

UNIT 8. Adapting to Different Learning Styles



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1. Aim and Objectives

The aim of this unit is to help trainers design learning activities adapted to different learning styles by transforming the same content into multiple formats using CT principles.

By the end of this unit, adult trainers will be able to:

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1. Identify the role of different learning styles in CT learning.
2. Present the main learning styles.
3. Employ AI tools to generate content for different learning styles.

4. Apply CT principles to decompose content and reuse core elements across different formats.
5. Present additional resources that can be used to prepare different content formats.





2. Outcomes

Adult trainers are able to design and adapt learning activities to suit different learning styles, structure them using CT principles, use different content formats as learning triggers, and adjust activities based on learners' responses.



3. Main CT Principles Applied

Abstraction – learning activities focus on the core message, separating meaning from specific forms. This allows the same content to be reused and transformed across different learning formats without dependence on the original medium.

Pattern Recognition – trainers identify recurring interaction patterns when using AI tools, such as prompting, generating, and converting content between formats. Recognising these similarities supports efficient transfer of skills across tools and activities.

These principles enable flexible adaptation of learning formats based on learners' responses, without requiring technical expertise.



4. Link to WP2 Modules

M3, slide 17, "What Makes Adult Students Different", states that CT activities should be adapted for visual, auditory, and tactile learners. Slide 22, "Elements of a Good Lesson Plan", identifies methods addressing different learning styles as an important element of an engagement strategy.

M5, slide 35, presents visual, auditory, kinaesthetic, and written learning styles.



5. Challenges

Adult trainers face challenges when they have to deliver content in different formats for different learning styles in both online and offline settings.

Cognitive Overload

Managing different content forms for different learning styles requires considerable effort from trainers and can shift their attention from monitoring CT-related reasoning to managing instructional complexity.

Trainer Confidence

Adult trainers may feel uncertain about facilitating CT activities when using different formats or unfamiliar content. This may affect their confidence.

Assessment and Feedback

If learners experience CT through different formats, adult trainers may find it challenging to apply unified assessment and feedback methods.

Overreliance on learning styles

Overreliance on learning styles may distract from more effective training and can lead to fragmented training design that prioritises format over learning outcomes.

Abstract CT Principles

CT principles are abstract by nature. Converting CT principles into different formats can cause them to be overly simplified or distorted.

Digital Technology Skills

Trainers may lack the practical proficiency with diverse digital tools required to transform CT content into different formats.



6. Justification

Why adapt different content formats for different learning styles?

Adult learners differ in how they process information. Using multiple content formats helps reduce cognitive load and improves understanding and engagement.

Why use AI tools to generate materials for different learning styles?

AI tools allow trainers to generate and convert learning materials quickly with limited time and technical skills.

AI tools enable trainers to prepare different formats for the same content.

Why focus on formats rather than learning styles?

Content formats are observable and adjustable during training. They allow trainers to respond flexibly to learner reactions without a formal diagnosis.

Why apply CT?

CT supports structured content reuse and transformation. It helps trainers decompose content, identify reusable elements, and apply them across formats.

Why is simple observation sufficient?

In adult learning, immediate feedback and engagement signals are often more reliable than formal tests. Observing learners' questions and attention, as well as their need for clarification, supports timely adjustments to the content format.



7.1 Activity: Preparation of Visual Content

AI-powered generation of slides, images and short videos

Goal: To enable the preparation of visual learning materials using AI with minimal technical effort.

Outcome: Ability to prepare visual learning materials using AI tools.

SLIDES

1. Open <https://gamma.app/>
2. Click "Create New (AI)"
3. Choose "Generate"
4. Type a topic (e.g. "Disinformation")
5. Click "Generate"
6. Edit and export as PPTX

INFOGRAPHIC

1. Open <https://chatgpt.com/>
2. Start a new chat.
3. Enter a prompt (e.g. "Create an infographic about disinformation").
4. Download the generated image.

DISINFORMATION



False or misleading information used deliberately to mislead or manipulate people.

SOURCES



SOCIAL
MEDIA



WEBSITES



TRADITIONAL
MEDIA



INDIVIDUALS

HOW TO SPOT DISINFORMATION



SENSATIONAL
HEADLINES



UNVERIFIED
SOURCES



MANIPULATED
CONTENT

APPEAL TO EMOTIONS



Some AI tools require users to sign up, but the described functions are available through free or freemium plans.



7.1 Activity: Preparation of Visual Content

VIDEO GENERATION FROM AN IMAGE

1. Open <https://app.heygen.com/>
2. Click "Create" → "Create a video"
3. Choose "Photo to video"
4. Upload one image (e.g. a photo of a rat)
5. Paste a short script (e.g. "Rats never lie... Because they do not speak.")
6. Select a voice and language
7. Click "Generate"
8. Download the generated video



Results:

- AI-generated slide deck with visuals.
- AI-generated infographic suitable for visual explanation.
- An AI-generated video created from a single image with a synthetic voice-over.

CT principles:

- **Abstraction** – focuses on retaining the core message independently of visual details when generating slides, infographics, or short videos.
- **Pattern Recognition** – focuses on recognising recurring interaction patterns with different AI tools, such as providing a prompt and supplying input in another format when generating or transforming visual content.



Visual content is a primary learning format when learners can decode meaning directly from images without additional verbal or text-based explanation.



7.2 Activity: Preparation of Audio Content

Generation and conversion of speech-based audio content

Goal: To enable trainers to prepare audio learning materials by generating speech from text and extracting audio from video content.

Outcome: Ability to generate, convert, and reuse speech-based content as standalone learning materials suitable for audio-focused activities.

SLIDE NARRATION

1. Prepare slides with notes
2. Save the presentation as PPTX
3. Open <https://www.narakeet.com/>
4. Click "Tools" → "Slides to Video..." → "Try Now"
5. Upload the PPTX file
6. Click "Continue"
7. Click "Create video"
8. Download the video with narration



TEXT TO SPEECH

1. Open <https://elevenlabs.io/>
2. Click "Text to Speech".
3. Enter the text (e.g. "Hello, this is an automated security call from your bank. We have detected unusual activity on your account. Confirm your identity immediately to avoid account suspension.")
4. Select a voice and language.
5. Click "Generate speech".
6. Download the audio file.



7.2 Activity: Preparation of Audio Content

AUDIO GENERATION FROM VIDEO

1. Open <https://cloudconvert.com>
2. Upload a video file (e.g. slide narration video)
3. Select MP3 as the output format
4. Click "Convert"
5. Download the audio file



Results:

- Automatically narrated slides based on speaker notes.
- Synthetic speech audio generated directly from text.

An audio-only file extracted from video content.

CT principles:

Abstraction – spoken content is separated from its original source (slides, text, or video) so that meaning is carried only through sound.

Pattern Recognition – trainers recognise that different audio tools follow similar interaction steps, such as providing text, selecting speech output, or converting existing media into audio.



Auditory learning becomes primary when learners can follow and explain content through listening alone, without requesting visual cues or written support.

T

7.3 Activity: Preparation of Text

Generation and conversion of text-based learning materials for reading, analysis, and diagnostic purposes

Goal: To enable trainers to generate, extract, and use text-based content as a flexible learning format and support basic learning-style diagnostics.

Outcome: Ability to prepare and reuse text-based learning materials for text-focused learning activities.

GENERATED TEXT MESSAGE

1. Open <https://chatgpt.com/>
2. Start a new chat
3. Enter a prompt (e.g.
"Generate a short text message impersonating a family member who claims to be in urgent trouble.")
4. Review and copy the generated message

Generated example of a short scam message:

"Mum, I had an accident and need help right now. I'll explain later – please message me back immediately."

CT principles:

- **Abstraction** – focuses on extracting meaning from spoken or visual content and representing it as text that can be reused independently of the original format.
- **Pattern Recognition** – focuses on recognising recurring workflows when using text-based AI tools, such as entering prompts, refining outputs, and converting content from other formats into text.

T

7.3 Activity: Preparation of Text

TRANSCRIPT FROM VIDEO

1. Open <https://www.youtube.com/>
2. Select a video
3. Click "...more" below the video
4. Click "Show transcript"
5. (Optional) Toggle timestamps if needed
6. Select and copy the transcript text

LEARNING STYLE DIAGNOSTICS

1. Open <https://claude.ai/>
2. Start a new chat
3. Paste the following prompt: "You are assisting an adult trainer during a live training session. Explain how to identify which learning format (visual, audio, or text-based) works best for learners in real time. Focus on observable behaviours, typical learner reactions, and practical signals that indicate a preference for one format over other formats."
4. Keep the guidance concise and actionable.
5. Review the generated guidance
6. Apply the suggested observation cues during activities

Results:

- Generated short text message illustrating a disinformation pattern.
- Text transcript extracted from video for reading and analysis.
- AI-generated guidance for real-time learning style diagnostics.



Text-based learning works best when learners prefer reading, annotating and reflecting on text, and can understand and explain ideas clearly.



8. Additional Resources

Additional freemium tools for generating content in various formats are available. Most require users to sign in, often using a standard Google account.

Text generation

<https://chatgpt.com/>
<https://claude.ai/>
<https://gemini.google.com/>
<https://www.perplexity.ai/>

Image generation

<https://chatgpt.com/images>
<https://leonardo.ai/>
<https://www.canva.com/>
<https://ideogram.ai/>

Speech generation

<https://elevenlabs.io/>
<https://www.narakeet.com/>
<https://murf.ai/>
<https://ttsmaker.com>

Video generation

<https://app.heygen.com/>
<https://runwayml.com/>
<https://pictory.ai/>
<https://pika.art/>

Slide generation

<https://gamma.app/>
<https://www.canva.com/>

Think

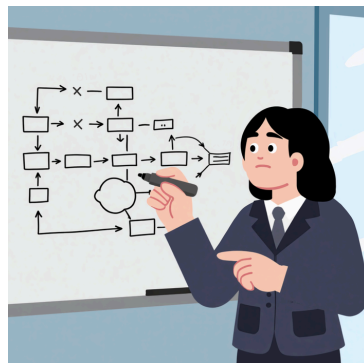
Which tool is your favourite?



9. What is the value of this unit?

This unit explains the need to adapt training content to different learning styles:

- Visual
- Auditory
- Kinaesthetic
- Written

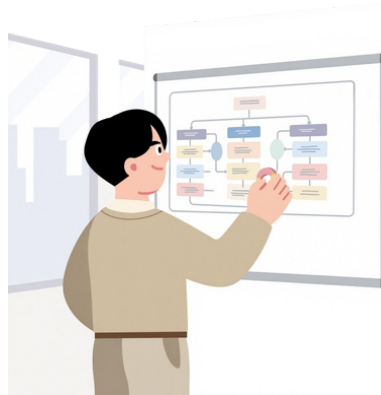


This unit provides practical recommendations on how to prepare training content in different formats:

- Visual content
- Audio content
- Written content

This unit supports adult trainers by:

- Providing practical examples of how to adapt training content to different learning styles;
- Building their confidence and awareness of cognitive diversity.



End of the Unit