorporate Assessment and Evaluation:** Integrate various formative assessment methods to gauge participants' understanding and progress during the session. This could involve quizzes, polls, class discussions, or hands-on demonstrations. Determine how you will provide feedback and address any misconceptions or gaps in understanding.
10. **Plan Closure and Follow-up:** Conclude the session effectively by summarizing the key points, reinforcing the learning outcomes, and allowing participants to ask questions or share their reflections. Provide guidance on any follow-up activities, assignments, or recommended resources to support continued learning beyond the session.
11. **Consider Adaptations and Contingencies:** Anticipate potential challenges, diverse learning needs, or unforeseen circumstances. Plan for adaptations or modifications to accommodate different learners and have alternative activities or strategies ready as backup options.
12. **Review and Revise:** Take the time to review and revise your session plan before implementation. Ensure that it is clear, concise, and well-structured. Seek feedback from colleagues or mentors, if possible, to gain different perspectives and make improvements as needed.

7. Work Plan

A work plan represents the formal road map / streamline a project for a project. It should clearly articulate the required steps to achieve a stated goal by setting demonstrable objectives and measurable deliverables that can be transformed into concrete actions.

The purpose of workplan is to create a visual reference for the goal, objectives, tasks and team members who are responsible for each area.

A work plan includes:

- Setting goals and objectives
- Establishing team responsibilities
- Setting project timelines
- Establishing a budget

Things to consider in making a plan:

1) Define your goal in writing

- According to research from Dominican University, people who write their goals down accomplish significantly more than those who don't.
- Use the SMART goals framework
  - Specific
  - Measurable
  -Achievable (but ambitious)
  - Relevant (and realistic)
  -Time-bound (or timely)
- Using this framework will enable you to remove ambiguity around a goal and craft an action plan that spells out exactly what you need to do.

2) Divide the goals into milestones

When you have a roadmap that details what needs to happen, you're more likely to stay motivated and committed throughout the process.

3) Identify the resources needed

- Any action plan that doesn't account for resources is akin to a wish list.
- Identifying the resources needed to successfully act on your plan will enable you to make informed decisions regarding its implementation.

Sample format of workplan:

WORK PLAN

Sector :	Training & Assessment
Qualification :	NC level 4 in Competency Based Training and Assessment
Unit of Competency:	TVTDES401A1: Design and modify CBT learning materials and resources
Title :	Designing and modifying CBT learning materials and resources.

Objectives:

- Analyze existing learning materials and relevant resources.
- Adapt existing resources.
- Develop new resources
- Review learning materials
- Evaluate the design and development process.

Area of Concentration	Challenges met	Activity/ies	Description	Strategy/ies	Resources	Budget	Time line /Duration
Analyze existing learning materials and relevant resources	• Preparing quiz • Preparing presentation • Internet Facilities • Guiding Learners • Monitoring learning progress • Record Keeping	**A. Face to face Activities** 1. Participate in Forum discussion on learning materials and resources 2. Take the Pre-Test 3. Slide presentation with discussion on Learning materials and resources and relationship between learning outcomes and elements 4. Slide presentation with discussion on adult learning and learning environment 5. Perform Task Sheet No. 8.1 Collect and access existing learning materials and resources 6. Perform Task Sheet No. 8.2 Modify training resources and aid. **B. Offline Activities** 7. Finalization of task sheets, assessment of activities and oral questioning. 8. Feedbacking and facilitating. 9. Share and discuss key takeaways and new learnings from the course. 10. Take the Post-Test	• Learners should need to collect and access existing learning materials and resources. • Learners should review the learning outcomes and assessment criteria of existing learning materials to ensure they align with the competency standard and meet the specific needs of individual learners, as per the requirements of the learning program. • Learners should be required to assess and evaluate existing learning materials and resources, based on the results checked for relevance and quality.	▪ Presentation ▪ Discussion ▪ Demonstration ▪ Think-pair-repair	▪ Laptop ▪ Internet connection ▪ CBLM ▪ Office stationeries ▪ Multimedia projector ▪ Handout	BDT 12,000	10 Hours

8. Study Guide

A study guide condenses all those topics into a single source of information. It **assists students' learning**; students can study better by **highlighting the most important topics and concepts.** It is a useful document that is generally used by students of all ages.

The purpose of a study guide is to **help you synthesize and summarize the information.** You might think of your study guide as a mini outline. It is especially useful for difficult or complex concepts or subject areas. The **primary advantage of a study guide is that it reduces the amount of information** to be learned.

Sample format of study guide:

DESIGN AND MODIFY CBT LEARNING MATERIALS AND RESOURCES

Nominal Duration: 40 Hours

Study Guide

INTRODUCTION

Welcome to this blended training of **Design and modify CBT learning materials and resources**. This unit covers the knowledge, skills and attitude required to design and modify CBT learning materials and resources. It includes analyzing existing learning

materials and relevant resources, adapting existing resources, developing new resources, reviewing learning materials and evaluating the design & development process.

OBJECTIVES

At the end of this module, you should be able to

1. Analyze existing learning materials and relevant resources
2. Adapt existing resources
3. Develop new resources
4. Review learning materials
5. Evaluate the design and development process

KEY CONCEPT

Module 1: Analyze existing learning materials and relevant resources

- Learning materials and resources
- Relationship between learning outcomes and elements.
- Adult learning
- learning environment

Module 2: Develop new resources

- Developing relevant learning materials and resources
- Learning Activities and Method
- Effective Training or Learning Materials

Module 3: Evaluate the design and development process

- Checking content of the developed materials
- Reviewing final draft
- Evaluating the design and development process

LEARNING RESOURCES

1. Self-paced Learning Material (CBLM)
2. LMS
3. Task Sheets and Performance Criteria Checklist

STUDY QUESTIONS

Module 1: Analyze existing learning materials and relevant resources

1. Why we use learning materials?
2. Write Down the major parts of CBLM?
3. What is learning materials?
4. What is learning Outcome
5. Write down the principle of adult learning?
6. Why need review Existing Learning materials?
7. What is operational Resources?
8. What are Consumable resources?
9. What is CBLM?
10. What are the major parts of CBLM's?
11. What is job sheet and specification sheet?

Module 2: new resources

1. Write down the nine steps that can assist you in your writing?

2. Why Self Tests, Quizzes and Questionnaires use?
3. What are the things considering that you need when preparation for writing CBLM?
4. How can you improve your Writing?

Module 3: design and development process

1. Why need Revision and Amendment of CBLM
2. What is Utilization Criteria for emulation CBLM?
3. What is Technical Criteria for emulation CBLM?

ACTIVITIES

A. Face to face Activities (guided online activities)

Module 1: learning materials and resources

a. Face to face discussion on the importance of learning materials and resources on **Designing and modifying CBT learning materials and resources**.

b. Access the Learning Management System (LMS), https://ecampusrisda.org/

c. Take the Pre-Test

d. Read the Power point presentation about CBLM.

e. Perform Task Sheet No. 8.1 Collect and access existing learning materials and resources

f. Perform Task Sheet No. 8.2 Modify training resources and aid.

Module 2: new resources

a. Face to face discussion about Learning materials and resources.

b. Perform Task Sheet No. 8.3 Develop relevant learning materials and resources

c. Perform Task Sheet No. 8.4 Review draft learning materials and resources

Module 3: design and development process

a. Face to face discussion on management and issues encountered

b. Perform Task Sheet No. 8.5 Evaluate the design and development process

B. Offline Activities

1. Finalization of task sheets, assessment of activities and oral questioning.
2. Feedbacking, facilitating.
3. Share and discuss key takeaways and new learnings from the course.

REFERENCES:

1. CBLM, Design and modify CBT learning materials and resources
2. https://moodle.org/

9. Course Blue Print

A course blueprint is a visual representation of a course that outlines its key components and how they fit together. It's part of a larger course design portfolio and helps ensure that the course is well-structured and coherent.

It is a **way for an instructor to map out the different aspects of teaching and learning** which go into a given course, thus providing an opportunity to articulate and "draw," so to speak, a holistic picture of the course.

This can be helpful for the **instructor's own course design and course revision efforts,** as well as for discussions with colleagues regarding the course and how it fits into the program curriculum as a whole. It can certainly inform the way that an instructor crafts the syllabus which they share with students.

The Course Blueprint may include:

i. **Course Description:** It is likely that your institution's course catalog provides a broad description of your course.

ii. **Learning Objectives** – Specified abilities that students will be able to achieve; the behaviors that students will be able to perform after completing the course. These must be observable and measurable, and criteria for their measurement should be described in a rubric.

iii. **Learning Experience/Activities–** Activities designed to assist students in achieving the learning objectives. These activities may be passive or active.

iv. **Evaluation Plan –** Assignments, tests, and grading system developed by the instructor used to assess how students reach the course learning objectives.

Sample template of course blue print

COURSE BLUE PRINT

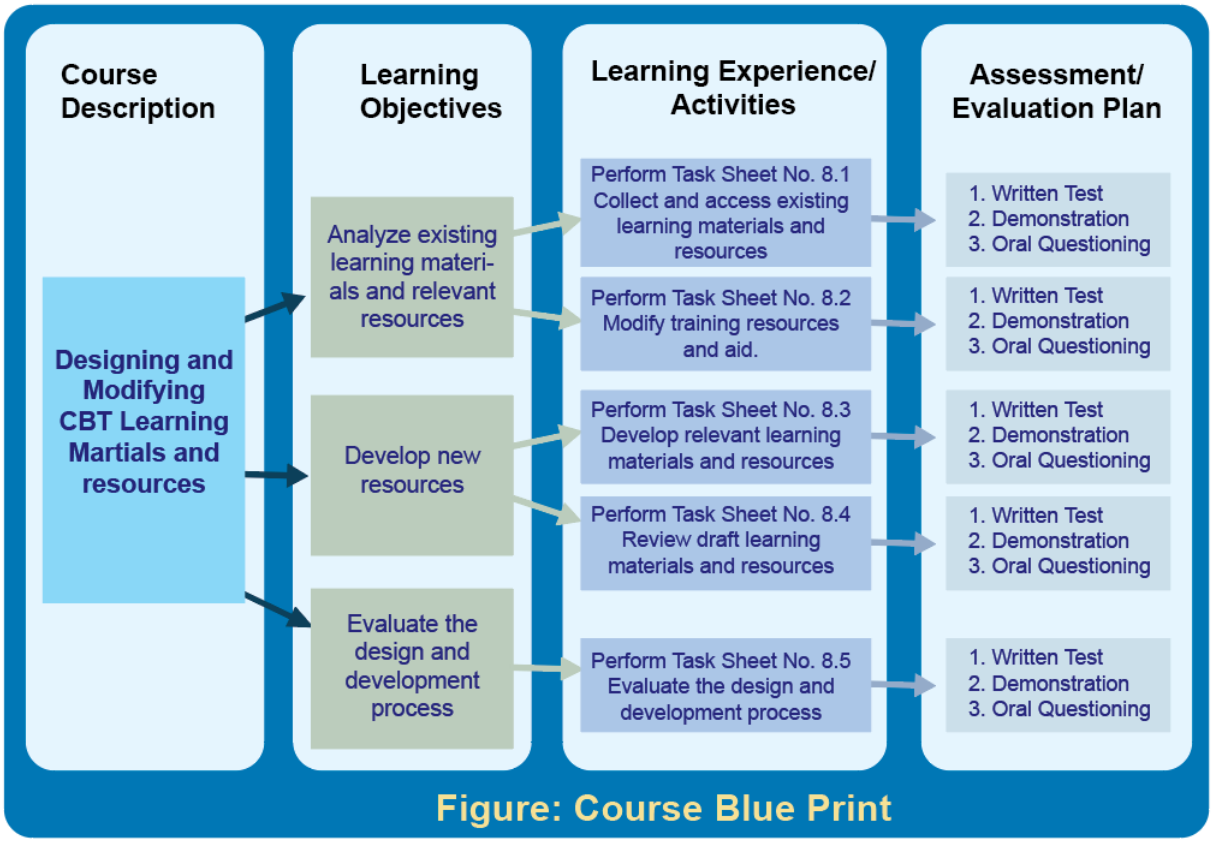


Figure: Course Blue Print

10. Instructional design

Instructional design is a framework to creation of instructional materials. Though, this field goes beyond simply creating teaching materials, it carefully considers how students learn and what materials and methods will most effectively also what technology use to help individuals achieve their academic goals.

Instructional design (ID) is based on three psychological principles of learning:

- Behavioral
- cognitive and
- constructivist.

Behavioral psychology advocates repetition and reinforcement in learning material to create a "behavior" in the learner. Cognitive psychology focuses on engaging the learner's senses to create a learning process, while constructivism emphasizes the learner's own experience and personal interpretation. To create a solid foundation for delivering these principles, learning materials should:

- Present content.
- Guide the learner in practice.
- Provide for independent practice by the learner.
- Assess how well the learner is doing.

And be supported by interactivity between learner and program, and the motivation of the learner. Skilled instructional designers know that the learning content shouldn't become secondary to the technology that delivers it. They also activate prior learning, demonstrate what's new, give learners opportunities to apply their new learning, and integrate current with previous learning.

Sample template of course instructional design

Instructional Design

Sector :	Training & Assessment
Qualification :	NC level 4 in Competency Based Training and Assessment
Unit of Competency:	TVTDES401A1: Design and modify CBT learning materials and resources
Module Title	Analyzing existing learning materials and relevant resources
Module Descriptor	This module covers the knowledge, skills and attitude required to analyses existing learning materials and relevant resources. It includes Learning Materials and Resources, learning outcomes and assessment criteria, Competency Standard and Learning Program.
Developer	Md. Anisuzzaman

Learning Outcome	Topic	Content	Multimedia			Activities	Notes
			Graphics	Video	H5P		
Analyze existing learning materials and relevant resources	1. Collecting and accessing existing learning materials and resources	1. Learning materials and learning resources	Presentation on Learning materials and resources	How to Collect and access existing learning materials and resources	-	Collect and access existing learning materials and resources	
	2. Review learning outcomes and assessment criteria based on competency standard	2. Learning outcomes 3. Assessment criteria 4. Competency standard	Presentation on Learning outcomes, Assessment criteria, Competency standard	How to review existing learning materials and resources	-	Review existing learning materials and resources	-
	3. Identify and reviewed learning materials and resources as per outcome for relevance and quality	5. Relevance and quality	Presentation on reviewed outcome for relevance and quality.	-	-	Evaluate reviewed outcome for relevance and quality.	-

11. Courseware:

The combination of 2 words: course and software made courseware. It is one of the educational software. Courseware is educational material designed as tools for teachers or trainers or as tutorials for students, usually packaged for use with a computer. Courseware refers to educational material used in the delivery of courses, lessons, or training programs. This material can take the form of multimedia content, including text, images, audio, and video, and is often used in online or distance learning environments.
Courseware is a great assistant for teachers since they present a lot of information that are hard to be communicated by spoken words.

For teachers and trainers, courseware content may include set-up information, a course plan, teaching notes, and exercises. Courseware can include:

- Slides for instructor-led classes.
- Material for self-directed computer-based training (CBT).
- Web sites that offer interactive tutorials.
- Material that is coordinated with distance learning, such as live classes conducted over the Internet.
- Videos or slides for use individually or as part of classes.

Purpose of Courseware:

The primary purpose of courseware is teaching or self-learning.

It provides students with the information and resources they need to learn and understand a subject, as well as to assess their progress and understanding through tests, quizzes, and assignments.

Main reason for courseware:

- Technology is one of the biggest reasons for courseware
  Train employee/trainee with new tricks
- Technology is always increasing

Some questions about courseware:

- Who uses courseware?
  Manager/trainer to train employees/trainees
- Where is it used?
  Any organization that feels the need to train their staff/trainee
- When it is used?
  When technology increased and employees/trainees need to update their skills

Principle of courseware design:

There are 3 Principles in courseware design

a. **Sound Instructional Plan** - gives targets, learning objectives and goals
b. **Adults learn best by doing** - Define, Show, Do, Review
c. **Learning experience** is set up for the individual so there is maximum retention of the information to be learned

Sample template of course courseware

COURSEWARE

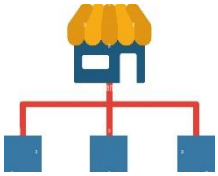
Sector :	Training & Assessment
Qualification :	NC level 4 in Competency Based Training and Assessment
Unit of Competency:	TVTDES401A1: Design and modify CBT learning materials and resources
Module Title	Analyzing existing learning materials and relevant resources
Developer:	Md. Anisuzzaman

Learning Objective/s:	At the end of the module, learners should be able to analyze existing learning materials and relevant resources

Learning Outcomes	**W E B S C R I P T**				**MEDIA SCRIPT**		REMARKS
	Lesson/s	**Topics**	**Assignment**	**Unit Quiz**	**Text/Image/Audio**	**Video**	
Analyze existing learning materials and relevant resources	Collecting and accessing existing learning materials and resources	Learning Materials and Resources	7.1 Collect and access existing learning materials and resources	Short questions on Learning Materials and Resources	Slide Presentation on Learning materials & resources and Relationship between learning outcomes and elements	Video on collection and accessing of existing learning materials and resources	

12. Structure and Segmentation of Digital Contents

The structure and segmentation of digital content is a key factor in how effectively learners can absorb and understand the information presented. Well-structured content contributes to a more engaging and effective learning experience.



- **Clear Organization**

  Organization in digital content refers to how the content is structured and ordered, including the grouping of similar topics and the logical flow from one topic to another.

- **Chunking Information**

  Chunking refers to breaking down information into smaller, manageable parts or 'chunks'. This technique makes content easier to digest and remember, making it particularly useful for complex or dense topics.

- **Sequential Flow**

  Sequential flow refers to arranging the content in a logical and linear order, where each topic builds on the previous one.

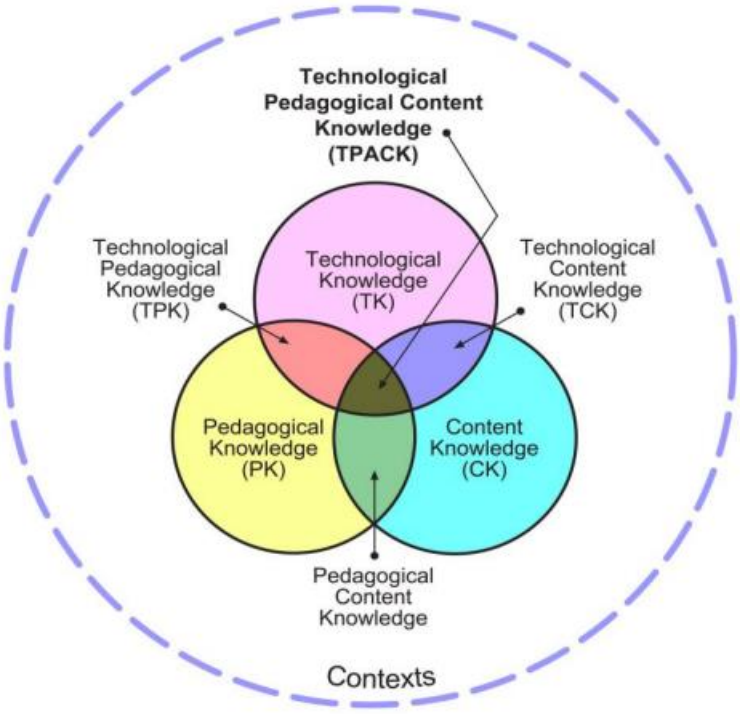
- **Navigation and Signposting**
  Navigation and signposting help guide learners through the content. They include elements like a table of contents, breadcrumb trails, navigation buttons, and clear headers and sub-headers.
- **Visual Hierarchy**
  Visual hierarchy in digital content refers to the use of design elements to indicate the importance of content. It helps learners identify key points and understand how information is related.
- **Interactive Elements**
  Interactive elements, such as quizzes, discussions, and interactive graphics, can increase engagement and improve learning outcomes.
- **Consistent Design**
  Consistent design enhances usability and learner confidence by making content predictable and easier to understand.

13. Technology, Pedagogy and Content Knowledge (TPACK) principles

At the heart of good teaching with technology are three core components: content, pedagogy, and technology, plus the relationships among and between them. The interactions between and among the three components, playing out differently across diverse contexts, account for the wide variations seen in the extent and quality of educational technology integration. These three knowledge bases (content, pedagogy, and technology) form the core of the technology, pedagogy, and content knowledge (TPACK) framework.

TPACK stands for Technological Pedagogical Content Knowledge. It is a framework that describes the knowledge and skills that teachers need to effectively integrate technology into their teaching practices. The TPACK framework recognizes that technology, pedagogy, and content are interconnected and that effective teaching with technology requires a deep understanding of these intersections. It suggests that teachers need to know not only about the technology itself, but also how to use it to support learning, and how to align technology use with the curriculum and learning objectives.

The main domains of TPACK are 1. Technological Content Knowledge (TCK); 2. Pedagogical Content Knowledge (PCK), and 3. Technological Pedagogical Knowledge (TPK). The three subdomains are 1. Technological Knowledge (TK); 2. Content Knowledge (CK); and 3. Pedagogical Knowledge (PK). In 2019, Mishra proposed a revised TPACK diagram to emphasize the context in which technology integration occurs by retitling the outer circle as Contextual Knowledge or XK.



TPACK is a framework that identifies the knowledge teachers need to teach effectively with technology.

- **Content Knowledge (CK)**
  Content Knowledge refers to the teacher's understanding of the subject matter that is to be learned or taught. This includes knowledge of concepts, theories, ideas, organizational frameworks, knowledge of evidence and proof, etc.
- **Pedagogical Knowledge (PK)**
  Pedagogical Knowledge involves understanding how to facilitate learning. This includes knowledge of teaching methods, lesson planning, learner assessment, and classroom management strategies.
- **Technological Knowledge (TK)**
  Technological Knowledge involves understanding of various technologies, software, hardware, and tools that can be used in teaching.
- **Technological Pedagogical Knowledge (TPK)**
  Technological Pedagogical Knowledge refers to an understanding of how teaching and learning can change when particular technologies are used. This includes knowing the pedagogical affordances and constraints of a range of technological tools as they relate to disciplinarily and developmentally appropriate pedagogical designs and strategies.

- **Technological Content Knowledge (TCK)**

  Technological Content Knowledge refers to an understanding of the relationship between your subject matter and the technology that can be used to communicate it.

- **Technological Pedagogical Content Knowledge (TPACK)**

  Technological Pedagogical Content Knowledge represents a class of knowledge that is central to teachers' work with technology. The interaction of these three types of knowledge - content, pedagogy, and technology - both with each other and with the context, creates the knowledge base necessary for effective teaching with technology.

14. Digital Learning Materials/Media Elements

Digital learning materials or media elements like text, images, video, audio, and interactive content enhance digital learning experiences. They cater to diverse learning styles, improve information retention, and make learning interactive and engaging.

Types of Media Elements

There is an array of media elements that can be used in digital learning, including but not limited to text, images, videos, audio, animations, infographics, quizzes, interactive simulations, augmented reality (AR), virtual reality (VR), and social media elements.

- **Text**

  Text is a vital component of digital learning materials. Text is a collection of words or letters that are understandable by the reader. On a computer, text is added, viewed, edited, and modified. It can be used to deliver crucial information, instructions, explanations, and more.

- **Images (Graphics)**

  Images, including photographs, diagrams, infographics, and illustrations, can supplement textual content and aid comprehension. They can be created or edited using tools like Adobe Photoshop, Canva, Adobe Illustrator etc.

- **Videos**

  Videos, including tutorials, demonstrations, animated explainers, or recorded lectures, can enhance understanding and retention. They can be created using tools like Adobe Premiere Pro or simpler alternatives like Lumen5.

- **Audio**

  Audio elements, such as podcasts, narrations, or sound effects, can offer a different mode of content delivery. Audacity or GarageBand can be used to create and edit audio content.

- **Interactive Content**

  Interactive content such as quizzes, simulations, drag-and-drop activities, or clickable infographics can boost learner engagement and retention. Tools like Articulate Storyline or Adobe Captivate can be used to create interactive elements.

15. Types of Presentation for Digital Learning Production

Digital learning offers various presentation types, each offering unique advantages. The choice of presentation type depends on factors such as the subject matter, learning objectives, learner preferences, and available resources. Type of presentation are illustrating bellow:

- **Slideshow Presentations**

  Slideshow presentations, typically using PowerPoint, Keynote, or Google Slides, are a staple in many learning environments. They allow for the systematic presentation of information, often supplemented with images, audio, video, and interactive elements.

- **Video Presentations**

  Video presentations can include recorded lectures, animated explainer videos, or demonstration videos. They are particularly effective when visual demonstration or storytelling is necessary for understanding.

- **Interactive Multimedia Presentations**

  Interactive multimedia presentations integrate various media types and interactive elements like quizzes, simulations, or clickable infographics. Tools like Adobe Captivate or Articulate Storyline can be used to create these.

- **Webinars and Live Streaming**

  Webinars and live streams provide real-time interaction between the presenter and the audience, making them ideal for live lectures, discussions, or Q&A sessions.

- **Augmented Reality (AR) and Virtual Reality (VR) Presentations**

  AR and VR offer immersive, experiential learning experiences, well-suited for fields like medicine, engineering, or history. They require specialized tools and equipment, such as Unity for creating the presentations and VR headsets for experiencing them.

- **Podcasts and Audio Presentations**

  Podcasts and audio presentations allow learners to absorb information while multitasking. They are effective for storytelling, interviews, or narrative-driven content.

- **E-books and Digital Textbooks**

  E-books and digital textbooks provide text-heavy, self-paced learning resources. They can be supplemented with images, interactive elements, and embedded multimedia.

16. Digital Learning Production Phase

The production of digital learning content can be broadly divided into three phases: preproduction, production, and post-production. Each phase involves specific tasks that contribute to the overall quality and effectiveness of the final learning material

16.1 Preproduction

The preproduction phase is the planning stage. This involves conceptualizing the content, defining learning objectives, and outlining the course structure. This phase often includes creating a detailed storyboard or script and setting up a production timeline.

Work Instructions:

Step 1: Begin by identifying the learning objectives and target audience for your digital learning content.

Step 2: Create a detailed outline or storyboard of the content. This should include the sequence of topics, the types of learning materials (text, video, audio, interactive elements), and any assessment methods.

Step 3: Develop a production timeline that outlines when each task needs to be completed.

16.2 Production

The production phase is when the actual creation of the digital learning content occurs. This can include writing, recording, designing, coding, and more, depending on the type of content being produced.

Work Instructions:

Step 1: According to your storyboard or script, start creating the content for your digital learning material.

Step 2: This can involve writing text, recording audio or video, designing visuals or graphics, and creating any interactive elements.

Step 3: Ensure you follow the best practices for each type of content. For example, for video content, ensure good lighting and audio quality.

16.3 Post Production

In the post-production phase, the raw materials created during the production phase are edited and polished. This can include adding effects or enhancements, testing the material, gathering initial feedback, and making necessary revisions.

Work Instructions:

Step 1: Review the content created during the production phase and perform necessary edits. This could include editing video or audio, proofreading text, and testing interactive elements. **Step 2:** Add any final enhancements such as transitions, effects, or additional multimedia elements.

Step 3: Test the digital learning content and gather feedback. Based on this feedback, make any necessary revisions to improve the content's quality and effectiveness.

17. Content Development Software

The production of digital learning content involves the use of various content development software. Each type of software has a specific role in the creation, editing, or organization of different content types.

17.1 Word Processors

A word processor is a device or software program capable of creating, storing, and printing text documents. It allows users to write and modify text, display it on a screen, save it electronically, and print it out.

Example:

- Microsoft Word
- Google Docs
- iWork Pages
- OpenOffice Writer
- WordPerfect etc.

17.2 Image Editors

An image editing software that enables the creating, editing and conversion of images to varying graphic formats. It can used for tasks ranging from simple cropping or resizing to complex graphic design. Everyone knows Photoshop as one of the most popular image editing tools, but there are many others with similar capabilities.

Example:

- Adobe Photoshop.
- Adobe Photoshop Lightroom.
- Canva for Enterprise.
- Photos.
- Adobe Photoshop Lightroom Classic.
- Photoshop Elements.
- Adobe Photoshop Express.
- GIMP etc

17.3 Video Editors

Video editors are essential for creating and editing videos, an increasingly important component of digital learning content.

Example:

- Adobe Premiere Pro.
- Final Cut Pro X.
- Adobe After Effects.
- Lightworks.
- Freemake.
- iMovie.
- Shotcut etc

17.4 Audio Editors

Audio editors are used for recording or editing sound files, such as voice-overs for videos or audio for podcasts.

Example:

- Riverside.fm.
- Logic Pro X.
- Adobe Audition.
- GarageBand.
- Audacity.
- Descript.
- Ableton Live etc.

17.5 Screen casting Software

Screen casting software is used to create screencasts, which are video recordings of your computer screen. They are often used for software tutorials or demonstrations.

Example:

- Camtasia
- ScreenFlow
- Loom
- OBS Studio

18. Content Development/Authoring Tools

Developing digital learning content often requires specialized authoring tools. These tools allow for the creation of structured, interactive learning experiences, such as online courses, quizzes, or assessments.

18.1 Course Authoring Tools

Course authoring tools are software applications used to create online courses. These tools typically offer features for creating and organizing content, incorporating multimedia elements, and building interactive components.

Example:

- Elucidat
- Articulate Rise
- Easygenerator
- Articulate Storyline
- Adobe Captivate.

18.2 Quiz Creation Tools

Quiz creation tools allow you to create quizzes or assessments to test learners' understanding of the content. These tools often provide options for multiple question types, automatic grading, and feedback.

Example:

- Google Forms
- Quizizz
- Slido
- SurveyMonkey
- Playbuzz
- Typeform, etc

Self-Check Sheet 2: Plan for digital learning contents development

1. What is the ADDIE model used for in instructional system design? What are the five phases of this model?

2. What is learning domain? According to Bloom's Taxonomy what are the three parts of learning domain?

3. According to Bloom's Taxonomy, how many levels of cognitive domain are there in total? List and explain them in order from lowest to highest?

4. What is work plan? What is the purpose of a work plan?

5. What are the key elements of a work plan?

6. What is the purpose of study guide?

7. What is course blue print?

8. Which elements should be included in course blue print?

9. How many principles in courseware design? Explain each of them.

10: What is TPACK and why is it important for effective teaching with technology?

11. What are the main domains of TPACK?

12. What is Contextual Knowledge (XK) in the revised TPACK diagram proposed by Mishra in 2019?

Answer Key 2: Plan for digital learning contents development

1. What is the ADDIE model used for in instructional system design? What are the five phases of this model?

Answer: The ADDIE model is used as a framework for creating high-quality, effective digital learning materials.

The five phases of the ADDIE model are Analysis, Design, Development, Implementation and Evaluation.

2. What is learning domain? According to Bloom's Taxonomy what are the three parts of learning domain?

Answer: A domain is a particular field of thought, activity, or interest, especially one over which someone has control, influence, or rights.

According to Bloom's Taxonomy there are three parts of learning domain. These are:

1. **Cognitive domain** (intellectual capability, i.e., **knowledge**, or **'think'**)
2. **Affective domain** (feelings, emotions and behavior, i.e., **attitude**, or **'feel'**)
3. **Psychomotor domain** (manual and physical skills, i.e., **skills**, or **'do'**)

3. According to Bloom's Taxonomy, how many levels of cognitive domain are there in total? List and explain them in order from lowest to highest?

Answer: According to Bloom's Taxonomy, there are 6 levels of cognitive domain are there in total. These are:

i) **Remembering** is the ability to recall data and/or information. Example: A children recites a rhythm in different language without understanding anything

ii) Understanding is the ability to understand the meaning of what is known. Example: a student interprets the ohm's law to his teacher.

iii) **Applying** is the ability to utilize an abstraction or to use knowledge in a new situation. Example: Calculate current, voltage and resistance what he learned about ohm's law and interpreted to his teacher.

iv) **Analysing** is the ability to differentiate facts of the relationship of current, voltage and resistance

v) **Evaluating** is the ability to come up with judgments about the importance of concepts and integrate different elements or concepts. Examples: Explain the reasoning of variation of values of the electrical quantities in different situation

vi) **Creating** is the ability to form a new pattern/ structure / theory so a new meaning can be established. A PhD students discover or invented a new and improved theory of current flow

4. What is work plan? What is the purpose of a work plan?

Answer: A work plan represents the formal road map / streamline a project for a project. It should clearly articulate the required steps to achieve a stated goal by setting demonstrable objectives and measurable deliverables that can be transformed into concrete actions.

The purpose of a work plan is to create a visual reference for the goal, objectives, tasks, and team members who are responsible for each area.

5. What are the key elements of a work plan?

Answer: The key elements of a work plan include setting goals and objectives, establishing team responsibilities, setting project timelines, and establishing a budget.

6. What is the purpose of study guide?

Answer: The purpose of a study guide is to help you synthesize and summarize the information. The primary advantage of a study guide is that it reduces the amount of information to be learned.

7. What is course blue print?

Answer: A course blueprint is a visual representation of a course that outlines its key components and how they fit together. It's part of a larger course design portfolio and helps ensure that the course is well-structured and coherent.

8. Which elements should be included in course blue print?

Answer: The Course Blueprint may include:

i. **Course Description:** It is likely that your institution's course catalog provides a broad description of your course.

ii. **Learning Objectives** – Specified abilities that students will be able to achieve; the behaviors that students will be able to perform after completing the course. These must be observable and measurable, and criteria for their measurement should be described in a rubric.

iii. **Learning Experience/Activities–** Activities designed to assist students in achieving the learning objectives. These activities may be passive or active.

iv. **Evaluation Plan –** Assignments, tests, and grading system developed by the instructor used to assess how students reach the course learning objectives.

9. How many principles in courseware design? Explain each of them.

Answer: There are 3 Principles in courseware design. These are:

a. **Sound Instructional Plan** - gives targets, learning objectives and goals
b. **Adults learn best by doing** - Define, Show, Do, Review
c. **Learning experience** is set up for the individual so there is maximum retention of the information to be learned

10: What is TPACK and why is it important for effective teaching with technology?

Answer: TPACK stands for Technological Pedagogical Content Knowledge, and it refers to the knowledge and skills that teachers need to effectively integrate technology into their teaching practices. It is important because technology, pedagogy, and content are interconnected, and effective teaching with technology requires a deep understanding of these intersections.

11. What are the main domains of TPACK?

Answer: The main domains of TPACK are Technological Content Knowledge (TCK), Pedagogical Content Knowledge (PCK), and Technological Pedagogical Knowledge (TPK).

12. What is Contextual Knowledge (XK) in the revised TPACK diagram proposed by Mishra in 2019?

Answer: Contextual Knowledge (XK) refers to the knowledge and skills that teachers need to effectively integrate technology into their teaching practices in a specific context. The revised TPACK diagram emphasizes the importance of considering the context in which technology integration occurs.

Task Sheet 2.1: Make work plan

TASK SHEET 2.1
Title: Make a Work Plan
Performance Objective: At the end of this task, the trainee should be able to make a work plan for the for the development of digital contents for face-to-face delivery Following the steps and procedures given below.
A. Supplies Documents ▪ Sample format of workplan ▪ Learning site, development site, Microsoft word **B. Tools and Material required:** ▪ Notebook ▪ Handbook ▪ Office Stationeries **C. Equipment:** ▪ Laptop/Computer
Steps/Procedures: • Follow the given template of work plan in information sheet. • In paper and pen, identify your project name (project title), its purpose, time frame. • and budgetary requirement. • Identify your goals and objectives. • Identify your resources, risks and possible accountability. • Consolidate your ideas into context. • Fill in the required information on the table. • Convert your output into a pdf file. • Upload and wait for it to be evaluated by your trainer.

Specification sheet 2.1: Make work plan

A. Supplies Documents

- Sample format of work plan
- Learning site, development site, Microsoft word

B. Tools and Material required:

- Notebook
- Handbook
- Office Stationeries

C. Equipment:

- Laptop/Computer

Task Sheet 2.2: Prepare a Study Guide

TASK SHEET 2.2
Title: Prepare a Study Guide
Performance Objective: At the end of this task, the trainee should be able to prepare a comprehensive study guide considering the given sample in information sheet.
A. Supplies Documents ▪ Sample format of study guide ▪ Learning site, development site, Microsoft word **B. Tools and Material required:** ▪ Notebook ▪ Handbook ▪ Office Stationeries **C. Equipment:** ▪ Laptop/Computer
Steps/Procedures: • Enumerate key ideas as highlight to study by your trainees. • Include nominal duration, introduction, objectives and learning resources. • Specific study questions for each module you wish to create should be listed there, • activities specifically for face-to-face classes should be provided in a very specific • and in chronological order. • Provide study schedule in the table on the template provided. Don't forget to put • number of hours the activity should be covered. • Create your study guide in a word document then turn it into a pdf file. • Upload and wait for it to be evaluated by your trainer.

Specification sheet 2.2: **Prepare a Study Guide**

A. Supplies Documents

- Sample format of study guide
- Learning site, development site, Microsoft word

B. Tools and Material required:

- Notebook
- Handbook
- Office Stationeries

C. Equipment:

- Laptop/Computer

Task Sheet 2.3: Construct Course Blue Print

TASK SHEET 2.3
Title: Construct Course Blue Print
Performance Objective: At the end of this task, the trainee should be able to construct course blue print considering the given sample in information sheet.
A. Supplies Documents ▪ Sample format of course blue print ▪ Learning site, development site, Microsoft word, Training Needs Analysis (TNA) **B. Tools and Material required:** ▪ Notebook ▪ Handbook ▪ Office Stationeries **C. Equipment:** ▪ Laptop/Computer
Steps/Procedures: • Use the Training Needs Analysis (TNA) as your basis to set the training goals. • Set achievable target/s based on your trainees' capability. • Do not forget to put the title of your qualification, sector, unit of competency and • the module title. • Flow chart will help the trainees to identify the context of the training for each • unit of competency. • Use the given template. • Convert your output into a pdf file. • Upload and wait for it to be evaluated by your trainer.

Specification sheet 2.3: Construct Course Blue Print

A. Supplies Documents

- Sample format of study guide
- Learning site, development site, Microsoft word, Training Needs Analysis (TNA)

B. Tools and Material required:

- Notebook
- Handbook
- Office Stationeries

C. Equipment:

- Laptop/Computer

Task Sheet 2.4: Develop Instructional Design

TASK SHEET 2.4
Title: Develop Instructional Design
Performance Objective: At the end of this task, the trainee should be able to Develop Instructional Design considering the given sample in information sheet.
A. Supplies Documents ▪ Sample format of course blue print ▪ Learning site, development site, Microsoft word **B. Tools and Material required:** ▪ Notebook ▪ Handbook ▪ Office Stationeries **C. Equipment:** ▪ Laptop/Computer
Steps/Procedures: • Fill-in the template given to you. • Do not forget to put the sector, qualification, unit of competency, module title. • Course descriptor and your name as developer on the first part of the table. • Contextualize each learning outcome, the topic, its content, the resource which will be the multimedia. • Please take note that, you don't have to fill all types of multimedia. Be specific with your activities. • Convert your output into a pdf file. • Upload and wait for it to be evaluated by your trainer.

Specification sheet 2.4: Develop Instructional Design

A. Supplies Documents

- Sample format of study guide
- Learning site, development site, Microsoft word, Training Needs Analysis (TNA)

B. Tools and Material required:

- Notebook
- Handbook
- Office Stationeries

C. Equipment:

- Laptop/Computer

Task Sheet 2.5: Outline Courseware Content

TASK SHEET 2.5
Title: Develop Instructional Design
Performance Objective: At the end of this task, the trainee should be able to Outline Courseware content considering the given sample in information sheet.
A. Supplies Documents ▪ Sample format of course blue print ▪ Learning site, development site, Microsoft word **B. Tools and Material required:** ▪ Notebook ▪ Handbook ▪ Office Stationeries **C. Equipment:** ▪ Laptop/Computer
Steps/Procedures: • Fill-in the template given to you. • Do not forget to put the sector, qualification, unit of competency, module title, your name as developer on the first part of the table and learning objectives. • Identify all learning outcomes of your unit of competency. Determine relevant lesson and include at least 2 or more topics per LO. Assignment may be in a form of self-check which include number control number and for numbering system follow this rule: Unit of Competency, Learning Outcome and then Topic (e.g., Self-Check: 5.3-2) wherein, 5 is the UoC, 3 is the learning outcome and 2 is the number of topics. • For the portion of media script just put a check mark (✓) to which the topic applies. You may choose one from the two choices. • You may put remarks at the end column of the table for future references. • Convert your output into a pdf file. • Upload and wait for it to be evaluated by your trainer

Specification sheet 2.5: Outline Courseware content

A. Supplies Documents

- Sample format of study guide
- Learning site, development site, Microsoft word

B. Tools and Material required:

- Notebook
- Handbook
- Office Stationeries

C. Equipment:

- Laptop/Computer

Learning Outcome 3: Collect Media Elements

Assessment Criteria:

1. Sources of media elements for the presentation are selected and collected.
2. Media elements are downloaded or collected from appropriate source.
3. Media elements are manipulated and edited as required.
4. Video is cut and appended as required to use in presentation.
5. Open educational resources (OER) are selected and collected

Content:

1. **Guidelines for Selecting Media Elements**
2. **Researching and Validating Media Sources**
    - 1.1. Reliable Media Sources
    - 1.2. Downloading/Collecting Process of Media Elements
    - 2.3. Assessing Media Quality and Relevance
3. **Legal and Ethical Guidelines for Media Usage**
    - 4.1. Understanding Copyrights and Fair Use
    - 4.2. Citing and Acknowledging Media Sources
4. **Accessibility and Universal Design in Media Selection**
    - 5.1. Principles of Accessible Media
    - 5.2. Inclusive Design in Media Selection
5. **Accessing OER (Open Educational Resources)**

Resources Required/ Conditions:

The trainees must be provided with the following:

- Handouts or reference materials/books/ CBLMs on the above stated contents
- PCs/printers or laptop/printer with internet access
- Digital projector and Screen
- Bond paper
- Ball pens/pencils and other office supplies and materials
- Relevant learning materials
- Workplace or simulated environment

Methodologies

- Lecture/discussion
- Demonstration/application
- Presentation
- Blended delivery methods

Assessment Methods

- Written test
- Demonstration
- Observation with checklist
- Oral questioning
- Portfolio

Learning Experience 3: Collect Media Elements

In order to achieve the objectives stated in this learning guide, you must perform the learning steps below. Beside each step are the resources or special instructions you will use to accomplish the corresponding activity.

Learning Steps	Resources specific instructions
1. Student will ask the instructor about Collecting Media Elements.	1. Instructor will provide the learning materials "**Developing Digital Learning Materials"**
2. Read the Information sheet/s	2. Information Sheet No 3: Collect Media Elements
3. Complete the Self Checks & Check answer sheets.	3. Self-Check/s Self-Check No 3: Collect Media Elements Answer key No. 3: Collect Media Elements
4. Read the Job Sheet and Specification Sheet and perform job	4. Job- Sheet No 3-1: Collect Media Elements Specification Sheet 3-1: Collect Media Elements

Information Sheet 3: Collect Media Elements

Learning Objectives:

After completion of this information sheet, the learners will be able to:

1. Select and collect Sources of media elements for the presentation.
2. Download or collect Media elements from appropriate source.
3. Manipulate and edit Media elements as required.
4. Cut and append Video as required to use in presentation.
5. Select and collect Open Educational Resources (OER)

Content:

1. Guidelines for Selecting Media Elements

Selecting the right media elements can be the difference between effective and ineffective digital learning content. Media elements should be chosen carefully to support learning objectives, cater to diverse learning styles, engage learners, and enhance content comprehension.

Work Instructions:

Step 1: Identify your learning objectives. What knowledge or skills do you want your learners to acquire? How can media support these objectives?

Step 2: Understand your learners. Consider their age, cultural backgrounds, literacy levels, accessibility needs, and learning styles. These factors can influence the types of media elements that will be most effective.

Step 3: Select high-quality media elements that are relevant to the content, appropriate for the learners, and supportive of the learning objectives.

2. Researching and Validating Media Sources

2.1 Reliable Media Sources

When sourcing media for your digital learning content, it's vital to use reliable and credible sources. This will ensure that the information you're providing is accurate and of high quality.

Work Instructions:

Step 1: Identify potential sources for your media elements. This could be databases, libraries, online platforms, or commissioned work.

Step 2: Evaluate each source for its reliability. Consider factors such as the author's credibility, the source's reputation, and the quality and accuracy of the content.

Step 3: Always cross-check information across multiple sources when possible.

2.2 Downloading/Collecting Process of Media Elements

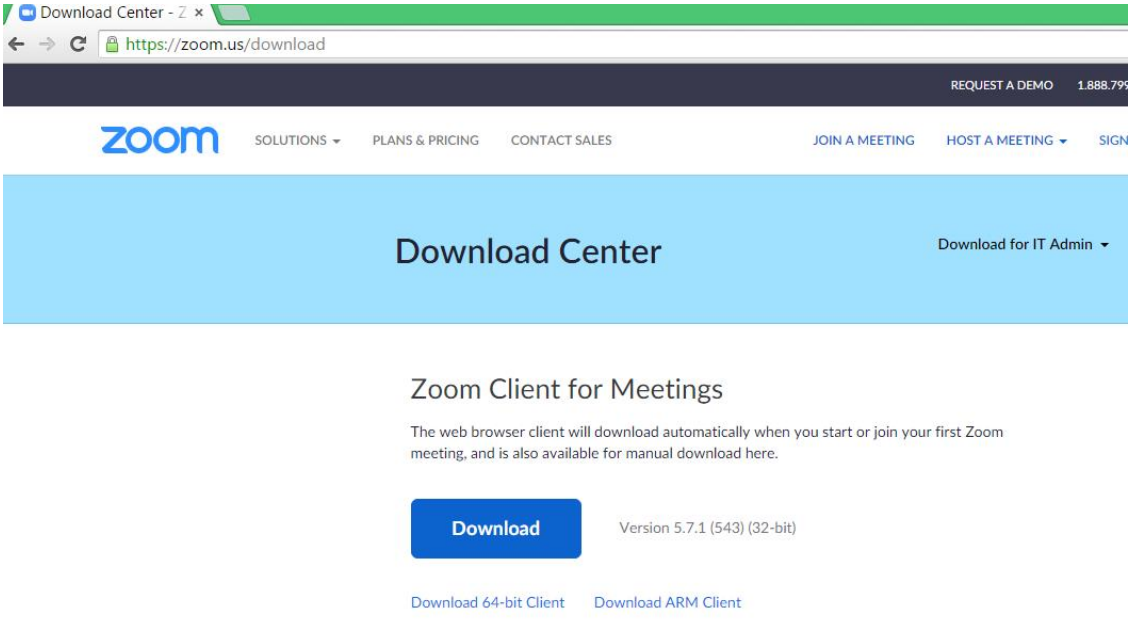
Downloading Files from Web

The process of copying a file (such as a game or utility) from one computer to another through the internet is known as downloading. The transmission of a file from a server or remote computer system to a user's PC is known as downloading. Downloading a file, from the perspective of an Internet user, is making a request for a file from a server computer and receiving it. When you download a game from our website, you are transferring it from the author's or publisher's web server to your own computer. This enables you to install and run the software on your own computer. Using Download, Click Here, etc. types of links on Web pages, downloading photos, articles, and apps from the Internet has become a pleasure.

Steps to Download a File:

To download a file (from a remote server), perform the following steps:

Step 1: Select the software you wish to download by clicking on the download link. There are different websites that may provide download URLs for the same program, select one from them. **Example:** To download zoom on Windows: Go to the URL: "**https://zoom.us/download**" and then click on the download button.

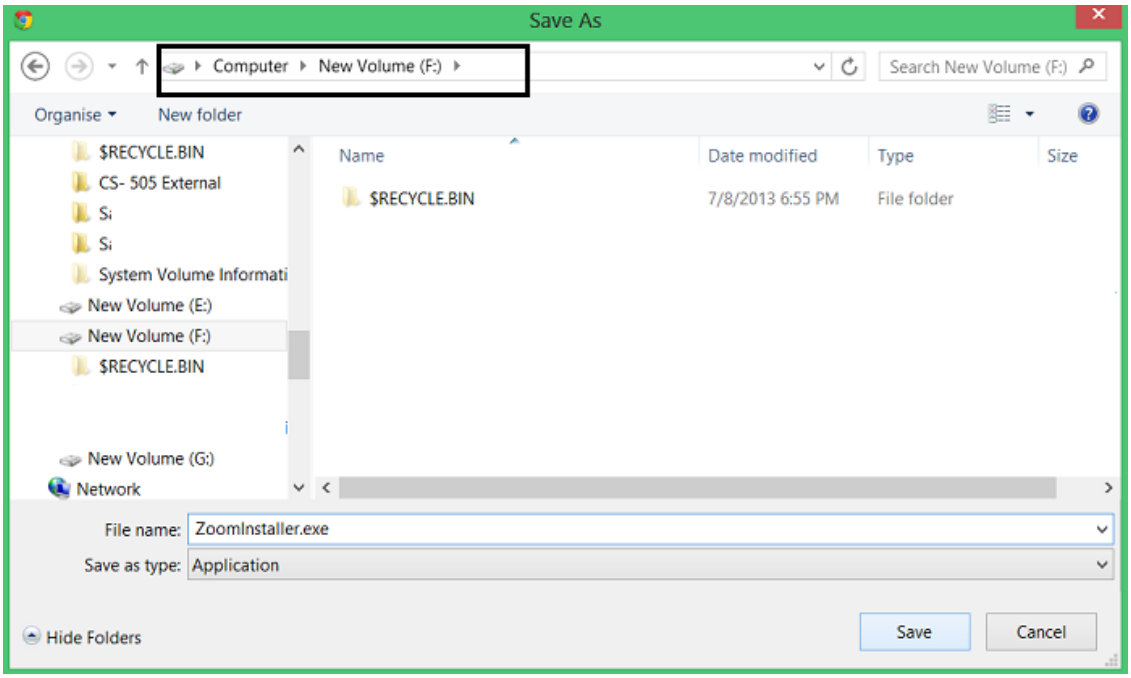


Step 2: You might be prompted whether you wish to save or run the file from its present location. Select "**Save**" (if asked).

Note: Some browsers will choose "Save" for you automatically.

Step 3: A regular "**Save As**" dialogue box will appear, prompting you to select the folder where you want to save the application or file. Before selecting the "Save" button, select

the folder where you want to save the file. Generally, by default: "**C:\Download**," is chosen.



Step 4: Your file's download will start. Your web browser will display a progress bar that fills up as you download to keep you informed about the download's progress. In the example above, the file will be saved as "**F: \ZoomInstaller.exe**".
Depending on the sort of file you downloaded, what follows next is different. Most of the files you download will have one of two extensions.

- **EXE files:** .exe files means executable files. It is an application that can be executed. From there, follow the on-screen directions to install the program on your computer and learn how to use it after it's installed.
- **ZIP files:** ZIP is a popular file format for compressing and combining files to make them download faster. Some versions of Windows (such as XP and ME) can read ZIP files without the need for additional software. You'll need an unzipping application to read these ZIP files if you don't have one.

Guideline for download other files:

1. On your computer, open Chrome.
2. Go to the site where you want to download the file.
3. Save the file:
   - **Most files:** Click the download link. You can also right-click on the file and choose **Save as**.
   - **Images:** Right-click on the image and choose **Save Image As**.
   - **Videos:** Point to the video. Click Download . If you can't do this action, the video's owner or hosting site has prevented downloads.
   - **PDFs:** Right-click on the file and choose **Save Link As**.
   - **Web pages:** At the top right, click More ⋮ › **More Tools** › **Save Page As**.
4. If asked, choose where you want to save the file, then click **Save**.

- **Executable files (.exe, .dll, .bat):** If you trust the file, click **Save**. If you're not sure about the contents of the download, click **Discard**.

5. When you begin a download, a Download in progress icon appears on the top right next to the address bar. Once the download completes, the Download tray opens.

6. To open your file, click Open new.
   - You can also click the file to open it.

Tips:

- To show extra actions like Show in Folder, point to the filename.
- If you download a file, or if you've recently downloaded a file, the Download tray will appear. Recently downloaded files will appear to the right of the address bar.
- To view all downloads if the Download tray isn't present to the right of the address bar, click More > **Downloads**.
- You can drag a downloaded file to another folder, program, or website. To move a downloaded file, in the Download tray , click the file and drag it to the target location.

2.3 Assessing Media Quality and Relevance

Not all media elements are created equal. It's important to assess each element for its quality and relevance to your digital learning content.

Work Instructions:

Step 1: Evaluate the quality of the media element. This includes its resolution, sound or image quality, and the clarity of its message.

Step 2: Assess the relevance of the media element. Does it align with your learning objectives and support your content?

Step 3: Make a decision to include or discard the media element based on your assessments.

3. Legal and Ethical Guidelines for Media Usage

- **Understanding Copyrights and Fair Use**
  When using media elements in your digital learning content, it's crucial to understand the legal and ethical guidelines around copyrights and fair use.

- **Citing and Acknowledging Media Sources**
  It's important to always cite and acknowledge your media sources. This not only respects the original creator's rights but also enhances the credibility of your content.

4. Accessibility and Universal Design in Media Selection

4.1 Principles of Accessible Media

Accessible media is a crucial component of inclusive digital learning. It ensures that all learners, including those with disabilities, can fully engage with your content.

Work Instructions:

Step 1: Familiarize yourself with the principles of accessible media. The World Wide Web Consortium (W3C) offers comprehensive guidelines known as the Web Content Accessibility Guidelines (WCAG) here.

Step 2: Incorporate accessibility principles in your media selection and content design. This can include adding captions to videos, providing text transcripts of audio content, using sufficient color contrast, and adding alt text to images.

Step 3: Regularly test and update your content to ensure it continues to meet accessibility standards.

4.2 Inclusive Design in Media Selection

Inclusive design involves designing your digital learning content to be accessible and usable by the widest range of learners possible, irrespective of their abilities, age, or cultural backgrounds.

Work Instructions:

Step 1: Understand the principles of inclusive design. The Inclusive Design Research Centre provides a useful guide *(more details follow the link: https://idrc.ocadu.ca/about-the-idrc/).*

Step 2: Choose media that represents diversity and is sensitive to different cultures, abilities, and learning preferences.

Step 3: Seek feedback from a diverse range of learners and use it to refine your content and make it more inclusive.

5. Accessing OER (Open Educational Resources)

Open Educational Resources (OER) are teaching, learning and research materials in any medium – digital or otherwise – that reside in the public domain or have been released under an open license that permits no-cost access, use, adaptation and redistribution by others with no or limited restrictions (*According to UNESCO:*). OERs are free resources that can be used for teaching, learning, and assessing. They can include textbooks, lesson plans, quizzes, games, simulations, videos, and more.

OPEN EDUCATIONAL RESOURCES

The 5 Rs of Using OER

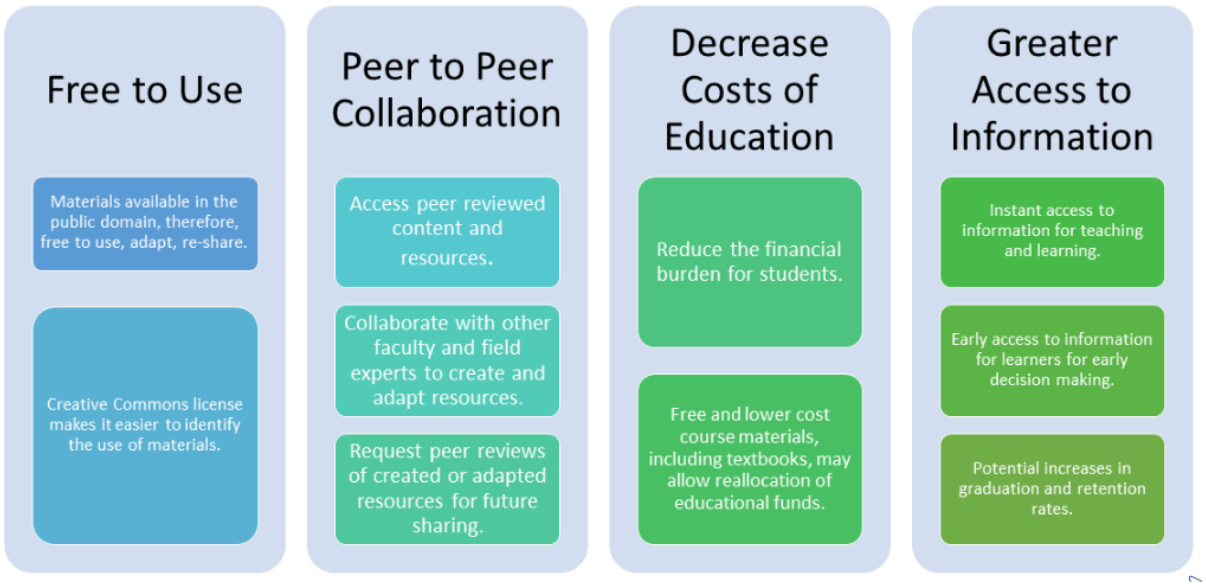
Within the bounds of Creative Commons licensing there are 5 key points to consider when using OERs:

Within the bounds of Creative Commons licensing there are 5 key points to consider when using OERs:

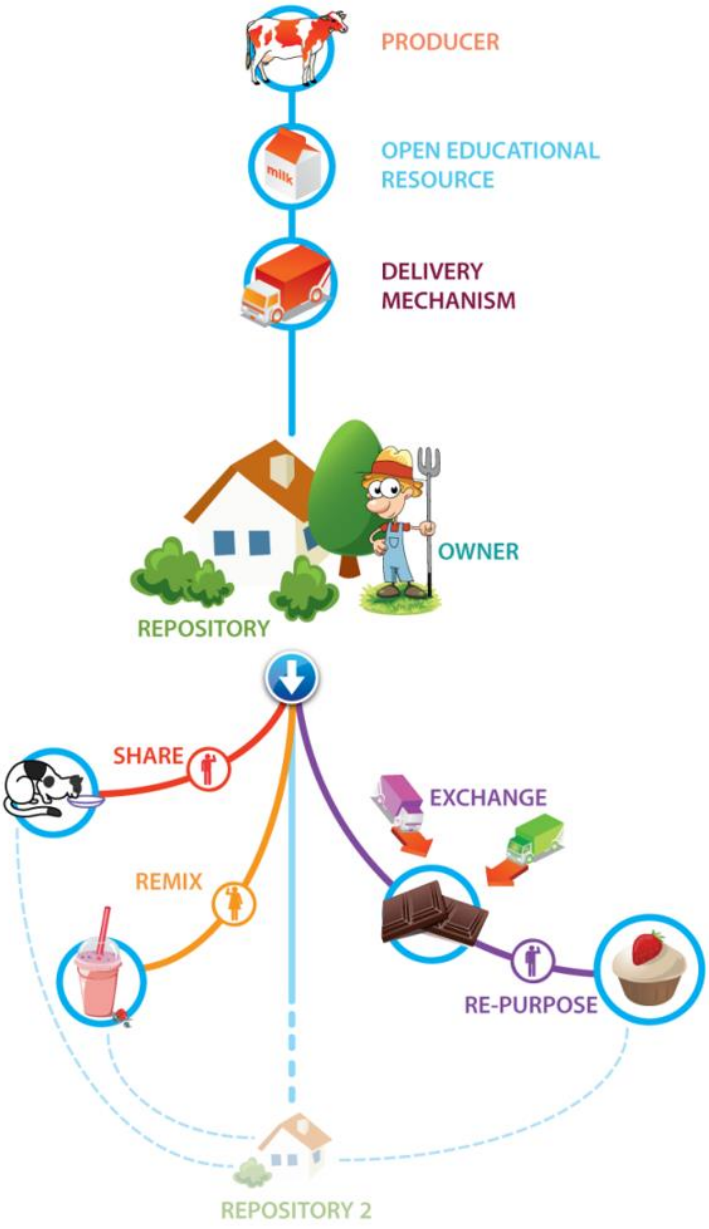
1. **Reuse** - Content can be reused in its unaltered original format - the right to use the content in a wide range of ways (e.g., in a class, in a study group, on a website, in a video)
2. **Retain** - Copies of content can be retained for personal archives or reference - the right to make, own, and control copies of the content (e.g., download, duplicate, store, and manage)
3. **Revise** - Content can be modified or altered to suit specific needs - the right to adapt, adjust, modify, or alter the content itself (e.g., translate the content into another language)
4. **Remix** - Content can be adapted with other similar content to create something new- the right to combine the original or revised content with other material to create something new (e.g., incorporate the content into a mashup)
5. **Redistribute** - Content can be shared with anyone else in its original or altered format - the right to share copies of the original content, your revisions, or your remixes with others (e.g., give a copy of the content to a friend)

OERs include a wide range of materials: assessments, assignments, books, case studies, courses, journals, primary sources, reference materials, simulations, tutorials, tests, and textbooks.

Benefits, impact of OER:



An interesting OER Metaphor



Milk	Role	OERs
Cow	Primary producer/creator	Teacher/author
Calf	Primary consumer	Enrolled student
Farmer	Secondary producer/repurposer	Learning technologist/Course leader
Milk bottlers	Primary supplier	Learning technologist
Shop	Secondary supplier	deposit in institutional repository or open deposit

Human family	Secondary consumer	Teacher within or outside institution
Human family and pets	Sharers and re-users	Enrolled students of that teacher
Person with milk, Person with cocoa powder, Person with sugar – can make chocolate	Exchange and repurposers	other teachers within or outside institution
Chocolate in shop fridge	repository	deposit in different open repositories
Chocolate eaten	re-users/maybe sharing	potentially global learners
Chocolate added to cake mixture	further re-purposing	potentially global teachers

Self-Check Sheet 3: Collect Media Elements

1. Describe Legal and Ethical Guidelines for Media Usage

2. What is OER?

3. Describe The 5 Rs of Using OER

Answer Key 3: Collect Media Elements

1. Describe Legal and Ethical Guidelines for Media Usage

Answer:

- **Understanding Copyrights and Fair Use**
  When using media elements in your digital learning content, it's crucial to understand the legal and ethical guidelines around copyrights and fair use.
- **Citing and Acknowledging Media Sources**
  It's important to always cite and acknowledge your media sources. This not only respects the original creator's rights but also enhances the credibility of your content.

2. What is OER?

Answer: Open Educational Resources (OER) are teaching, learning and research materials in any medium – digital or otherwise – that reside in the public domain or have been released under an open license that permits no-cost access, use, adaptation and redistribution by others with no or limited restrictions (According to UNESCO:). OERs are free resources that can be used for teaching, learning, and assessing. They can include textbooks, lesson plans, quizzes, games, simulations, videos, and more.

3. Describe The 5 Rs of Using OER

Answer:

1. **Reuse** - Content can be reused in its unaltered original format - the right to use the content in a wide range of ways (e.g., in a class, in a study group, on a website, in a video)
2. **Retain** - Copies of content can be retained for personal archives or reference - the right to make, own, and control copies of the content (e.g., download, duplicate, store, and manage)
3. **Revise** - Content can be modified or altered to suit specific needs - the right to adapt, adjust, modify, or alter the content itself (e.g., translate the content into another language)
4. **Remix** - Content can be adapted with other similar content to create something new- the right to combine the original or revised content with other material to create something new (e.g., incorporate the content into a mashup)
5. **Redistribute** - Content can be shared with anyone else in its original or altered format - the right to share copies of the original content, your revisions, or your remixes with others (e.g., give a copy of the content to a friend)

Task Sheet 3.1: Collect Media Elements

Task Sheet 3.1: Collect Media Elements
Title: Collect Media Elements
Performance Objective: By the end of this task, the trainee should be able to:
1. Source media elements from appropriate sources.
2. Organize collected media elements for ease of use.
Policy and Documents Required:
• Copyright and Fair Use Policies
• Citing Sources Guidelines
Tools and Materials Required:
• Internet access for sourcing media
• System for organizing media
Equipment:
• Laptop or Computer
• Internet Access
Steps/Procedures:
1. **Identify Necessary Media Elements:**
• Refer to the lesson plan and content outline to identify the specific types of media elements required for the digital learning materials. These may include images, videos, audio clips, graphics, or interactive elements.
2. **Source Media from Appropriate Sources:**
• Use various internet resources, textbooks, social media platforms, and Open Educational Resources (OER) to source relevant media elements. Ensure that all media elements chosen are permitted for use or reuse under copyright law and adhere to fair use policies.
3. **Ensure Copyright Compliance and Citation:**
• Verify that all sourced media elements are properly attributed and comply with copyright and fair use policies. Provide proper citations for each media element used.
4. **Store and Organize Collected Media:**
• Establish a logical and efficient system for storing and organizing the collected media elements. Create folders or categories that make it easy to access the media during the content development phase.
5. **Review and Quality Check:**
• Review the collected media elements to ensure they meet the required quality standards and align with the learning objectives. Discard any media elements that may not be suitable for the content.

Assessment Method: Evaluation of the trainee's collection of relevant, high-quality media that adheres to copyright and citation guidelines. The assessment will also evaluate the efficiency and effectiveness of the organization system for media, ensuring ease of access during the content development phase.

Specification Sheet 3.1

A. Supplies Documents

- Sample format of a TNA Questionnaire
- Copy of existing Course Accreditation Document or competency standard (related to your qualification)

B. Tools and Material required:

- Notebook
- Handbook
- Office Stationeries

C. Equipment:

- Laptop/Computer

Learning Outcome 4: Prepare Digitally Formatted Contents

Assessment Criteria:

1. Media elements are organized and appended with content development software as per lesson/ session plan.
2. Proper action verbs are used and maintained during the preparation of the objectives of the session / lesson.
3. Media elements used in digital content are formatted.
4. Appropriate animation is used to make the presentation attractive and interactive
5. OER are accessed and used during the content development process if required

Content:

1. **Principles of Digitizing Learning Content**
    - 1.1. Digitization Techniques
    - 1.2. Enhancing Learning Experience through Digital Formats
2. **Selecting Software and Tools for Digital Formatting**
    - 2.1. Overview of Popular Formatting Tools
    - 2.2. Aligning Tool Selection with Content Requirements
3. **Digitizing Content**
    - 3.1. Step-by-step Process of Digitizing Content
    - 3.2. Ensuring Quality and Consistency
4. **Enhancing Engagement with Digital Formats**
    - 4.1. Interactive Elements in Digital Content
    - 4.2. Using Digital Formats for Active Learning
5. **Accessibility in Digital Formats**
    - 5.1. Principles of Digital Accessibility
    - 5.2. Tools and Techniques for Ensuring Accessibility

Resources Required/ Conditions:

The trainees must be provided with the following:

- Handouts or reference materials/books/ CBLMs on the above stated contents
- PCs/printers or laptop/printer with internet access
- Digital projector and Screen
- Bond paper
- Ball pens/pencils and other office supplies and materials
- Relevant learning materials
- Workplace or simulated environment

Methodologies

- Lecture/discussion
- Demonstration/application
- Presentation
- Blended delivery methods

Assessment Methods

- Written test
- Demonstration
- Observation with checklist
- Oral questioning
- Portfolio

Learning Experience 4: Prepare Digitally Formatted Contents

In order to achieve the objectives stated in this learning guide, you must perform the learning steps below. Beside each step are the resources or special instructions you will use to accomplish the corresponding activity.

Learning Steps	Resources specific instructions
1. Student will ask the instructor about Preparing Digitally Formatted Contents.	1. Instructor will provide the learning materials "**Develop Digital Learning Materials"**
2. Read the Information sheet/s	2. Information Sheet No: 4 Prepare Digitally Formatted Contents
3. Complete the Self Checks & Check answer sheets.	3. Self-Check/s Self-Check No: 4 Prepare Digitally Formatted Contents Answer key No. 4 Prepare Digitally Formatted Contents
4. Read the Job Sheet and Specification Sheet and perform job	4. Job- Sheet No:4-1 Prepare Digitally Formatted Contents Specification Sheet: 4-1 Prepare Digitally Formatted Contents

Information Sheet 4: Prepare Digitally Formatted Contents

Learning Objectives:

After completion of this information sheet, the learners will be able to:

1. Organize and append Media elements with content development software as per lesson/ session plan.
2. Use and maintain Proper action verbs during the preparation of the objectives of the session / lesson.
3. Format Media elements used in digital content.
4. Use Appropriate animation to make the presentation attractive and interactive
5. Access and use OER during the content development process if required

1. Principles of Digitizing Learning Content

- **Digitization Techniques**

Digitizing learning content is a process that involves converting physical or analog educational content into a digital format. This can enhance accessibility, interaction, and learning experiences for students.

Work Instructions:

Step 1: Identify the types of content you need to digitize. This could be textbooks, lesson plans, images, audio recordings, or videos, among others.

Step 2: Choose an appropriate digitization technique for each type of content. For instance, text can be digitized using Optical Character Recognition (OCR) software, images using scanners, and audio or video using recording and editing software.

Step 3: Use the selected technique to digitize your content. Follow best practices for digitization to ensure high-quality results.

- **Enhancing Learning Experience through Digital Formats**

Digital formats can greatly enhance learning experiences by making content more engaging, interactive, and accessible.

Work Instructions:

Step 1: Identify ways to enhance your content through digital formats. For example, you can incorporate multimedia elements, interactive quizzes, or virtual simulations.

Step 2: Implement these enhancements using appropriate software or tools.

Step 3: Test the enhanced content with learners to ensure that it improves their learning experience.

2. Selecting Software and Tools for Digital Formatting

There are numerous tools available for digital formatting, each with different features and suited to different content types. Research popular formatting tools. Some examples include Microsoft Word for text, Adobe Photoshop for images, and Adobe Premiere Pro for video. Compare the features of these tools. Consider their ease of use, capabilities, cost, and compatibility with your content and learning platform. Choose the tool or tools that best meet your needs. The software and tools you select should be capable of fulfilling your content requirements.

3. Digitizing Content

3.1. Step-by-step Process of Digitizing Content

Work Instructions:

Step 1: Organize your content. Have all physical or analog content ready for digitization.

Step 2: Choose the appropriate tool or software for digitization.

Step 3: Digitize your content. Ensure you maintain the quality and integrity of the original content during the process.

Step 4: Review and refine the digitized content. Check for errors or omissions and correct them.

Create Digital Content using Microsoft PowerPoint:

Introduction to Presentation application:

A presentation package is a software program that provides the resources necessary to give a professional presentation for meetings, lectures, speeches or other similar situations.

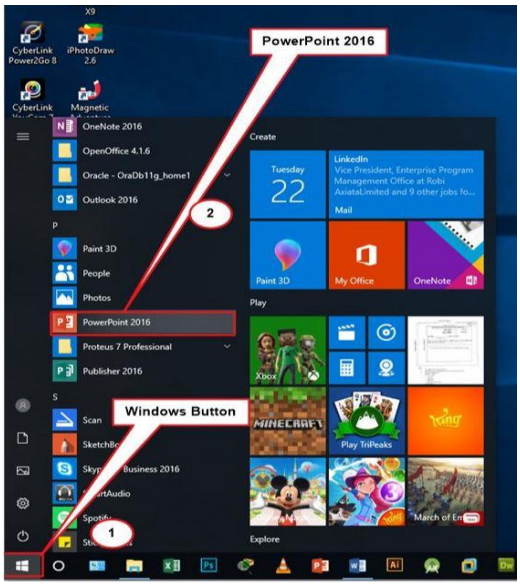
The most prominent example of presentation software is Microsoft PowerPoint. Other examples include Apple Keynote, OpenOffice Impress, Corel Presentations, Adobe Persuasion, Flowboard, Kingsoft Presentation and Prezi.

Here we discuss about Microsoft PowerPoint-

PowerPoint is computer application created by Microsoft which allows the user to create slides with recordings, narrations, transitions and other features in order to present information. PowerPoint is a presentation software made by Microsoft.

A PowerPoint presentation is a presentation created using Microsoft PowerPoint software. The presentation is a collection of individual slides that contain information on a topic. PowerPoint presentations are commonly used in business meetings and for training and educational purposes.

Run PowerPoint



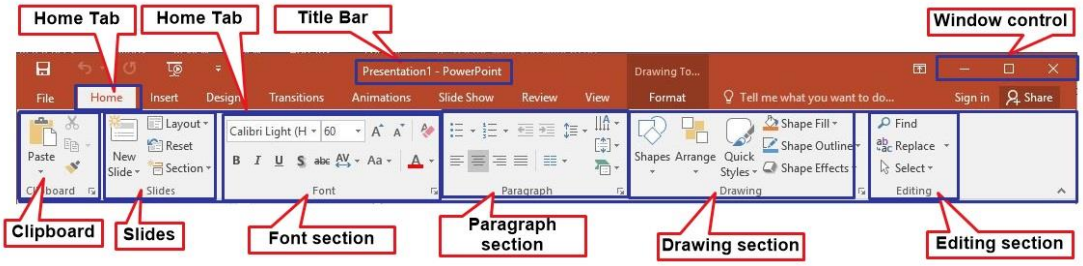
Way 1 – From Start Menu

Step 1 – The most common way to open PowerPoint is with the help of the Start menu. Click on the **Start** button which is in the leftmost corner of the taskbar.

Step 2 – Locate **Microsoft Office** in the **M** alphabet section and click on it to expand.

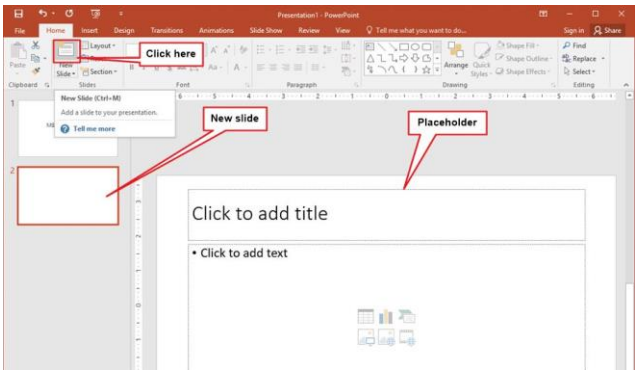
Step 3 – Find **PowerPoint** in the list and then click on it.

PowerPoint Layout:



Insert New Slide:

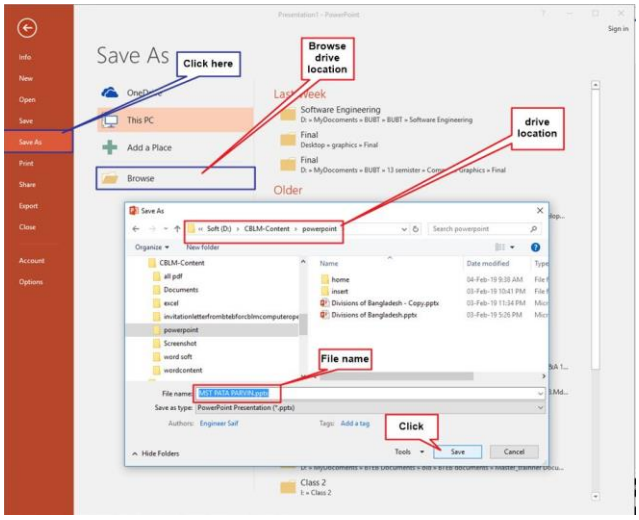
Here you will learn how to insert a new slide in PowerPoint. When you create a new presentation, PowerPoint gives you one default slide that contains a “Title Slide” layout. You can click into the placeholders shown in the title slide. Then click the “New Slide” button in the “Slides” button group.



Insert a New Slide in PowerPoint:

1. To insert a new slide that contains a "Title and Content" slide layout, click the "Home" tab in the Ribbon.
2. Then click the "New Slide" button in the "Slides" button group

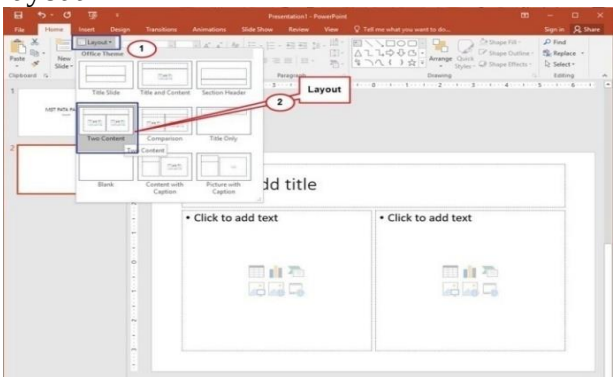
Save Presentation File:



1. Select File > Save as (or Save a Copy).
2. Click browse options.
3. Browse to the folder where you want to save your presentation.
4. In the File name box, type a name for your presentation.
5. Under Save as type, select PowerPoint Presentation (pptx).
6. Click save button

Insert Layout in Slide:

Apply a slide layout. You choose a layout from a menu in PowerPoint, then insert your words and graphics. The predefined layouts include a Title slide to begin with, a general Title and Content layout, a side-by-side Comparison layout, and a Picture-with-Caption layout

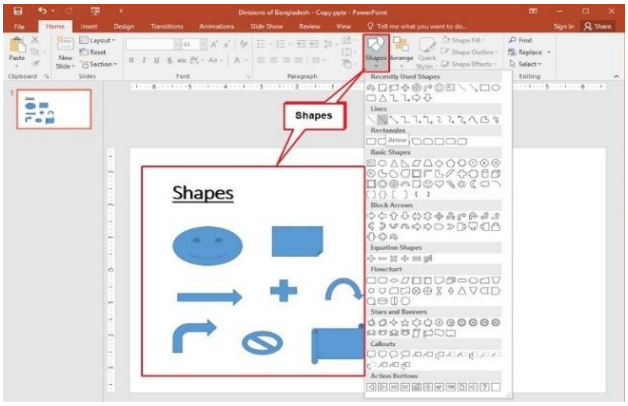


Insert a Slide layout in PowerPoint:

1. To insert a slide layout that contains layout button, click the "Home" tab in the Ribbon.
2. Then click the "layout" button in the "Slides" button group
3. Select required layout.

Use of Shape:

PowerPoint has many useful shapes ready to insert into your slides. Basic shapes such as lines, bubbles, curves, and more can add a necessary visual element to your document.

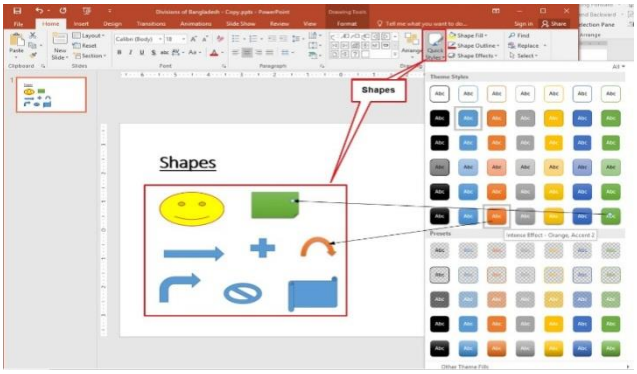


To insert a shape:

1. Select the Insert tab.
2. Click the Shape command.
3. Left-click a shape from the menu. Your cursor is now a cross shape.
4. Left-click your mouse and while holding it down, drag your mouse until the shape is the desired size.
5. Release the mouse button.

Use of Quick Style:

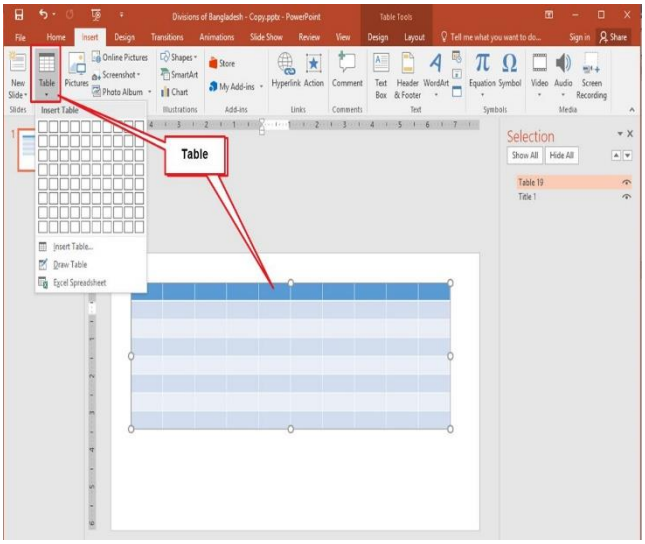
A Quick Style set contains the basic styles that you need to build a document. However, you may want to add a custom style. Select the text that you want to format as a new style. For example, perhaps you want text that contains certain information about your business to always appear as bold and red in your document.



1. Apply or change a Quick Style set. On the home tab, click the quick part bottom
2. Then choose a style set such as Basic or Casual. On the Home tab, the options in the Styles group change to reflect the Quick Style set that you clicked.

Use of Table in Slide:

When presenting ideas that include references to data, it can be helpful to make the point using a table. These visual methods can make the point much stronger than simply describing the data.

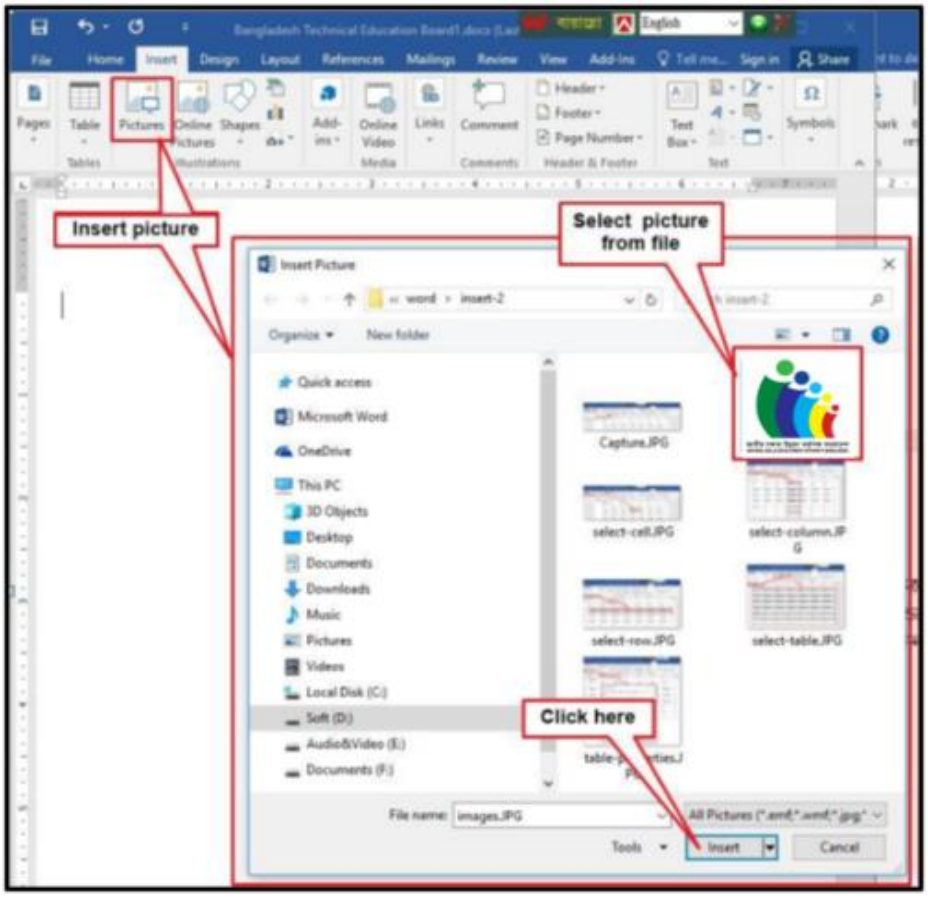


Create and format a table in PowerPoint

1. Select the slide that you want to add a table to.
2. On the Insert tab, select Table.
3. In the Insert Table dialog box, do one of the following: Use the mouse to select the number of rows and columns that you want.
4. To add text to the table cells, click a cell, and then enter your text.

Insert Picture:

Adding picture scan make your presentations more interesting and engaging. You can insert a **picture from a file** on your computer onto any slide. PowerPoint even includes tools for finding **online pictures** and adding **screenshots** to your presentation.

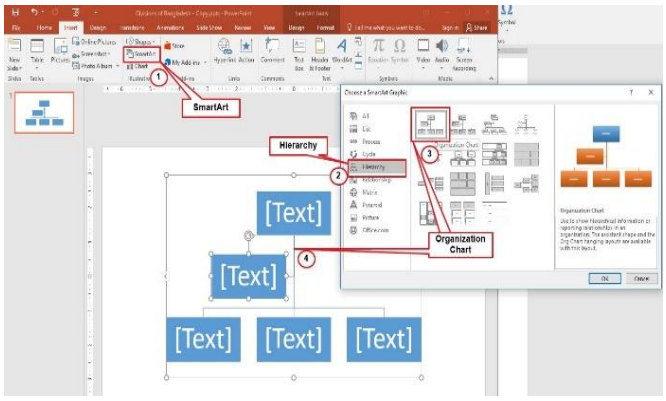


To insert a picture from a file:

1. Place your insertion point where you want the image to appear.
2. Select the Insert tab.
3. Click the Picture command in the Illustrations group. The Insert Picture dialog box appears.
4. Select the desired image file, then click Insert to add it to your document. Selecting an image file.

Use of SmartArt:

A SmartArt graphic is a visual representation of information and ideas, and a chart is a visual illustration of numeric values or data. Basically, SmartArt graphics are designed for text and charts are designed for numbers. Use the information below to decide when to use a SmartArt graphic and when to use a chart.

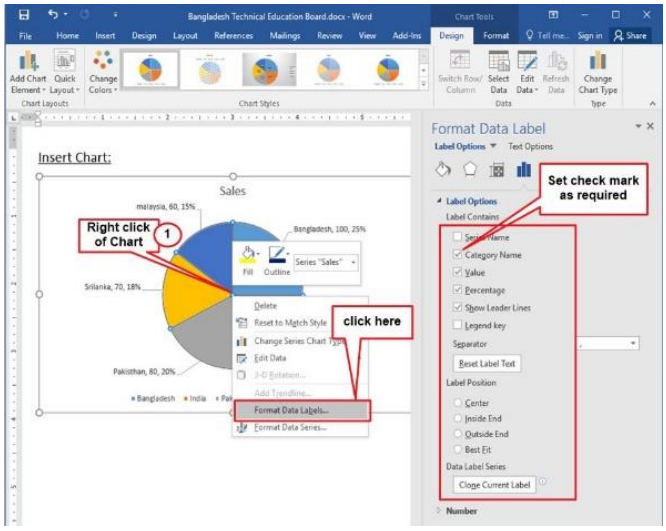


To insert a SmartArt graphic:

1. Select the slide where you want the SmartArt graphic to appear.
2. From the Insert tab, select the SmartArt command in the Illustrations group. Clicking the SmartArt command.
3. A dialog box will appear.
4. The SmartArt graphic will appear on the current slide.

Use of Chart:

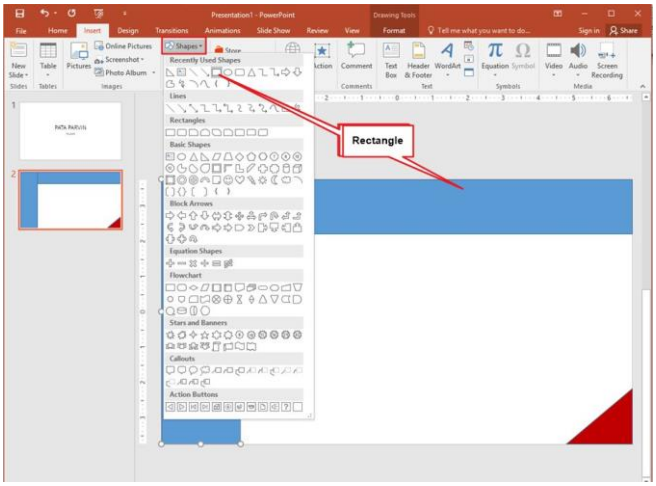
Chart refers to a graphical representation of data. Charts are used to visually communicate information, trends, and patterns present in your data. They are often more comprehensible than raw data in tables or spreadsheets, making it easier for readers to understand and analyze the information.



1. In Word, click where you want to insert the chart.
2. On the Insert tab, in the Illustrations group, click Chart.
3. In the Insert Chart dialog box, click a chart, and then click OK.
4. Enter your data into the spreadsheet that automatically opens with the chart.

Use of Rectangle:

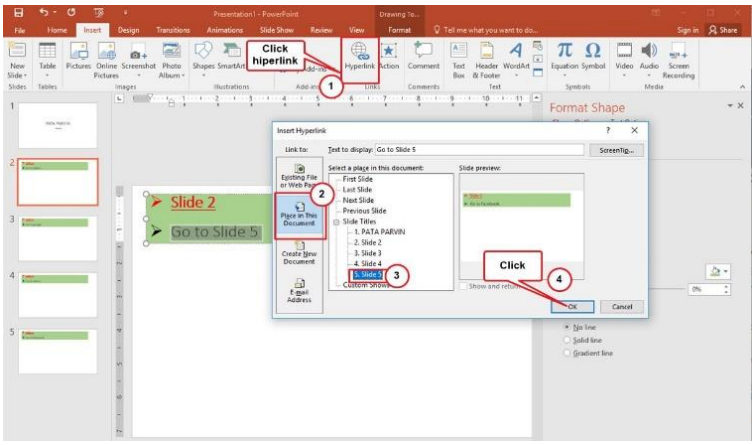
Select the Insert tab, then click the Shapes command in the Illustrations group. A drop-down menu of shapes will appear. Select the rectangle shape. Click and drag in the desired location to add the shape to the slide.



1. Select Insert tab.
2. Click rectangle from shapes command.
3. Click and drag in the desired location to add the shape to the slide.

Use of hyperlink:

In POWERPOINT 2016, *a* HYPERLINK is simply a bit of text or a graphic image that you can click when viewing a slide to summon another slide, another presentation.

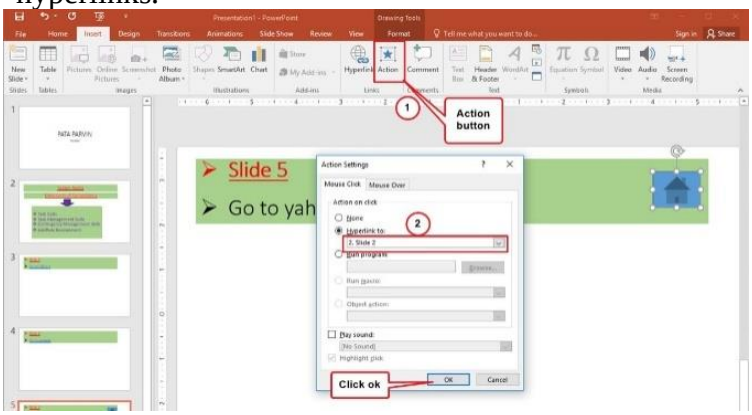


To insert a hyperlink to another slide:

1. Right-click the selected text or image, then click Hyperlink.
2. The Insert Hyperlink dialog box will appear.
3. On the left side of the dialog box, click Place in this Document.
4. A list of other slides in your presentation will appear.
5. Click OK

Use of Action Button:

Action buttons are built-in shapes you can add to a presentation and set to link to another slide, play a sound, or perform a similar action. When someone clicks or hovers over the button, the selected action will occur. Action buttons can do many of the same things as hyperlinks.

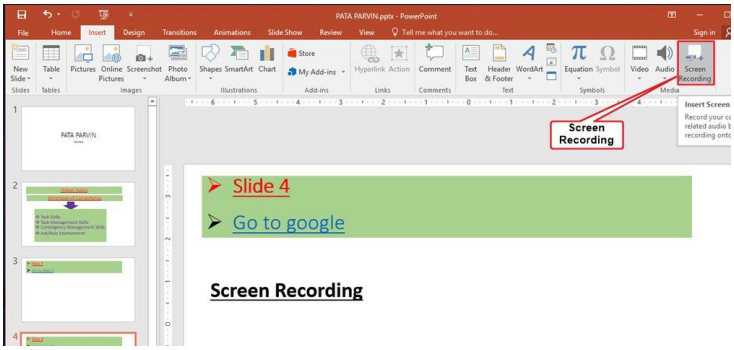


To insert an action button on one slide:

1. Click the Insert tab.
2. Click the Shapes command in the Illustrations group.
3. Select the desired action button.
4. Insert the button onto the slide by clicking the desired location.
5. Select the Mouse Click or Mouse Over tab.

Use of Recording Option:

The Recording tab introduced in PowerPoint 2016 gives you this ability and goes even further with more interactive elements—like quizzes—to include in a presentation. Your interactive video can contain: Audio narration.

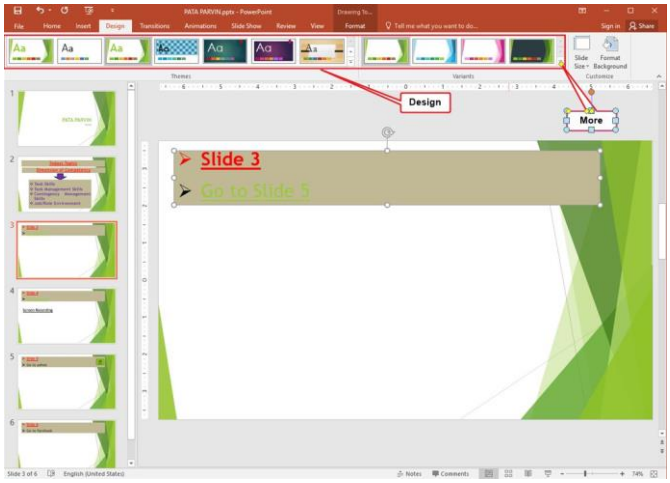


Take a screen recording

1. As for screen capture.
2. Choose Insert, Screen Recording from the Media group.
3. To record part of the screen, click the Select Area button and drag across the area you want to record.
4. Click Record.
5. Press Windows button + Shift + Q and the video appears on your current slide

Use of Built-in Slide Template:

A PowerPoint template is a pattern or blueprint of a slide or group of slides that you save as a .potx file. Templates can contain layouts, colors, fonts, effects, background styles, and even content. You can create your own custom templates and store them, reuse them, and share them with others.

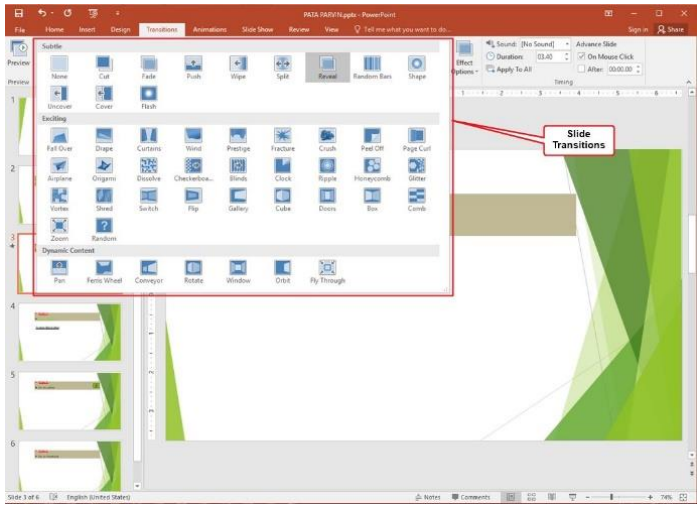


Applying themes

1. Select the Design tab on the Ribbon, then locate the Themes group. Each image represents a theme.
2. Click the More drop-down arrow to see all available themes.
3. Select the desired theme.
4. The theme will be applied to the entire presentation. To apply a different theme, simply select it from the Design tab.

Use of Slide Transition:

Slide transitions are the effects that take place when one slide gives way to the next one in the presentation, like Roll down from top or Fly in from left. They add dynamic flair to a slideshow, smoothing the transition between slides. You can add transitions while in Slide Sorter view or in Normal view.

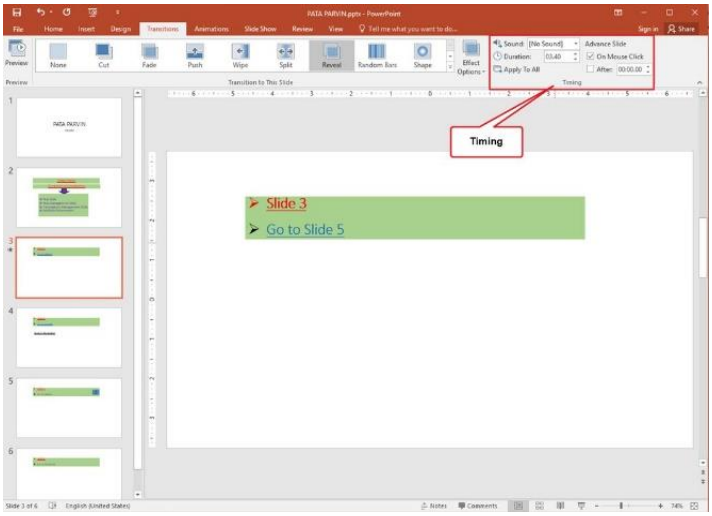


To apply a transition:

1. Select the desired slide from the Slide Navigation pane.
2. Click the Transitions tab, then locate the Transition to This Slide group.
3. Click the More drop-down arrow to display all transitions.
4. Click a transition to apply it to the selected slide.

Set Timing in Slide:

Specify a TIME to advance to the next SLIDE. Select the SLIDE that you want to SET the TIMING for. On the Transitions tab, in the TIMING group, under Advance SLIDE, do one of the following: To make the SLIDE advance to the next SLIDE when you click the mouse, select the On Mouse Click check box.

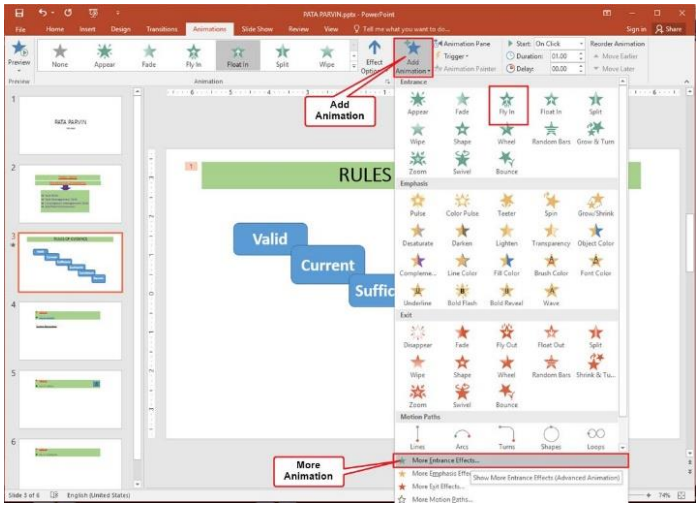


Specify a time to advance to the next slide

1. Select the slide that you want to set the timing for.
2. On the Transitions tab, in the Timing group, under Advance Slide, do one of the following: To make the slide advance to the next slide when you click the mouse, select the On Mouse Click check box.

Set Animation in Slide:

PowerPoint animation is a form of animation which uses Microsoft PowerPoint and similar programs to create a game or movie. The artwork is generally created using PowerPoint's AutoShape features, and then animated slide-by-slide or by using Custom Animation.

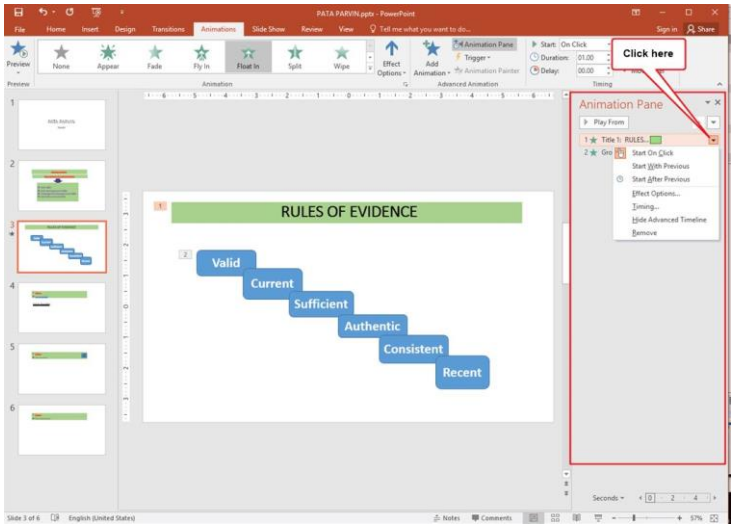


To apply a custom animation effect in Office PowerPoint, do the following:

1. Select the text or object that you want to animate.
2. On the Animations tab, in the Animations group, click Custom Animation.
3. In the Custom Animation task pane, click Add Effect, and then do one or more.

Control Animation:

Slide transition animation in PowerPoint is the animation that occurs when you advance from slide to slide within the presentation. You have many options for controlling the effects of the slide transition animation in PowerPoint.

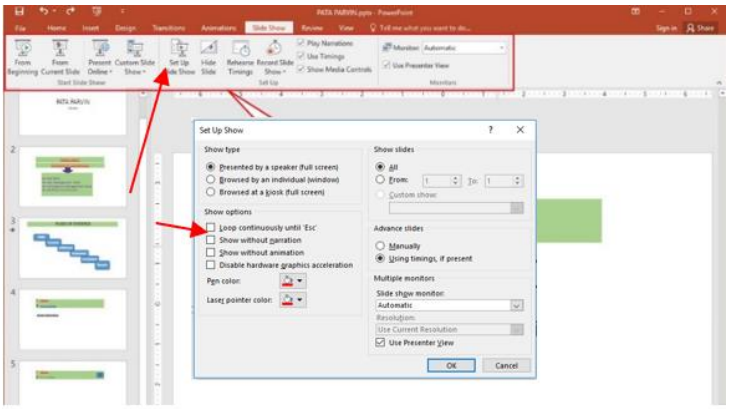


Open the Animation Pane

1. Select the object on the slide that you want to animate.
2. On the Animations tab, click Animation Pane.
3. Click Add Animation, and pick an animation effect.
4. To apply additional animation effects to the same object, select it, click Add Animation and pick another animation effect.

Use of Slide Show:

A slide show is a presentation of a series of still images on a projection screen or electronic display device, typically in a prearranged sequence. The changes may be automatic and at regular intervals or they may be manually controlled by a presenter or the viewer.

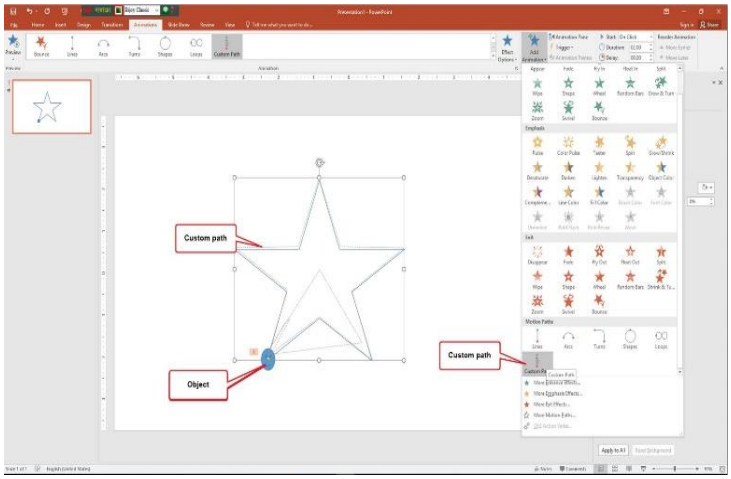


To set up a PowerPoint presentation to run automatically, do the following:

1. On the Slide Show tab, click Set Up Slide Show.
2. Under Show type, pick one of the following: To allow the people watching your slide show to have control over when they advance the slides, select Presented by a speaker
3. To allow automatically play slide show, select loop continuously until Esc.

Motion Paths.

A motion path moves an item, like a picture, on a line you specify. So, you use a motion path to move something in a very specific way on a slide. You can also combine motion paths with other effects.

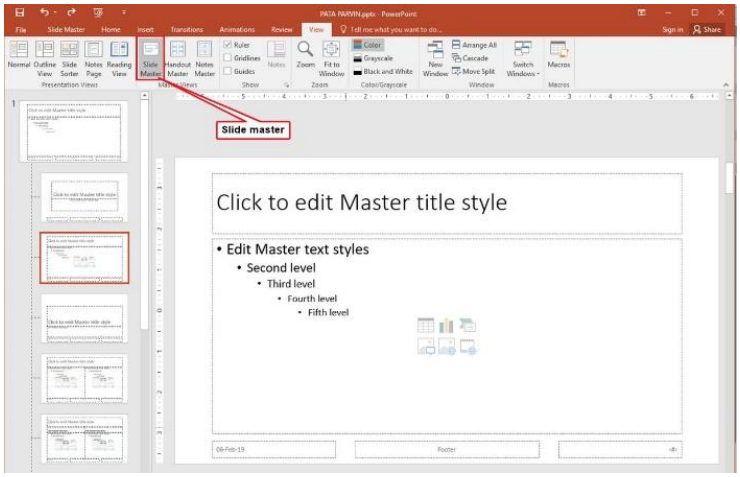


Add a motion path to an object

1. Click the object you want to animate.
2. On the Animations tab, click Add Animation.
3. Scroll down to Motion Paths, and pick one. Tip: If you choose the Custom path option, you will draw the path that you want the object to take. To stop drawing a custom path, press Esc.

Use of Slide Master:

In Microsoft PowerPoint, the Slide Master is the top slide that controls all information about the theme, layout, background, color, fonts, and positioning of all slides. Using the Slide Master can be an easy way to adjust the look of an existing theme or make overall changes to all slides in your presentation.

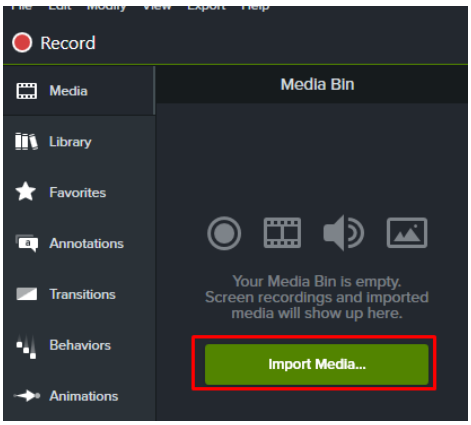


1. Select the View tab, then click the Slide Master command.
2. The presentation will switch to Slide Master view, and the Slide Master tab will be selected on the Ribbon.
3. In the left navigation pane, scroll up and select the slide. This is the slide master.
4. Create your design as required.
5. Close slide master view
6. Then select new slide.

Make video Tutorial for YouTube

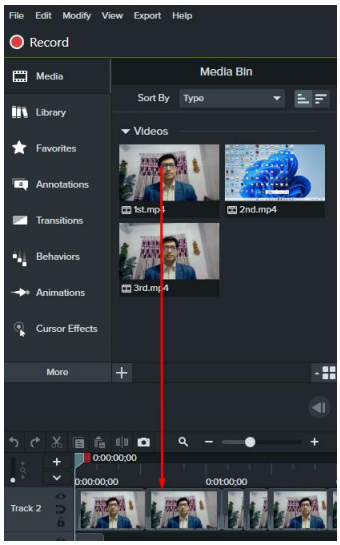
1. Open Video Editing Software (Camtasia20)

2. Click on **"New project"**

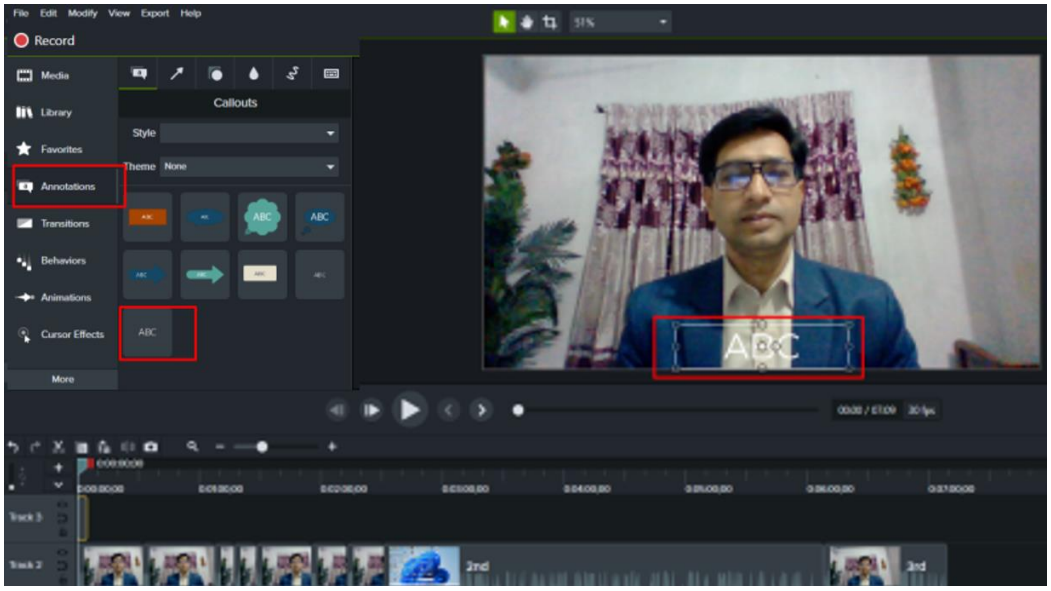


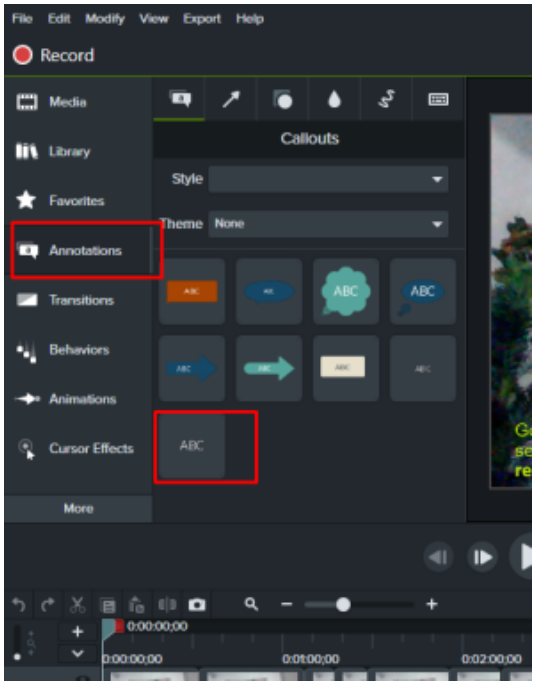
3. Click on "Import media" to insert raw footage (which is recorded by camera)

4. Drag the raw footage into Track

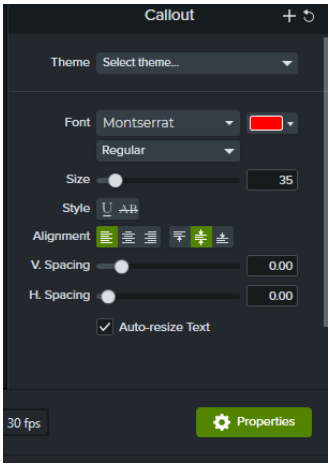


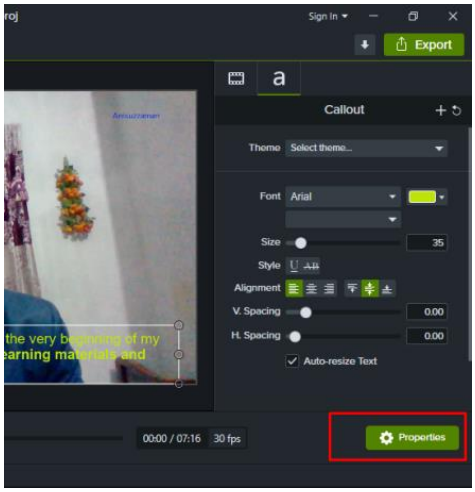
5. To Add text click on “Annotation” and select text style.



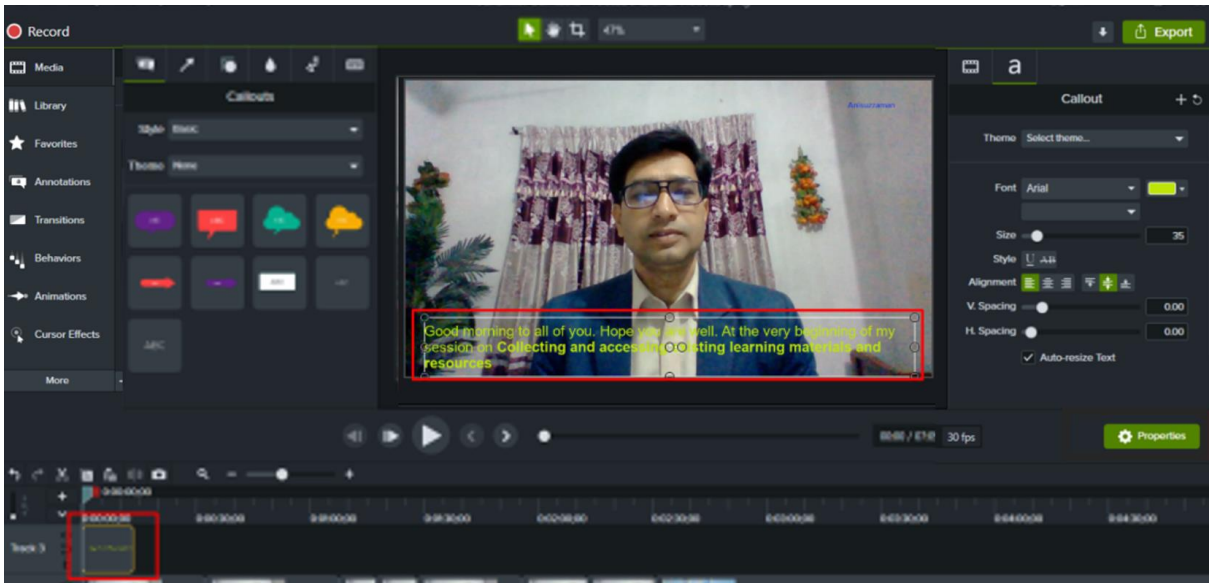


6. For Adjusting Font size, color, and align use “properties panel”.

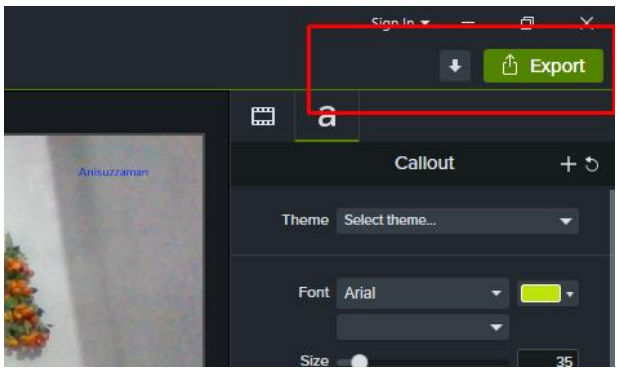




7. Type the script in the text box and adjust with footage voice.



8. Now "export" the file .mp4 format for final video to use YouTube channel



4. Enhancing Engagement with Digital Formats

- **Interactive Elements in Digital Content**
  Incorporating interactive elements in your digital content can increase student engagement and participation. Identify places in your content where interactive elements could be beneficial. This could be a complex concept that can be better explained with an interactive diagram, or a topic that can be reinforced with a quiz.

- **Use Digital Formats for Active Learning**
  Digital formats can support active learning, where students are actively involved in their own learning process. This could be an exercise that students can do on their own, or a discussion that they can participate in. Use the features of your digital format to support these active learning activities. For example, you could use interactive elements, collaborative tools, or multimedia content.

5. Accessibility in Digital Formats

- **Principles of Digital Accessibility**
  Digital accessibility is crucial to ensure that all learners, including those with disabilities, can access and benefit from your content. Familiarize yourself with the principles of digital accessibility. The Web Content Accessibility Guidelines (WCAG) provide a comprehensive guide to these principles. Apply these principles to your content. This could involve using alt text for images, captions for videos, or keyboard navigation for interactive elements.

- **Tools and Techniques for Ensuring Accessibility**
  There are various tools and techniques you can use to ensure your digital content is accessible. Identify the accessibility features of your chosen digital tools. Many tools have built-in features that support accessibility, such as alt text for images in Microsoft Word.

Self-Check Sheet 4: Prepare Digitally Formatted Contents

1. Describe Legal and Ethical Guidelines for Media Usage

2. What is OER?

3. Describe The 5 Rs of Using OER

Answer Key 4: Prepare Digitally Formatted Contents

1. What is digitization of learning content?

Answer: Digitizing learning content is a process that involves converting physical or analog educational content into a digital format. This can enhance accessibility, interaction, and learning experiences for students.

2. What are the principles of digital accessibility?

Answer: The principles of digital accessibility include providing alternative text for images, closed captions for videos, keyboard navigation for interactive elements, and ensuring that all content can be accessed and understood by assistive technologies.

3. What are some common accessibility features of digital tools?

Answer: Some common accessibility features of digital tools include alt text for images, closed captions for videos, keyboard navigation, and text resizing. These features can help make content more accessible to learners with disabilities.

Task Sheet 4.1: Format Media Elements

Task Sheet 4.1: Format Media Elements
Title: Format Media Elements
Performance Objective: By the end of this task, the trainee should be able to:
1. Format media elements to align with the digital content.
2. Ensure media elements are suitable for the chosen presentation method.
Policy and Documents Required:
• Media formatting guides
Tools and Materials Required:
• Media editing software (e.g., Adobe Photoshop for images, Adobe Premiere Pro for videos)
• Document formatting software (e.g., Microsoft Word for text)
Equipment:
• Laptop or Computer
• Media editing software
• Document formatting software
Steps/Procedures:
1. **Review Selected Presentation Method:**
• Review the chosen presentation method (e.g., PowerPoint, video, audio, web-based platform) to understand the specific formatting requirements for each media element. Consider aspects like aspect ratios, resolution, file formats, and compatibility with the chosen presentation medium.
2. **Open Media Elements in Editing Software:**
• Open each media element in the appropriate editing software that corresponds to its type (e.g., images in Adobe Photoshop, videos in Adobe Premiere Pro, text in Microsoft Word).
3. **Format Media Elements as Needed:**
• Format the media elements to meet the requirements of the selected presentation method. This may involve various adjustments such as:
• Resizing images to fit the slide dimensions or video frame.
• Adjusting video resolution and aspect ratio to suit the display platform.
• Setting appropriate audio levels and ensuring clear audio quality.
• Styling text with appropriate fonts, sizes, and colors for readability.
4. **Save Formatted Media Elements:**

- Save the formatted media elements in appropriate formats that are compatible with the digital content development software or tools being used. Ensure the media elements are optimized for smooth integration and playback.

5. **Review and Quality Check:**

- Review the formatted media elements to ensure they align with the content, meet the requirements of the selected presentation method, and maintain high-quality standards.

Assessment Method: Assessment of the trainee's ability to format media elements according to the requirements of the selected presentation method. The assessment will evaluate the trainee's proficiency in formatting images, videos, audio, and text to ensure they are suitable for the chosen presentation medium and aligned with the digital content.

Specification Sheet 4.1:

A. Policy and documents required:

- Bangladesh National Qualifications Framework (BNQF)
- Competency Standard or “Training Package”

B. Tools and Material required:

- Notebook
- Handbook
- Office Stationeries
- Interview questionnaire
- Observation checklist

C. Equipment:

- Laptop/Computer

Learning Outcome 5: Test Digitally Formatted Learning Contents

Assessment Criteria:

1. Test criteria and instruments are developed in line with learning material specification.
2. Test sites and reviewers are identified in line with established target users
3. Testing of learning contents are undertaken in line with plan
4. Feedback and suggestions are addressed in line with plan and development cycle.
5. Developed digital contents are preserved in appropriate storage

Content:

1. Designing Content for Various Devices and Platforms

1.1. Responsive Design Principles

1.2. Testing and Adjusting Content for Different Devices

2. Understanding the Importance of Testing

3. Testing All Functional Elements

4. Ensuring Responsiveness

5. Accessibility Testing for Inclusivity

5.1. Guidelines for Accessible Content

5.2. Tools for Accessibility Testing

6. User Experience Testing

6.1. Gathering User Feedback

6.2. Incorporating Feedback into Design Changes

Resources Required/ Conditions:

The trainees must be provided with the following:

- Handouts or reference materials/books/ CBLMs on the above stated contents
- PCs/printers or laptop/printer with internet access
- Digital projector and Screen
- Bond paper
- Ball pens/pencils and other office supplies and materials
- Relevant learning materials
- Workplace or simulated environment

Methodologies

- Lecture/discussion
- Demonstration/application
- Presentation
- Blended delivery methods

Assessment Methods

- Written test
- Demonstration
- Observation with checklist
- Oral questioning
- Portfolio

Learning Experience 5: Test Digitally Formatted Learning Contents

In order to achieve the objectives stated in this learning guide, you must perform the learning steps below. Beside each step are the resources or special instructions you will use to accomplish the corresponding activity.

Learning Steps	**Resources specific instructions**
1. Student will ask the instructor about Test Digitally Formatted Learning Contents.	1. Instructor will provide the learning materials "**Develop Digital Learning Materials"**
2. Read the Information sheet/s	2. Information Sheet No:5-1 Test Digitally Formatted Learning Contents
3. Complete the Self Checks & Check answer sheets.	3. Self-Check/s Self-Check No: 5 Test Digitally Formatted Learning Contents Answer key No. 5 Test Digitally Formatted Learning Contents
4. Read the Job Sheet and Specification Sheet and perform job	4. Job- Sheet No: 5-1 Test Digitally Formatted Learning Contents Specification Sheet: 5-1 Test Digitally Formatted Learning Contents

Information Sheet 5: Test Digitally Formatted Learning Contents

Learning Objectives:

After completion of this information sheet, the learners will be able to:

1. Develop Test criteria and instruments in line with learning material specification.
2. Identify Test sites and reviewers in line with established target users
3. Undertake Testing of learning contents in line with plan
4. Address Feedback and suggestions in line with plan and development cycle.
5. Preserve developed digital contents in appropriate storage

Content:

1. Designing Content for Various Devices and Platforms

- **Responsive Design Principles**

  Responsive design ensures that your content looks good and functions well on various devices and screen sizes. It ensures that design and development should respond to the user's behavior and environment based on screen size, platform and orientation.

  Work Instructions:

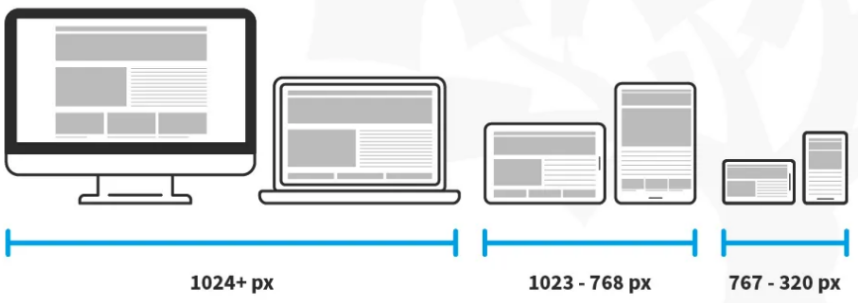
  Step 1: Familiarize yourself with the principles of responsive design. This involves designing your content to be flexible and adapt to different screen sizes.

  Step 2: Implement these principles when designing your content. Many digital tools support responsive design and allow you to preview how your content will look on different devices.

  Step 3: Test your content on various devices to ensure it adapts properly and provides a good user experience on all of them.

- **Testing and Adjusting Content for Different Devices**

  It's important to test your content on different devices and adjust it as necessary to ensure a good learning experience for all students, regardless of the device they are using.



2. Understanding the Importance of Testing

Testing is a crucial step in the development of digital learning content. It helps identify issues or shortcomings in the content and ensure that the learning experience meets the intended objectives. Testing determines whether your target audience can find, understand, and comprehend your content.

3. Testing All Functional Elements

It is important to test all functional elements in your digital content to ensure they work as expected and enhance the learning experience.

4. Ensuring Responsiveness

Responsiveness is a key aspect of digital content, ensuring that it works well on various devices and screen sizes.

5. Accessibility Testing for Inclusivity

- **Guidelines for Accessible Content**

  Making your content accessible ensures that all learners, including those with disabilities, can access and benefit from it. The Web Content Accessibility Guidelines (WCAG) provide a comprehensive guide to these principles.
- **Tools for Accessibility Testing**

  Various tools can help you test the accessibility of your content. Identify suitable tools for accessibility testing. This could include screen readers, color contrast analyzers, and accessibility checkers integrated into content creation tools.

6. User Experience Testing

- **Gathering User Feedback**

  User feedback can provide valuable insights into the user experience and help identify areas for improvement.
- **Incorporating Feedback into Design Changes**

  User feedback should be used to inform design changes and improve the overall user experience.

Sample check list for test Digitally Formatted Learning Contents

SL No.	Testing Question	Please place a tick in the appropriate column				
		Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
FUNCTIONALITY TESTING:						

01	▪ Interactive elements (buttons, links, forms) work as intended.	☐	☐	☐	☐	☐
02	▪ Media players (video, audio) function properly.	☐	☐	☐	☐	☐
03	▪ Quizzes, assessments, and simulations operate correctly.	☐	☐	☐	☐	☐
04	▪ Navigation within the content is smooth and intuitive.	☐	☐	☐	☐	☐
COMPATIBILITY TESTING:						
05	▪ Content displays and functions correctly across different devices (desktop, mobile, tablets**).**	☐	☐	☐	☐	☐
06	▪ Compatibility across various web browsers (Chrome, Firefox, Safari, Edge).	☐	☐	☐	☐	☐
07	▪ Responsive design adapts well to different screen sizes and resolutions.	☐	☐	☐	☐	☐
USABILITY TESTING:						
08	▪ Clear and logical content structure and organization.	☐	☐	☐	☐	☐
09	▪ Intuitive user interface with easy-to-understand instructions.	☐	☐	☐	☐	☐
10	▪ Adequate navigation options and menu structure.	☐	☐	☐	☐	☐

11	▪ Proper labeling and positioning of interactive elements.	☐	☐	☐	☐	☐
ACCESSIBILITY TESTING:						
12	▪ Compliance with accessibility standards (WCAG 2.1, Section 508).	☐	☐	☐	☐	☐
13	▪ Alternative text for images.	☐	☐	☐	☐	☐
14	▪ Keyboard accessibility for navigation and interaction.	☐	☐	☐	☐	☐
15	▪ Sufficient color contrast for readability**.**	☐	☐	☐	☐	☐
INTERACTIVITY TESTING:						
16	▪ Interactive elements provide appropriate feedback.	☐	☐	☐	☐	☐
17	▪ Assessments and quizzes provide accurate scoring and feedback.	☐ ☐	☐ ☐	☐ ☐	☐ ☐	☐ ☐
18	▪ Simulations and interactive exercises perform as expected.					
19	▪ User inputs are captured accurately.					
RECOMMENDATIONS:						

Self-Check Sheet 5: Test Digitally Formatted Learning Contents

1. What is Responsive Design Principles?

2. Why is testing important in the development of digital learning content?

3. What is the purpose of gathering user feedback in user experience testing?

Answer Key 5: Test Digitally Formatted Learning Contents

1. What is Responsive Design Principles?

Answer: Responsive design ensures that your content looks good and functions well on various devices and screen sizes. It ensures that design and development should respond to the user's behavior and environment based on screen size, platform and orientation.

2. Why is testing important in the development of digital learning content?

Answer: Testing is important because it helps identify issues or shortcomings in the content and ensures that the learning experience meets the intended objectives. It also helps to determine whether the target audience can find, understand, and comprehend the content.

3. What is the purpose of gathering user feedback in user experience testing?

Answer: The purpose of gathering user feedback is to provide valuable insights into the user experience and identify areas for improvement.

4. How should user feedback be used in design changes?

Answer: User feedback should be used to inform design changes and improve the overall user experience. By incorporating user feedback into design changes, you can create a more user-friendly and effective learning experience.

Task Sheet 5.1: Develop Test Criteria and Instruments

Task Sheet 5.1: Develop Test Criteria and Instruments
Title: Develop Test Criteria and Instruments
Performance Objective: At the end of this task, the trainee should be able to:
1. Develop appropriate test criteria to assess the quality and effectiveness of the digital learning content.
2. Develop instruments to facilitate the testing process, such as questionnaires or feedback forms.
Policy and Documents Required:
• Quality assurance guidelines
• Testing procedures
Tools and Materials Required:
• Office Stationeries
• Digital Assessment Tools like Google Forms, SurveyMonkey
Equipment:
• Laptop/Computer
Steps/Procedures:
1. **Identify Lesson Objectives and Content:**
• Review the lesson objectives and content to be covered in the digital learning material. Understand the learning outcomes and specific areas that need to be evaluated.
2. **Develop Test Criteria:**
• Based on the lesson objectives and content, develop a set of test criteria that can be used to assess the quality and effectiveness of the digital learning content. These criteria should be clear, specific, and aligned with the desired learning outcomes.
3. **Create Measurable Indicators:**
• For each test criterion, create clear and measurable indicators that will serve as evidence of the content's effectiveness. Ensure that the indicators can be observed or measured objectively.
4. **Develop Testing Instruments:**
• Develop instruments, such as questionnaires or feedback forms, that can be used to gather data for each of the test criteria. These instruments should capture relevant information from the learners or reviewers to evaluate the content.
5. **Ensure Clarity and Ease of Use:**
• Review the testing instruments to ensure they are clear, easy to understand, and user-friendly. Avoid ambiguous questions or instructions that could lead to inconsistent or unreliable responses.
6. **Test the Instruments:**

• Conduct a pilot test of the developed instruments to identify any issues or areas for improvement. Make necessary adjustments based on the feedback received.
7. **Finalize Test Criteria and Instruments:**
• Finalize the test criteria and instruments after incorporating the improvements identified during the pilot testing.
Assessment Method: Assessment of the trainee's ability to develop suitable test criteria and instruments for assessing digital learning content. The assessment will evaluate the clarity, relevance, and effectiveness of the test criteria in evaluating the quality and effectiveness of the digital learning material. The developed testing instruments will also be assessed for clarity, ease of use, and appropriateness for gathering the necessary data.

Specification Sheet 5.1: Develop Test Criteria and Instruments

A. Policy and documents required:

- Bangladesh National Qualifications Framework (BNQF)
- Competency Standard or “Training Package”

B. Tools and Material required:

- Notebook
- Handbook
- Office Stationeries
- Interview questionnaire
- Checklists

C. Equipment:

- Laptop/Computer

Task Sheet 5.2: Conduct Testing and Address Feedback

Task Sheet 5.2: Conduct Testing and Address Feedback
Title: Conduct Testing and Address Feedback
Performance Objective: By the end of this task, the trainee should be able to:
1. Conduct testing of the digital learning content using the developed test criteria and instruments.
2. Collect and analyze feedback from test users.
3. Make necessary revisions to the digital content based on the feedback received.
Policy and Documents Required:
• Quality assurance guidelines
• Testing procedures
• Feedback and revision procedures
Tools and Materials Required:
• Test criteria and instruments
• Digital feedback tools
Equipment:
• Laptop/Computer
Steps/Procedures:
1. **Conduct Testing:**
• Use the developed test criteria and instruments to conduct testing of the digital learning content. This can be done through pilot tests with a small group of learners or reviewers. Ensure that the testing process is well-organized and that data is collected systematically.
2. **Collect Feedback:**
• Use digital feedback tools or other appropriate methods to collect feedback from the test users. Encourage honest and constructive feedback to identify strengths and areas for improvement in the content.
3. **Analyze Feedback:**
• Analyze the feedback collected to identify common themes, patterns, and specific issues mentioned by the test users. Categorize the feedback based on its significance and relevance to the learning objectives.
4. **Revise Digital Content:**
• Based on the feedback received, make necessary revisions to the digital learning content. Address identified issues, clarify confusing points, and improve areas that require enhancement.
5. **Re-Test Revised Content:**
• After making the revisions, re-test the digital content using the same test criteria and instruments. Ensure that the changes have effectively addressed the feedback and improved the content.

6. **Document Revisions:**
• Document all the revisions made to the digital content, along with the reasons for the changes. This documentation will be useful for future reference and quality assurance purposes.
Assessment Method: Assessment of the trainee's ability to conduct effective testing, analyze feedback, and make necessary revisions to the digital content. The assessment will evaluate the trainee's proficiency in using the developed test criteria and instruments, analyzing feedback from test users, and implementing improvements to the digital content based on the feedback received.

Specification Sheet 5.2

D. Policy and documents required:

- Bangladesh National Qualifications Framework (BNQF)
- Competency Standard or “Training Package”

E. Tools and Material required:

- Notebook
- Handbook
- Office Stationeries
- Interview questionnaire
- Checklists

F. Equipment:

- Laptop/Computer

Learning Outcome 6: Upload and Use Digital Contents

Assessment Criteria:

1. Appropriate online media is selected for uploading digital contents
2. Digital content uploading formalities are done
3. Digital contents are uploaded in online media for users

Content:

1. **Platforms for publishing learning materials**
2. **Uploading Digital Content**
   - 2.1 Procedures of sign-in/registration on Publishing Platform
   - 2.2 Process of Content Uploading/Sharing
   - 2.3 Necessary steps to check the published Contents.

Resources Required/ Conditions:

The trainees must be provided with the following:

- Handouts or reference materials/books/ CBLMs on the above stated contents
- PCs/printers or laptop/printer with internet access
- Digital projector and Screen
- Bond paper
- Ball pens/pencils and other office supplies and materials
- Relevant learning materials
- Workplace or simulated environment

Methodologies

- Lecture/discussion
- Demonstration/application
- Presentation
- Blended delivery methods

Assessment Methods

- Written test
- Demonstration
- Observation with checklist
- Oral questioning
- Portfolio

Learning Experience 6: Upload and Use Digital Contents

In order to achieve the objectives stated in this learning guide, you must perform the learning steps below. Beside each step are the resources or special instructions you will use to accomplish the corresponding activity.

Learning Steps	Resources specific instructions
1. Student will ask the instructor about uploading and using Digital Content.	1. Instructor will provide the learning materials "**Develop Digital Learning Materials"**
2. Read the Information sheet/s	2. Information Sheet No:6-1 Upload and Use Digital Contents
3. Complete the Self Checks & Check answer sheets.	3. Self-Check/s Self-Check No: 6 Upload and Use Digital Contents Answer key No. 6 Upload and Use Digital Contents
4. Read the Job Sheet and Specification Sheet and perform job	4. Job- Sheet No:6-1 Upload and Use Digital Contents Specification Sheet: 6-1 Upload and Use Digital Contents

Information Sheet 6: Upload and Use Digital Contents

Learning Objectives:

After completion of this information sheet, the learners will be able to:

1. Select Appropriate online media for uploading digital contents
2. Ensure Digital content uploading formalities
3. Upload Digital contents in online media for users

Content:

1. Platforms for Publishing Learning Materials

There are several platforms available for publishing digital learning materials. Each platform comes with its unique features and functionalities. Here are a few prominent ones:

- **Google Drive**: Google's cloud storage service that allows you to store, share, and collaborate on files and folders from any mobile device, tablet, or computer.
- **Dropbox**: A file hosting service providing personal cloud, file synchronization, cloud storage, and client software.
- **Amazon S3 (Simple Storage Service)**: An object storage service that offers industry-leading scalability, data availability, security, and performance.
- **Microsoft OneDrive**: Microsoft's storage service for hosting files in the "cloud". It's available for free to all owners of a Microsoft account.
- **Box**: A cloud content management and file sharing service for businesses, offering secure, scalable content-sharing that both users and IT love and adopt.

2. Uploading Digital Content

2.1. Procedures of Sign-In/Registration on the Publishing Platform:

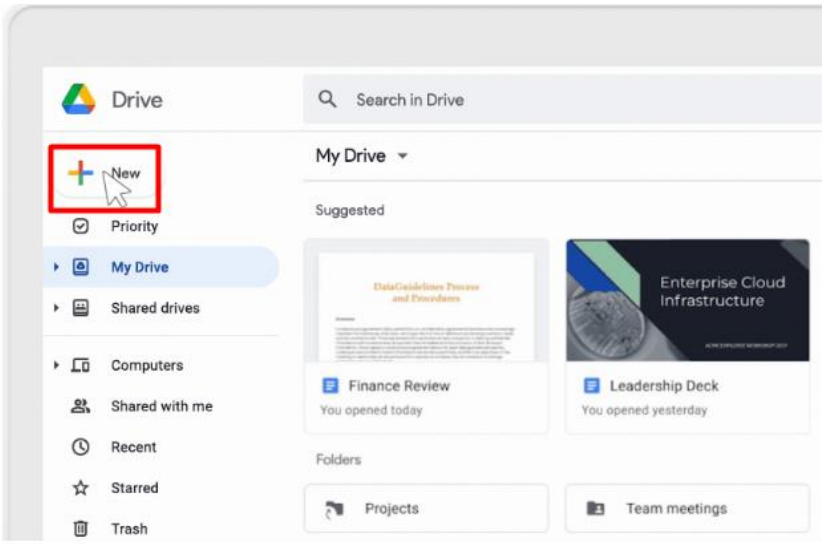
Depending on the chosen platform, the steps may vary slightly, but they generally include:

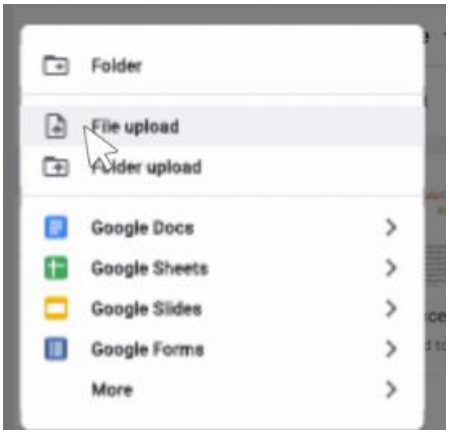
- **Navigate to the platform's website**: Open a web browser and type in the URL of the service you wish to use.
- **Create an account or sign-in**: If you're new to the platform, you'll have to create an account by providing necessary details such as email address and password. If you already have an account, just log in with your credentials.

2.2. Process of Content Uploading/Sharing:

Let's consider Google Drive as an example:

- **Navigate to Google Drive**: Once logged in, you'll be directed to your Drive.
  On your computer, you can upload from drive.google.com or your desktop. You can upload files into private or shared folders.
  1. On your computer, go to drive.google.com.
  2. At the top left, click **New** › **File Upload** or **Folder Upload.**





3. Choose the file or folder you want to upload.

Drag files into Google Drive

1. On your computer, go to drive.google.com.
2. Open or create a folder.
3. To upload files and folders, drag them into the Google Drive folder.

- **Upload Files/Folders**: Click on the "+ New" button on the left side of the page, then select either "File upload" or "Folder upload". Navigate through your files, select what you want to upload, and click "Open".

- **Share files/folders**: Right-click on the uploaded file/folder and select "Share". You can then add the email addresses of people you want to share the file/folder with, or you can generate a link that you can send to them.

2.3. Necessary Steps to Check the Published Contents:

Once your files are uploaded, it is important to check if the uploading process was successful and if the content appears as expected.

- **Check the upload status**: Most platforms will notify you once the upload is complete.
- **Open the file**: Open the uploaded file to ensure it appears as expected.
- **Test the sharing settings**: If you've shared the content, check if the recipients can access it properly. You may do this by either signing in from a different account or asking a recipient to confirm.

Self-Check Sheet 6: Upload and Use Digital Contents

1. What is Google Drive?

2. Why is testing important in the development of digital learning content?

3. What is the purpose of gathering user feedback in user experience testing?

Answer Key 6: Upload and Use Digital Contents

1. What is Google Drive?

Answer: Google drive is Google's cloud storage service that allows you to store, share, and collaborate on files and folders from any mobile device, tablet, or computer.

2. List 5 Platforms for Publishing Learning Materials

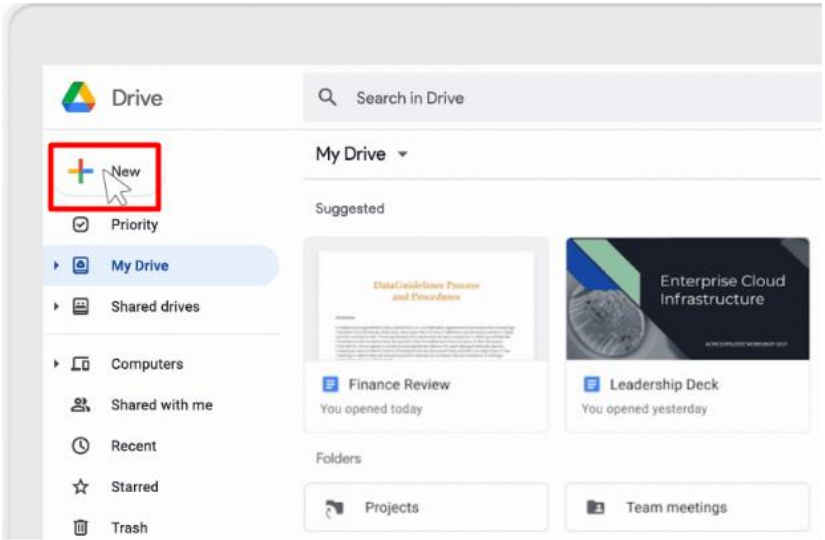
Answer: Some Platforms for Publishing Learning Materials are:

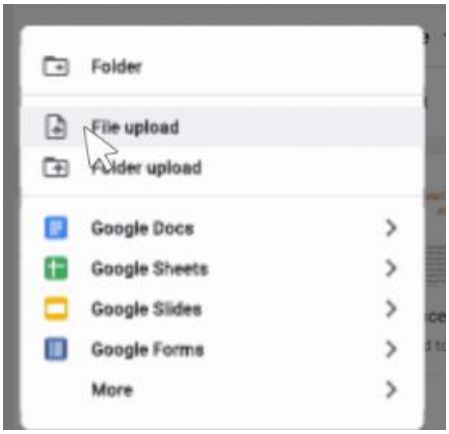
- Google Drive
- Dropbox
- Amazon S3 (Simple Storage Service)
- Microsoft OneDrive
- Box

3. How to upload/share digital content in google drive?

Answer: Process of Content Uploading/Sharing:

- **Navigate to Google Drive**: Once logged in, you'll be directed to your Drive.
  On your computer, you can upload from drive.google.com or your desktop. You can upload files into private or shared folders.
  4. On your computer, go to drive.google.com.
  5. At the top left, click **New** > **File Upload** or **Folder Upload.**





6. Choose the file or folder you want to upload.

Drag files into Google Drive

1. On your computer, go to drive.google.com.
2. Open or create a folder.
3. To upload files and folders, drag them into the Google Drive folder.

- **Upload Files/Folders**: Click on the "+ New" button on the left side of the page, then select either "File upload" or "Folder upload". Navigate through your files, select what you want to upload, and click "Open".

- **Share files/folders**: Right-click on the uploaded file/folder and select "Share". You can then add the email addresses of people you want to share the file/folder with, or you can generate a link that you can send to them.

Task Sheet 6.1:

Task Sheet 6.1: Upload Digital Contents
Title: Upload Digital Contents
Performance Objective: At the end of this task, the trainee should be able to:
1. Select an appropriate online media platform for uploading the digital contents.
2. Complete the necessary formalities for the chosen platform.
3. Upload the digital contents and ensure they are accessible to users.
Policy and Documents Required:
• Digital content upload policies
• User manuals or guides of the chosen platform
Tools and Materials Required:
• Final digital learning content
• User credentials for the chosen platform
Equipment:
• Laptop/Computer with internet access
Steps/Procedures:
1. **Select an Appropriate Platform:**
• Consider user accessibility, platform reliability, storage capacity, and other relevant factors to choose an appropriate online media platform for uploading the digital contents.
2. **Complete Necessary Formalities:**
• Sign in or register on the chosen platform using the provided user credentials or follow the registration process.
3. **Prepare Digital Contents for Upload:**
• Ensure that the final digital learning content is ready for upload and is in the appropriate format as required by the chosen platform.
4. **Upload the Digital Contents:**
• Follow the platform's procedures for uploading digital content. This may involve selecting the right file or folder, adding relevant metadata, and providing appropriate descriptions.
5. **Check Accessibility:**
• After uploading the digital contents, verify that they are accessible to users. Test access from different devices and ensure all media elements, links, and interactive components work correctly.
6. **Ensure Compliance with Policies:**
• Review the digital content upload policies to ensure that all requirements and guidelines are followed during the upload process.

7. **Document the Upload Process:**
• Document the details of the upload process, including the chosen platform, upload date and time, and any issues encountered and resolved.
Assessment Method: Assessment of the trainee's ability to select an appropriate platform, complete the necessary formalities, and successfully upload and check the digital contents. The assessment will evaluate the trainee's understanding of platform selection criteria, ability to follow upload procedures, and confirmation that the uploaded contents are accessible to users.

Specification Sheet 6.1

A. Policy and documents required:

- Bangladesh National Qualifications Framework (BNQF)
- Competency Standard or “Training Package”

B. Tools and Material required:

- Notebook
- Handbook
- Office Stationeries

C. Equipment:

- Laptop/Computer

Review of Competency

Below is yourself assessment rating for module **"Developing Digital Learning Materials"**

SL no	Assessment of performance Criteria	Yes	No
1.	Contents need to be digitized are selected		
2.	Learning resources specifications are established in line with target learners' requirements		
3.	Lesson plan is prepared incorporating pedagogy aspect		
4.	Digital contents to be developed are structured and segmented according to lesson/ session plan steps and sequences		
5.	Types of presentation are planned		
6.	Content development software and content development tools are selected and collected		
7.	Media elements of the presentation are planned		
8.	Technology, Pedagogy and Content Knowledge (TPACK) principles are followed during the plan of content development		
9.	Sources of media elements for the presentation are selected and collected.		
10.	Media elements are downloaded or collected from appropriate source.		
11.	Media elements are manipulated and edited as required.		
12.	Video is cut and appended as required to use in presentation.		
13.	Open educational resources (OER) are selected and collected		
14.	Media elements are organized and appended with content development software as per lesson/ session plan.		
15.	Proper action verbs are used and maintained during the preparation of the objectives of the session / lesson.		

16.	Media elements used in digital content are formatted.		
17.	Appropriate animation is used to make the presentation attractive and interactive		
18.	OER are accessed and used during the content development process if required		
19.	Test criteria and instruments are developed in line with learning material specification.		
20.	Test sites and reviewers are identified in line with established target users		
21.	Testing of learning contents are undertaken in line with plan		
22.	Feedback and suggestions are addressed in line with plan and development cycle.		
23.	Developed digital contents are preserved in appropriate storage		
24.	Appropriate online media is selected for uploading digital contents		
25.	Digital content uploading formalities are done		
26.	Digital contents are uploaded in online media for users		

I now feel ready to undertake my formal competency assessment.

Signed:

Date:

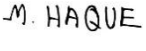
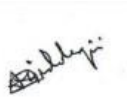
REFERENCE:

1. https://www.semrush.com/blog/content-creation-tools/
2. https://byjus.com/govt-exams/microsoft-powerpoint/
3. https://www.teachmeprezi.com/what-is-prezi/

REVIEW WORKSHOP OF COMPETENCY BASED LEARNING MATERIAL (CBLM)

The Competency Based Learning Material (CBLM) of Developing Digital Learning Materials for National Skills Certificate in Competency Based Training and Assessment, Level-5 is reviewed by NSDA on 18-19 July 2023.

List of Members

Sl	Name and Address	Position in the committee	Signature
1.	Md. Anisuzzaman, Instructor (Computer), Rajshahi TTC, Mobile: 01714422225, Email: mazaman84@gmail.com	Member	
2.	Md Maksudul Haque, Creative Director (e-learning), Enroute International Limited, Pragati Sarani, Dhaka. Mobile: +8801933005800 Email: maksudul_haque@hotmail.com	Member	
3.	Khondoker Ali Asgor Pavel, Chief Executive Officer, bitBirds Solutions, Dhaka. Email: email@aliasgorpavel.com Mobile: 01711873008	Member	
4.	Md. Younus Ali Mashud, Asst. Manager, Training & Development, RISDA Institute of Technology, Mobile: 01790721100, Email: yamasu1980@gmail.com	Member	
5.	Md. Abdul Hye Siddiqui, Senior Instructor (Computer), BMET, Email: siddiqui.ttc@gmail.com, Mobile: 01819725610.	Member	
6.	Md. Saif Uddin, Assessment Expert, National Skills Development Authority, Email: engrbd.saif@gmail.com, Mobile: 01723004419.	Member	