# UC4

## IP Content Development

Quest

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**This document is interactive. Throughout the document, you will find links to additional information.**

- Button that takes you to the beginning of the document.

- Whenever you see **text like this**, it means that it has an external link associated to it.

# INDEX

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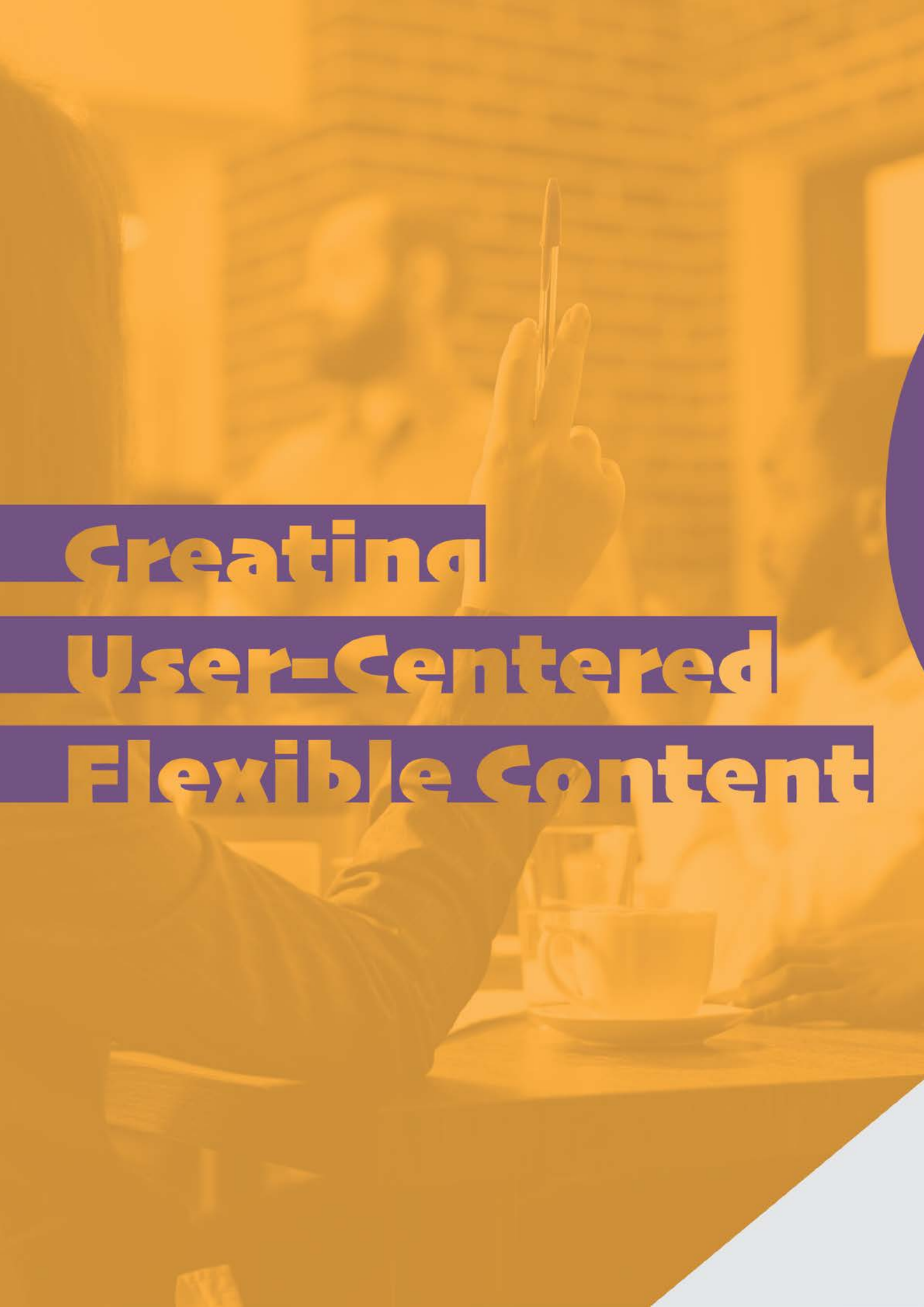
# Learning Outcomes

1. Create desirable, convenient, and enjoyable learning scenarios that enhance the learning experience;
2. Implement content development processes that allow for flexible outcomes based on the users' needs;
3. Design learning products that deliver high-quality learner experiences through multimedia exploration;
4. Understand the different methods you can use to adapt your educational content.



# Creating User-Centered Flexible Content

# Creating User-Centered Flexible Content

In this section you will:

- Learn about the importance of creating user-centered content with flexible outcomes.

## User-Centered Content

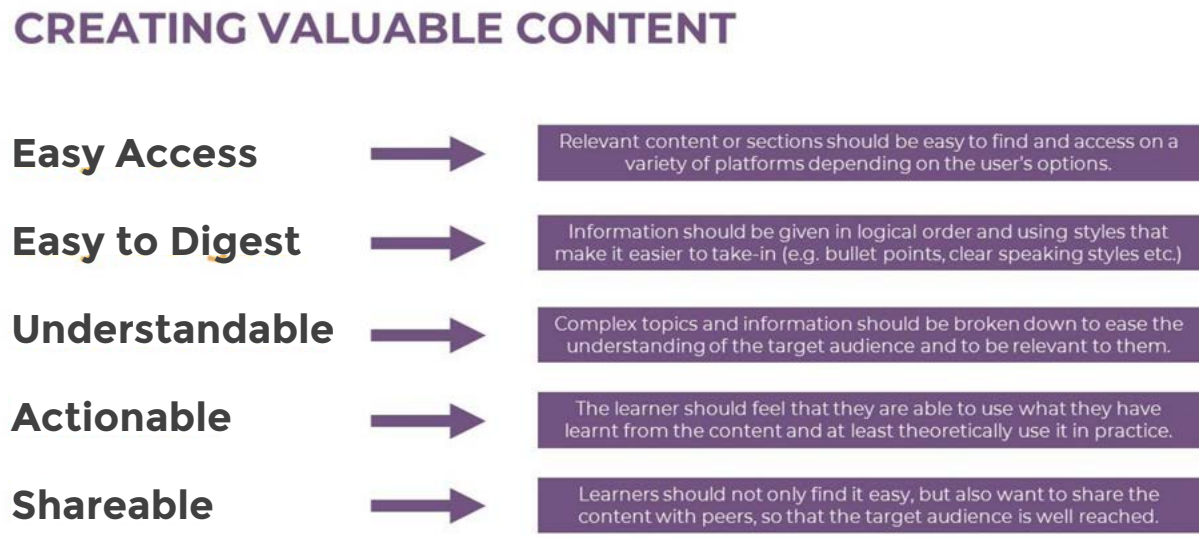
When developing new content, whether visual, audio or spoken it is important to consider the **needs of learners** and how you can meet them using **flexible outcomes**.

It is important to understand why the content is needed, who it is for and how it will be used.

Content should be easily accessible, easy to consume and understand.

For the content to be relevant to the learners, it needs to be something that they can put into practical use and share with peers.

For **content** to be **truly valuable** to learners, it should encompass **the following 5 pillars:**



# Learning Product Development

# Learning Product Development

In this section you will:

- Learn about the importance of product design in relation to instructional design development;
- Learn how to apply product design principles to your instructional design content.

## Product Development

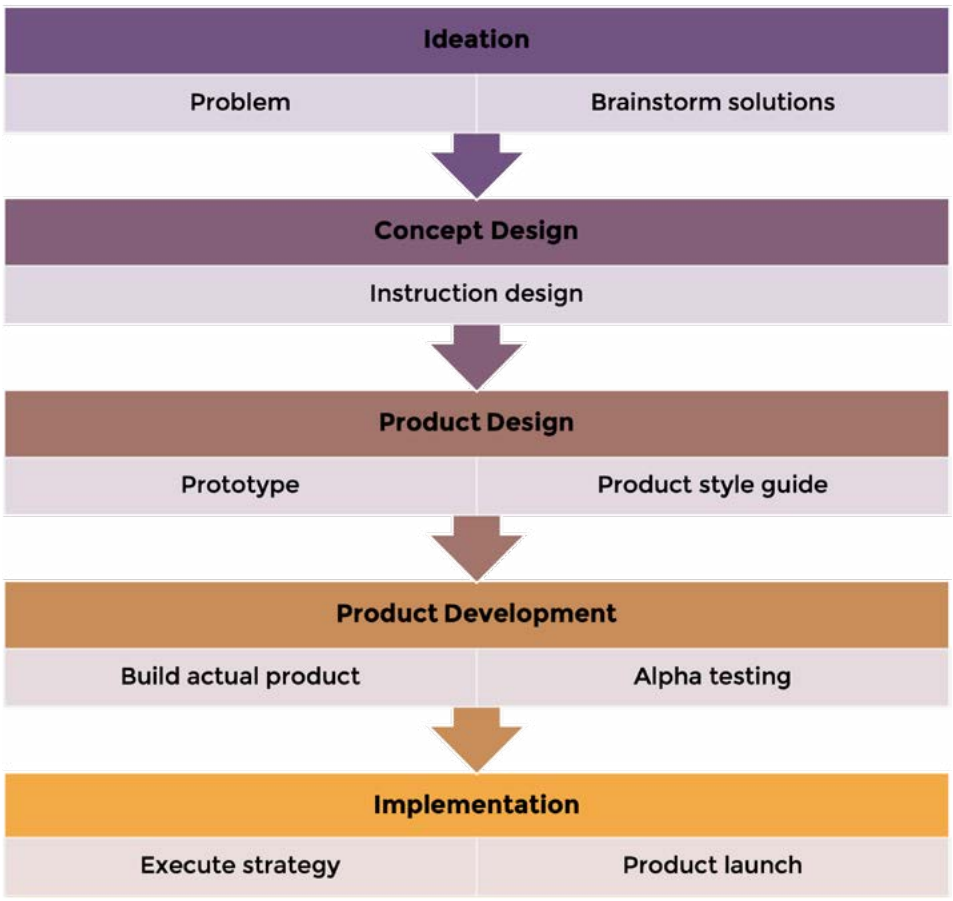
Product development is the complete process involved in taking a product from idea through to market release and beyond. It can also cover remaking an original product and the reintroduction of an older product to a new market.

The primary objective of product development from an instructional design perspective is to **develop**, **preserve**, **and boost** the knowledge of learners.

The methodology behind product development can be adapted to instructional design by applying the principles used in product development to the eLearning development process.

The methodology of product design is as follows:

- Identifying a market need;
- Conceptualising the product;
- Building the product roadmap;
- Launching the product;
- Collecting feedback.



When producing the instructional design content, applying the product development model can guide the content development process.

**Stage 4: Product Development** is the most important step for ID content development. Prototyping is the process of creating a mock-up sample in order to refine the final minimum viable product (MVP).

The phase involves the **creation of your product that will be released to your learners**. This involves gathering your information, creating your content, and implementing it into your chosen learning management system (LMS).

# User Experience and User Interface

# User Experience and User Interface

In this section you will:

- Learn about user experience (UX) and user interface (UI);
- Learn about the considerations to be kept in mind when designing a great user interface.

## UX and UI

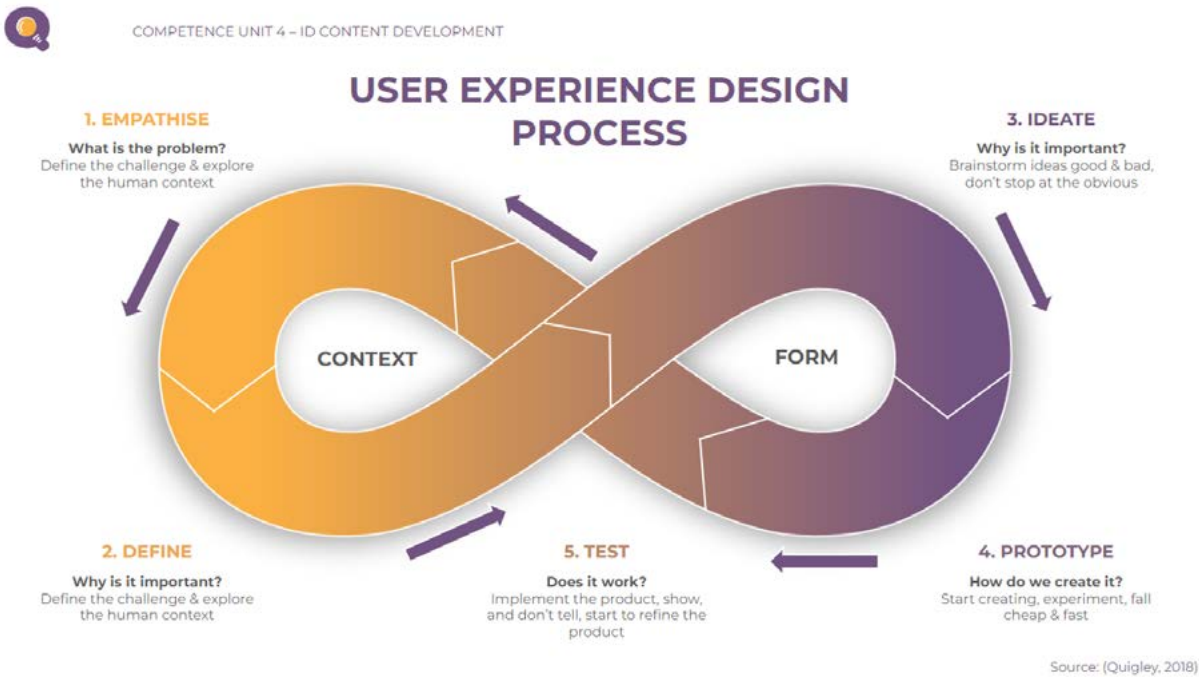
User experience (UX) and user interface (UI) are just two facets of instructional design that are fundamental to ensuring an effective learning experience for learners.

**User experience** refers to the way that users interact and experience a product, system or service. This experience relates to their perceptions of utility, ease of use, and efficiency.

**User interface** refers to the presentation of a product or system. The goal of UI design is to produce a UI that makes it easy, efficient, and enjoyable to operate a system in the way that produces a desired result.

**The User Experience Honeycomb framework** was created to guide user interface design. It involves 7 principles that must be kept in mind when designing an effective user interface:

- Usable
- Useful
- Desirable
- Findable
- Accessible
- Credible
- Valuable




Source: (Quigley, 2018)

**Usable**
The application should feel familiar, and it should be easy to use.

**Useful**
A business's product should be easy to use.

**Desirable**
The aesthetics of the system should be attractive, and easy to translate.

**Findable**
Information needs to be findable and simple to navigate.

**Accessible**
An application should be accessible to those with disabilities.

**Credible**
An application should be transparent, secure, and honest.

**Valuable**
If all 6 criteria are met, the end-user will find value and trust in the application.

# Interactivity

# Interactivity

In this section you will:

- Learn about the different interactive elements;
- Learn about the levels of interaction that can be included in your content.

Intuitive, dynamic instructional design content can take knowledge, retention, and active recall to the next level. Interactivity is one way that you can make it easier for learners to engage very well with your course. The interaction level that you include in your resources is based on a variety of different factors such as budget, target audience, the nature of the content, as well as your technological infrastructure and skills. When building the interactive elements for your course, including a variety of different levels will keep the content fresh and interesting for learners.

See below for some examples of the different levels of interaction that you can incorporate into your educational content.

## Levels of Interaction

### 01 Passive - No Interaction

- Graphics, images and simple animations
- Rollovers
- Basic quiz questions

### 02 Limited Interaction

- Animated graphics
- Navigation expands to menus, glossaries, and links to external resources
- Simple exercises
- Audio and video

### 03 Moderate Interaction

- Animated videos
- Customised audio recording
- Complex simulations where the learners enter data into fields
- Custom Flash Animations where the learners have to investigate

### 04 Simulation and Game-Based Learning

- Real-time learning
- Use of gaming technology
- 3D simulations
- Multimedia resources
- Digital 'avatars'
- All the elements of Levels 1-3 plus recharged interactivity

# Authoring Software

# Authoring Software

In this section you will:

- Learn about the considerations to keep in mind when choosing what tools to use;
- Learn about the different types of authoring tools available.

Authoring tools are a form of software that enables the creation of digital content. These tools can be as simple as creating a document in Microsoft Word, or as complex as graphic design tools.

Authoring tools can be either '**stand-alone**' or '**built-in**'.

These authoring tools are a great way for educators to design their own content and allow the user to produce and employ multimedia objects for the content's intended purpose.

There are different types of course authoring tools which can be adapted and used for a variety of different reasons.

## Choosing an E-Learning Authoring Tool

Choosing the correct E-Learning authoring tool is a fundamental step when developing your learning content.

Authoring tools allow users to **personalise** their content and adopt a **people-centred** approach to learning.

There are a variety of different considerations to keep in mind when picking which authoring tools to use:

- **User-Friendly Interface:** an intuitive interface means you can start building content straight away;
- **Collaboration Capability:** do some research on whether the authoring tool supports multiple users building, reviewing, and amending courses at the same time;
- **Ready-Made Templates:** expert-designed templates can help you choose the best interactions for your learning;
- **Multi-Device:** find out whether the tool produces content that works across desktop, tablet, and mobile.

## Types of Authoring Software

### Stand- alone

Stand-alone authoring software is external programs that allow you to create content in the tool before exporting it to import into your learning management system.

Using stand-alone tools can be very beneficial for certain tasks as there are many tools that are purpose built for specific purposes and can give users more flexibility in relation to content creation.

Most systems will allow you to import external-made content. These exported files must, however, be exported in file formats that are supported by your chosen LMS. Examples of stand-alone tools are Adobe Premiere, Canva, and Figma.

### Built- in

Built-in authoring tools are internal tools that are integrated into your learning management system. Using built-in authoring tools are convenient so you do not need to worry about compatibility when exporting and importing your content.

Ease of use is one of the most major benefits of using built-in tools. It can be very convenient for ensuring that all your content has a consistent theme.

Examples of built-in tools would be charting tools, interactive video players, and image editors.

# Video Audio and Image editing

# Video, Audio and Image editing

In this section you will:

- Learn about basic video and image editing techniques
- Understand the ways you can add interesting transitions

Video, audio, and images provide learners with powerful mediums for sharing information in an easily accessible and digestible format. It is important for instructional designers to understand how to keep these formats concise as time is precious. This is why instructional designers should be practiced in editing.

In this module, you will be introduced to some basic video, audio, and image editing concepts that you can build upon with further self-directed learning.

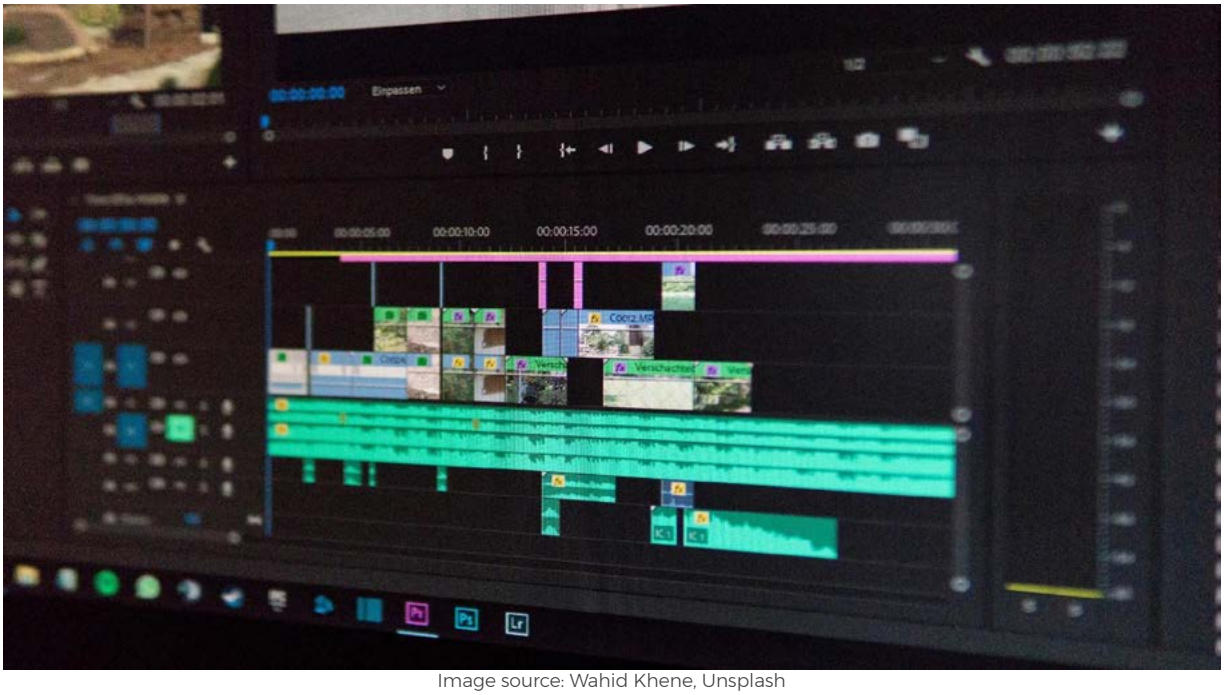


Image source: Wahid Khene, Unsplash

**Step 1** Planning

**Step 2** Software Options

**Step 3** Basic Editing Techniques

**Step 4** Transitions

**Step 5** Adding Details

**Step 6** Export

## Planning

Consider the following questions when planning the media you are about to create:

What is the purpose of the video?

There are many steps in creating viewers:
- Storyboard;
- Write a script;
- Collect content/media;
- Rough cut;
- Fine edit;
- Music, lower thirds, and other details.

## Software Options

There are quite a few video, audio, and image editing software options on the market. Depending on both the users skill level as well as wants when creating content.

Some examples of software available for users:
- Adobe Premiere;
- Final Cut Pro;
- Adobe Photoshop;
- GIMP Editing.

## Basic Editing Techniques

The following basic editing techniques are almost universal and can be applied to your chosen video editing software.

Steps:
- Upload your filmed videos, images, and audio;
- Add these to the workspace;
- Use the scissors tool to chop up your video content into different scenes;
- Arrange the trimmed down scenes into an order;
- Add details like overlays, lower thirds, and music.

## Transitions

Placing clips one after another into the Timeline in your video editing software results in what is known as a cut.

There are many different options for transitioning between the different clips in your project.

Consider using similar transitions within the project so that the content is not jarring to viewers.

## Adding Details

### Lower thirds

Lower-thirds are identifying text used in the corner of a video that identifies the person's name, title, and sometimes the logo of a company (see example).

### Pan/Zoom on images

Zooming and panning onto certain images in a video can be very engaging for viewers. This can trick the viewers into thinking that the image is not static.

### Audio

Adding background audio to your videos helps to reduce the sense of awkwardness for viewers. Choosing the correct background audio is very important, avoid tracks that have loud changes or large crescendos.

## Export

Once you are finished editing your video, it is time for you to export your finished product.
Depending on your chosen video editing software, this could be different, however most editing programmes use similar processes.

The most important considerations to be kept in mind when exporting your finished products are:

- Exporting in the correct file format;
- Saving your work project in case your file becomes corrupted.

# Scenario Development

# Scenario Development

In this section you will:

- Learn about the benefits of using scenario-based learning;
- Learn the steps of how to include scenario development in your courses.

## Scenario-Based Learning (SBL)

Scenario-based learning (SBL) has proven to be a very useful form of learning. SBL involves the learners engaging in active learning by presenting learners with problems that need to be solved.

SBL focuses on developing complex decision-making skills, not on applying a task with multiple steps. SBL courses combine the appeal of stories with the realism of hands-on training within a virtual environment.

## Benefits of SBL

- It helps facilitate the application of learning.
- Facilitates decision-making and problem-solving.
- Increases critical thinking skills.
- Provides a decision-making tool that provides an understanding of the consequences of certain decisions and choices.
- Boosts learning outcomes.
- Motivating and engaging for the learner.

## Building an Engaging Scenario

SBL is well-suited to teach learners to hone skills that involve proper decision-making. A scenario is essentially a story. It has a plot, characters, and a problem that the learners are striving to resolve. The plot should mirror the circumstances of the learners, and the characters should share the goals and aspirations of the learners.

Some examples of SBL scenarios include using an interactive online game to test learners on their knowledge of health and safety. Learners are provided with a scenario in which they are asked to demonstrate their knowledge of fire safety as they are trapped in a burning building. Users play the game and must escape safely by making a number of decisions based on challenges. This allows users to practice their decision-making and problem-solving skills in a safe environment where there is no real-life consequence for getting the answer wrong. The game is risk-free and the learner learns from the consequences of their decisions in a safe environment.

## Steps for Building Scenarios

Scenario planning is an exercise that helps you think through any critical uncertainties and anticipate problems in the future of your project or organisation.

Scenario planning helps you think through everything that influences your project. Then, you'll look for strategies and action plans that make the most sense, no matter what the scenario.

The following steps should be kept in mind when using scenario building to design your educational materials:

- Identify your target audience and understand their needs;
- Identify the learning outcomes;
- Choose a situation for the scenario;
- Choose the apt scenario structure;
- Design your scenario;
- Create the end problem for your learners to solve.

# Conclusion

# Conclusion

Content development is an important step of the instructional design process. Choices such as choosing the correct authoring tools, planning and developing a great user interface, as well as developing content to be used in your LMS such as interactive videos and scenario-based content, are all important tools that can be used in your content development processes.

### Important takeaways:

- Scenario-based learning is a valuable way to introduce problem-solving and decision-making into your content;
- Interactive content is a great way to engage learners;
- Great user interface generates great user experience;
- Using effects and audio in videos is a great way to keep viewers engaged.

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