

# Process of Developing Video Resources

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# Purpose and Impact

If I cannot learn in your method, then teach me in my method

New generation as “the technology or digital generation”  
or “e-generation”.

Greater **attraction towards visuals** including photos and videos as compared  
with the text.

## Definition

Educational videos are multimedia resources designed to facilitate **learning and comprehension**, engaging learners through visual and auditory elements that **enhance understanding of concepts**.

# Process

The development of educational videos involves several key stages:

- **Pre Production:** Define objectives and outline content(Ideation)
- **Production:** Capture footage and audio
- **Post-production:** Edit and refine the video
- **Distribution:** Share via appropriate channels
- **Evaluation:** Assess effectiveness and gather feedback



# Pre-Production



## Needs

Identify learning objectives clearly



## Scriptwriting

Create engaging and concise content



## Storyboarding

Visualize scenes and transitions effectively



## Style

Choose format that fits goals

# Scriptwriting



## Chapter 2: Journey of a River, 1<sup>st</sup> video.

Nilanjana Basu

### My thoughts:

**Objective:** To explain the journey of a river – particularly Godavari, from its source to where it ends. Flooding and drying up of rivers, will be explained in the other video I've conceptualised. And I've highlighted the important concepts from the book, in red.

**Setting:** A middle-class drawing room, with a TV, a table and a sofa. The video will take place in this room when the two kids discuss the river. And it will move to graphics on the TV screen, when the kids play a video game. I have not thought of too much of fancy animations. Rather 2D animations, if possible.

**Characters:** Ganita (10-11 years old) on wheelchair, can be dressed in a frock/skirt/anything works; and her friend Shubho (10-11 years old too), can be dressed in shorts/trousers/anything works.

### SCENE 1:

(Ganita arranging video game remotes on the table, then looking at her watch impatiently, and saying)

**G:** Uff! Shubho's always late for our gaming sessions!

**S enters:** Sorry sorry sorry Ganita... what are we playing today?

**G:** Finally! Let's play Adventures of a River again? (gets excited) Look, it's easy... we just have to keep the river flowing from its starting point in the mountains, across the valleys and the plains... (gets animated)

**S:** (slightly annoyed) I get it... all the way to its ending point in the sea, right? Like we played last time with the longest river of India, Ganga!

**G:** Yess! So, let's pick Godavari for today? The **second longest river** of India?

**S and M:** (High five!) Let's go! (They pick up the remotes and make concentrated faces)

(Now the screen zooms into the TV, which becomes a screen with graphics. The graphics will be accompanied by Shubho and Ganita's voiceovers, as if they are commenting on the game's progress. All will be accompanied by relevant visuals, I will give references as icons.)



Sr. No./Scene No.	Audio Content/Dialogue	Visual Description	Sound Effects/Music
Opening Narration (Voiceover)	Narrator (gentle, warm tone): Every morning, our school shines bright — because it's not just clean, it's <i>happy!</i> But do you know who keeps it that way? Some tiny heroes... and a few magical friends! Let's visit the school reception and find out what's happening there today!	Soft, cheerful music plays. The camera pans over the school garden, classrooms, and corridors.)	Music fades into sparkle sound. Scene begins
Scene 1	Swachhta Didi (smiling): Good morning, my shining friends! You all look very happy today!  Boond: Oh Didi! You should have seen the children yesterday — they saved me from being wasted!  Gulabo Rani: And they made compost for me! I'm healthy again!  Bijli Bhaiya: And I got my first full rest in months!  Naitik (opening pages): So many good deeds! I'm ready to write them all.  Swachhta Didi: Then let's begin! Boond, you go first!	(Reception area. Swachhta Didi enters in a sparkle of light. Boond, Gulabo Rani, Bijli Bhaiya, and Naitik come alive.)	(Blue light floods the stage. <i>Sound of dripping water.</i> )
Scene 2	Boond (narrating sadly): One morning, a tap was leaking near the wash area. I kept falling... drop by drop.	(School water drinking area.. Drip... drip... drip...)	Drumbeat. Students Hayat, Arnav, and

# Needs



- Need Analysis
- Selection of the Content/Topic
- Formulating Objectives (Learning Outcomes)
- Development of Programme Brief

S.No.	Unit	Chapter	Name of the Chapter	Video Lessons
1.	Life Around Us	Chapter 1	Water—The Essence of Life	4
		Chapter 2	Journey of a River	4
2	Health and Well-being	Chapter 3	The Mystery of Food	4
		Chapter 4	Our School—A Happy Place	2
3	Incredible India	Chapter 5	Our Vibrant Country	4
		Chapter 6	Some Unique Places	4
4	Things Around Us	Chapter 7	Energy—How Things Work	3
		Chapter 8	Clothes—How Things are Made	3
5	Our Amazing Planet	Chapter 9	Rhythms of Nature	4
		Chapter	Earth—Our Shared Home	3

## Programme Brief-1

1. Programme Title: Water- The Essence of Life

a) Duration of the Programme: 4-5 Minutes

b) Language/Medium of Instruction: English

Programme Series Title: Sources and Importance of Water

2. Target users/Learners/ Age Group/Class: Student/Teacher

3. Programme Objectives:

The video facilitates learners in:

- Identify different sources of water.
- Distinguish between freshwater and saltwater.
- Recognize water as essential for all forms of life.
- Develop awareness about the need to use water wisely.

4. Content Outline: The video explains:

- Availability of water on Earth
- Freshwater and saltwater
- Uses of water in daily life
- Importance of conserving water

5. Media Selection and Presentation Format: Video

6. Production tips: Video

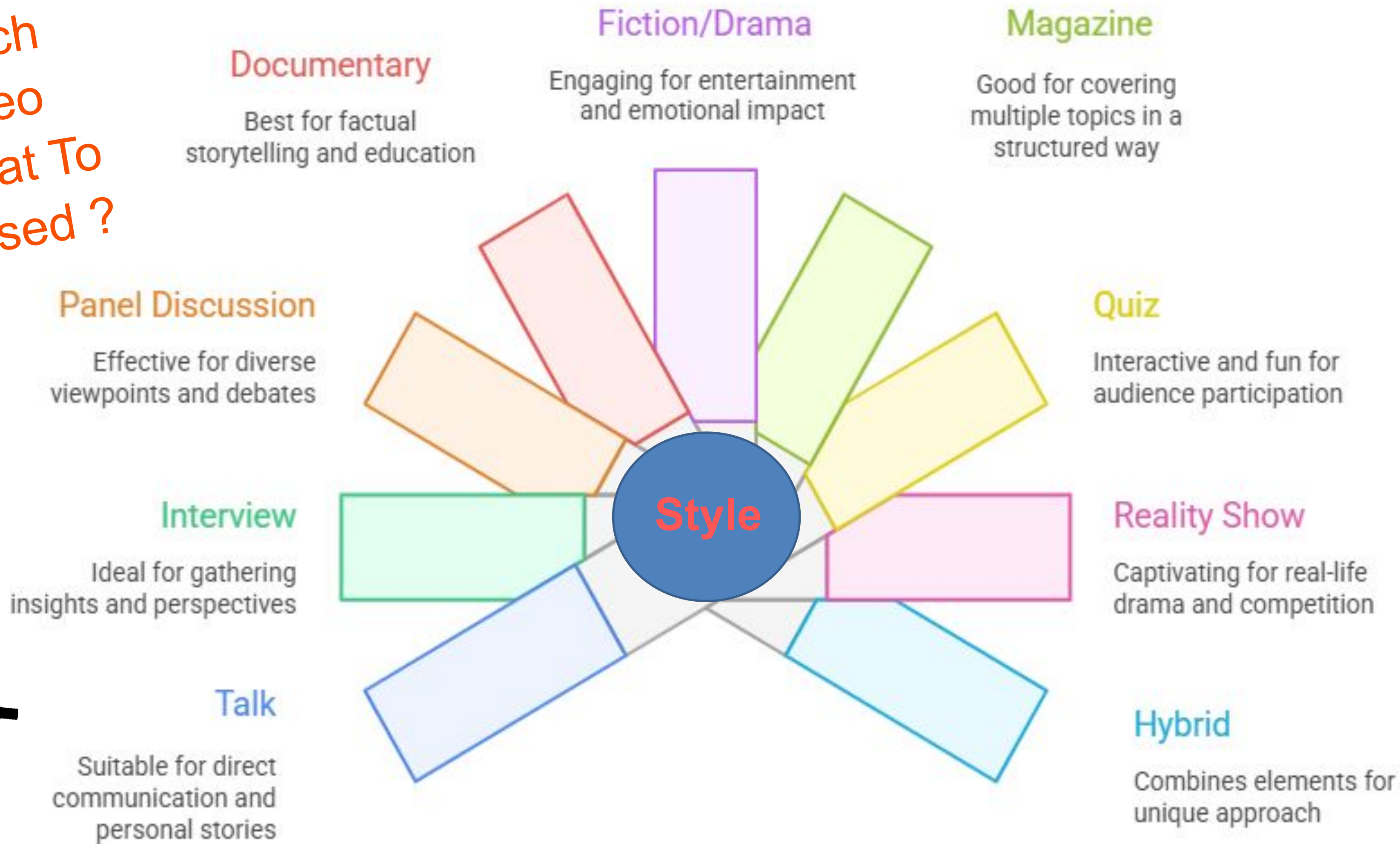
7. Reference Material (Brochures, Books, Journals, Websites, Apps, etc.)

Website : <https://ncert.nic.in/textbook/pdf/eeev101.pdf>

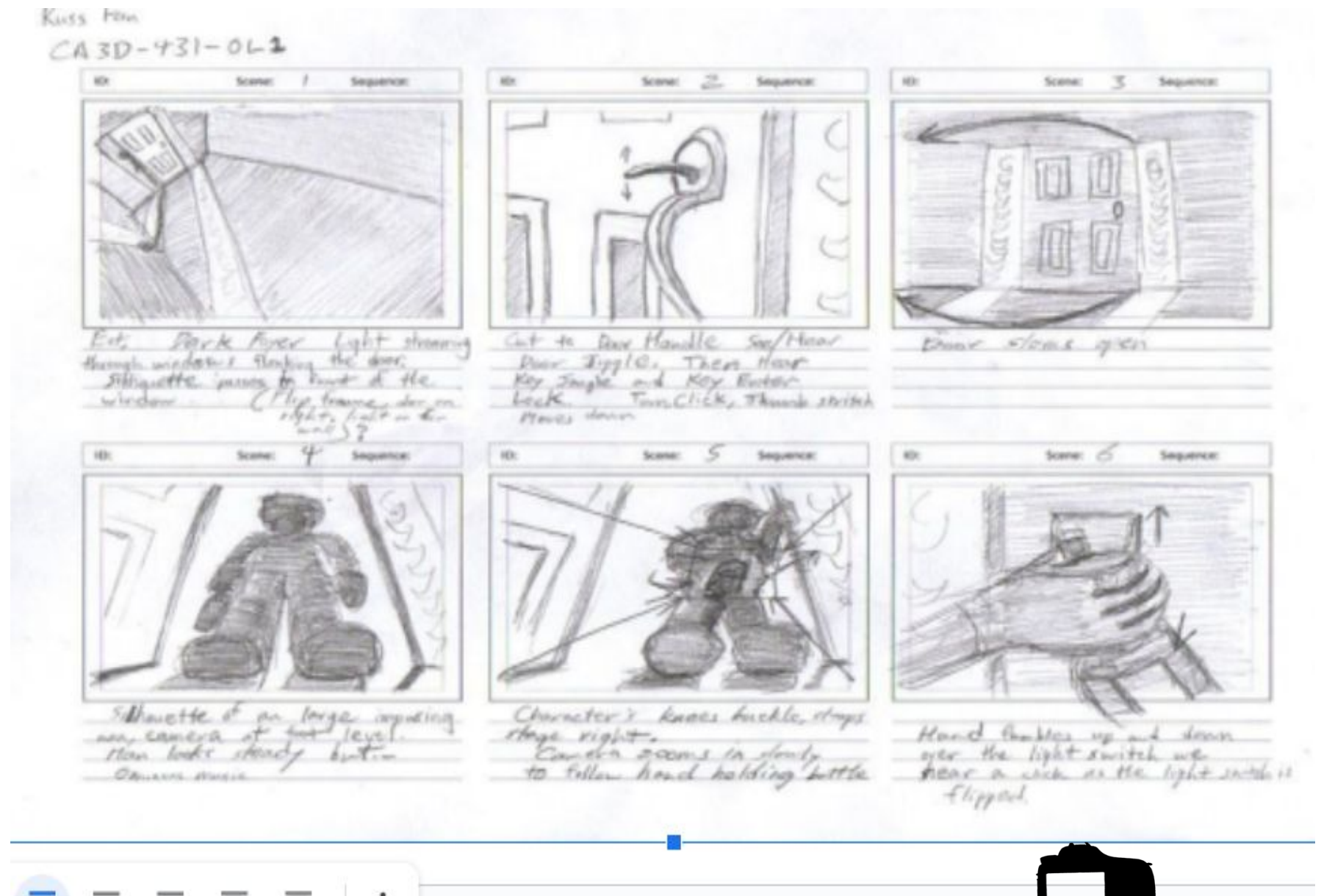
Resource Person:



# Which Video Format To Be Used ?



# Storyboarding



# Key Considerations

## Essential Elements for Effective Video Creation

### Learning Objectives

Clearly defined learning objectives **guide the content and structure of your video**, ensuring alignment with educational goals and facilitating effective knowledge transfer to learners.

### Target Audience

Understanding your target audience's **needs, preferences, and prior knowledge** is crucial for tailoring the video content, making it more relevant and engaging for viewers in their learning context.

### Content Clarity

Prioritizing content clarity helps **convey complex information** in a straightforward manner, enhancing viewer comprehension and retention, ultimately leading to a more impactful educational experience.

# Resource Planning for Video Creation



## Equipment

Essential tools for quality video production



## Software

Programs for editing and enhancing content

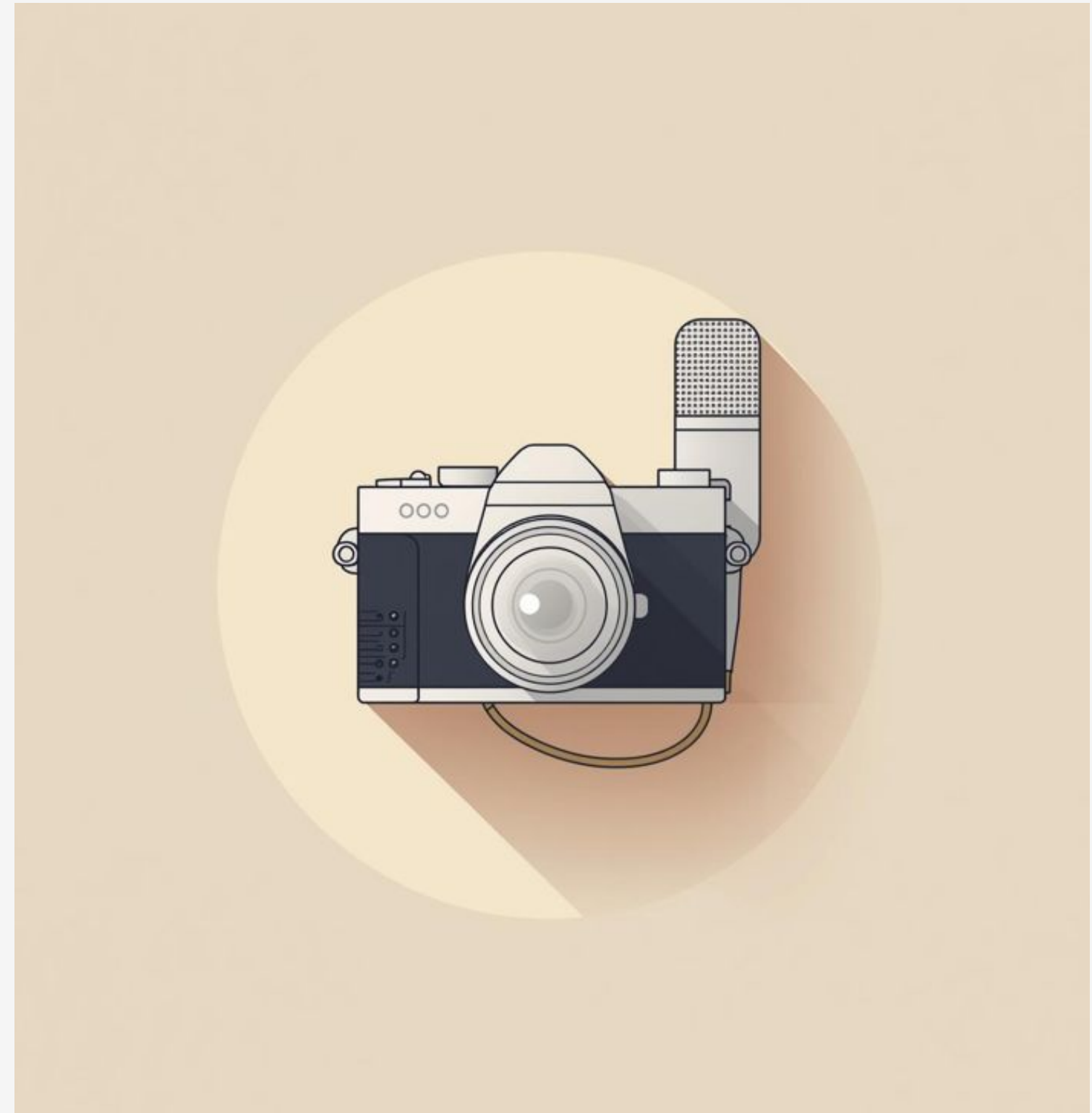


## Personnel

Producer/Director, Script-writer, Cameraperson, Sound-recordist, Graphic/Set-Designer and Editor

# Setup

- **Lighting:** Utilize natural light and soft diffusers for clarity.
- **Sound:** Ensure a quiet environment; consider using external microphones for better audio quality.
- **Background:** Choose simple, uncluttered backgrounds that enhance focus on the subject.



# Production Stage



- **Actual Recording/Shooting**
- **Own devices ( Video Software)**
- **Video Studios**



# Video Production Timeline

**Filming**



**Capture all video  
content**

**Editing**



**Edit video footage  
seamlessly**

**Quality Checks**



**Review for  
accuracy and clarity**

# Post Production Stage

## Editing

- graphics, images, voice-over, music, etc. are inserted at appropriate places.

## During Editing

- **Technical Design-** such as video file formats, adaptability with other electronic devices, etc. and
- **Visual Design- includes the**
- Graphical User Interface (GUI)
- Fonts
- Layout
- Colour etc

# Tips for Video Editing

- **Choose right software**
- **Use a fast computer**
- **Appropriate and aesthetic colour combinations, visuals, effects, transitions, text, graphics, images**
- **Select good and suitable music**
- **Select compatible file formats**
- **Change visuals every 4-6 seconds**
- **Remember copyright issues**



# Post Production Stage

## Academic Preview

- Technical
- Content
- Pedagogical
  - Field Try out**
  - Packaging**
  - Development of metadata**
  - Dissemination**

# Ensuring Quality

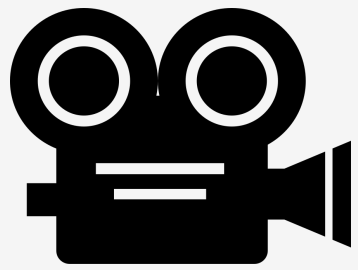
## Reviewing for Accuracy and Engagement

### Accuracy Checks

It's crucial to ensure that all **content is factually accurate** and aligns with educational objectives to enhance learners' trust and comprehension of the material.

### Engagement Strategies

Incorporating **interactive elements and visual aids** can significantly boost learner engagement, making the video more enjoyable and effective in conveying educational content.



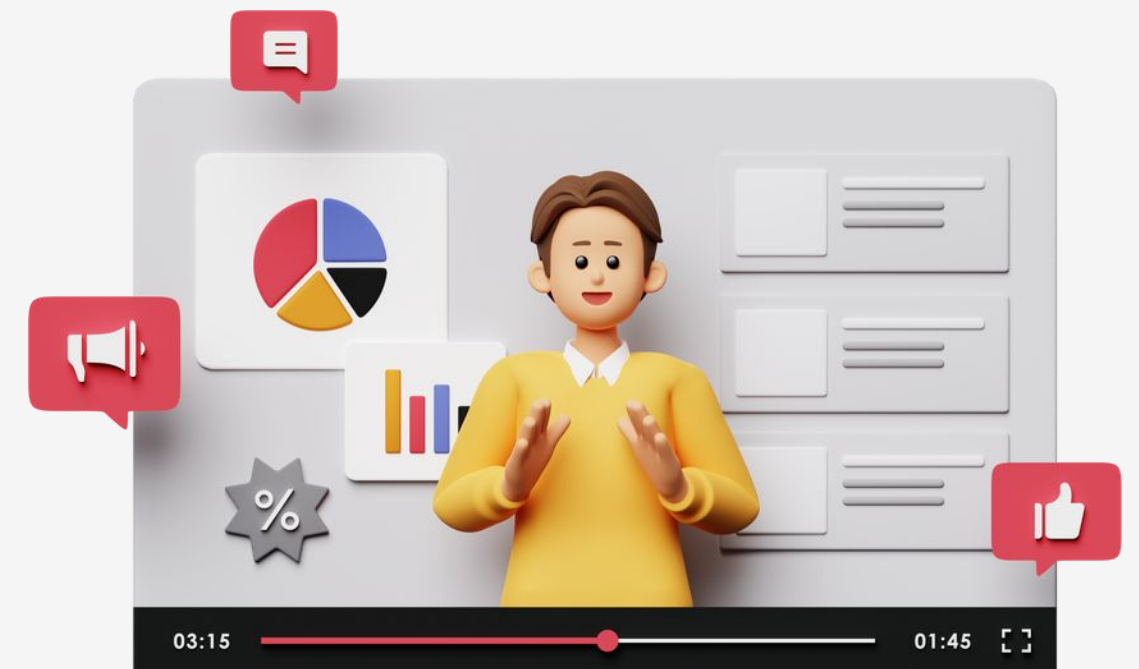
# Video File Format

- **MP4: mostly used in YouTube, Facebook, Twitter, and Instagram**
- **MOV (QuickTime Movie): stores high-quality video, audio, and effects. Facebook and YouTube both accept MOV and works great for viewing TV**
- **WMV (Windows Media Viewer) files: Microsoft created WMV for Windows Media Player.**
- **Audio Video Interleave (AVI): works with practically every web browser on Advanced Video Coding High Definition.**

# Digital Tools for Developin g Videos



OBS  
Animoto  
Applielmovie  
Avidemux  
FlexClip  
H5P  
Handbrake  
Meerkat  
Periscope  
SchoolTube  
StudiRack  
Swiffy  
ThingLink  
Vine  
Screencastify



# Factors to be Considered for Selection of Digital Tools

- **User-friendly & Ease of use**
- **Video format support**
- **Editing features**
- **Editing tools**
- **Compatibility factors**

# Distribution and Evaluation: Engaging Your Learners



## Platforms

Choose effective channels for distribution



## Marketing

Promote videos within educational contexts



## Feedback

Collect insights from learners and educators



## Improvements

Enhance future videos based on data



# Tips for Developing Effective Videos

- **A well designed plan, script and storyboard**
- **Quality Digital resources ( camera, video recorder, lights, etc)**
- **Adequate lighting (Natural, Studio, etc)**
- **Powerful video recording and shooting software**
- **Choose appropriate presentation format**
- **Select appropriate style, pace, etc.**
- **Make presentation interactive**

# Criteria for Evaluation of Videos

**Target Audience**

**Content**

**Pedagogical Consideration**

**Presentation**

**Technical Features**

**Administrative Considerations**

## Content

- Accuracy
- Relevance
- Content coverage
- Updated
- Aligned with curriculum
- Spatial contiguity
- Temporal contiguity
- Scope and depth appropriateness to target audience
- level of difficulty
- Integration of real-world experiences etc.

## Target Audience

- Age group
- Previous knowledge
- Social / cultural background
- learning styles
- language
- Demographic information
- Emotional development
- Ability level
- Social development etc.

Activate Windows  
Go to Settings to activate W

## Pedagogical Consideration

- Objectives
- Method of delivering content
- Media selection
- Presentation format
- Free from bias
- Contextual to local needs
- Scope for interaction
- Use of relevant images/ examples/ illustrations
- Support continuous learning
- Multiple modes of assessment
- learner engagement
- Skill development etc.

## Presentation

- Aesthetics
- literary and social values
- Motivation
- Innovative/ creative
- Universal design of learning
- Font
- Effects
- Coherence in media elements
- Chunking and organisation
- Scope for personalisation
- Inherent interactivity
- Suitability to learner with special Needs
- Addressing gender equality
- Multiculturalism etc.

## Technical Features

- File format
- Architecture
- Usability
- Interaction
- Navigation
- Adaptation
- Reusability
- Metadata
- Interoperability compliance
- Accessibility
- loading Time
- license
- Duration etc.

## Administrative Considerations

- Cost
- Delivery mechanism
- Support
- Services
- Training
- Maintenance
- Infrastructural and technological requirement
- Source of procurement/access etc.

**Storage/ Uploading – Online / On Air +Library + Meta Data Generation**

**Internal/ External/ Special /Preview of with all stakeholders**

**4<sup>th</sup> Internal QC**

**Field Testing**

**3<sup>rd</sup> Internal QC**

**Pre-Preview of the Content**

**2<sup>nd</sup> Internal QC**

**Production – Recording to Editing + Translation**

**Ideation**

01

**Planning Meeting**

02

**Scripting – Audio / Video Scripting + Storyboarding**

03

**Approval by Script Committee**

04

**1<sup>st</sup> Internal QC**

**1<sup>st</sup> Internal QC**

**Pre-Planning Meeting**

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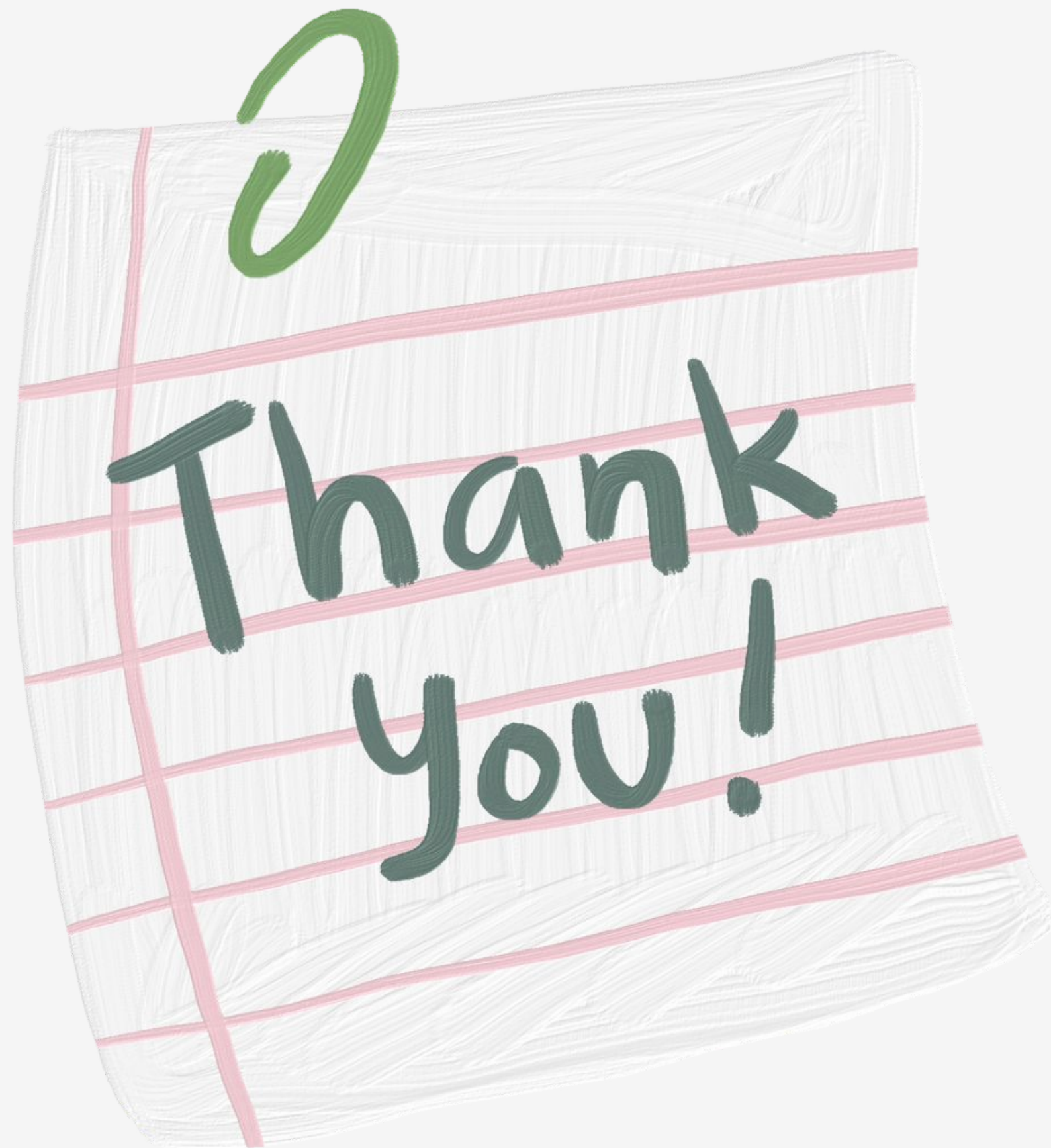
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Thank  
you!