Online Learning Framework

Guidance for the development of online learning solutions at the United Nations

United Nations

About

The Online Learning Framework is a set of tools and recommendations that provides guidance and promotes shared standards for the development of online learning products at the United Nations.

It is a guide and toolkit for the learning community in the United Nations Secretariat, including learning managers and staff working or interested in creating online learning programmes, that can be used to:

- Review and align current online learning solutions
- Guide the development and implementation of new online learning products
- Produce accessible digital content that all learners, regardless of disabilities, are able to navigate, understand and interact with
- Integrate cultural diversity and a gender perspective in all areas of online learning programmes (administration, course content, evaluation, communication and feedback)

The Framework is based on the principles of the ADDIE model, an instructional design model for developing and delivering learning programmes that seeks to change behavior and improve performance. It offers a systematic approach to analysing needs, designing and developing curricula and implementing and evaluating learning solutions in the UN context. The model gives you a streamlined, focused approach that provides feedback for continuous improvement.
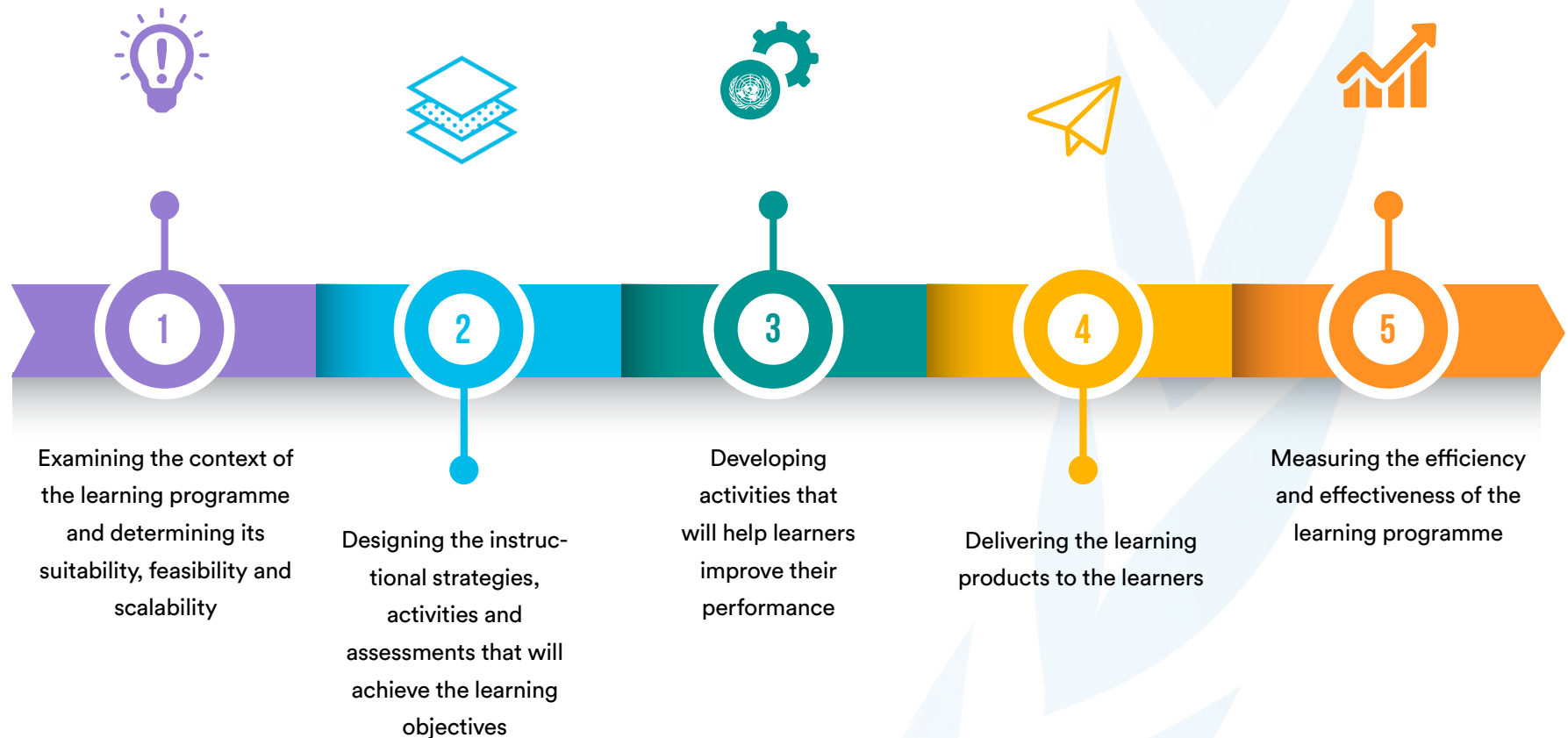
Contact

The Organizational Development Section in the Office of Human Resources is committed to enhancing the quality of learning opportunities for Secretariat staff and promoting a culture of continuous learning through self-learning resources available at the point-of-need. For more information, please contact: learning@un.org.

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Online Learning Framework

Based on the ADDIE instructional design model, the Online Learning Framework provides tools and recommendations on the different phases involved in developing and delivering learning programmes.

1 — Examining the context of the learning programme and determining its suitability, feasibility and scalability

2 — Designing the instructional strategies, activities and assessments that will achieve the learning objectives

3 — Developing activities that will help learners improve their performance

4 — Delivering the learning products to the learners

5 — Measuring the efficiency and effectiveness of the learning programme

KEY TOPICS

Key considerations for designing successful online learning

Essential considerations include focusing on the needs of the target audience, defining clear learning objectives, choosing the most appropriate learning modality and establishing evaluation mechanisms to assess the impact of the training.

## Promoting Gender Equality and Cultural Diversity

In alignment with both the System-wide Strategy on Gender Parity and the Universal Declaration on Cultural Diversity, this set of standards recommends a series of elements to integrate cultural diversity and gender perspectives in all areas of online learning programmes and eliminate unconscious bias.

Accessibility

Making content accessible requires overcoming obstacles that prevent staff members from understanding content due to a physical, technological or cognitive barrier. Accessible content benefits all learners.
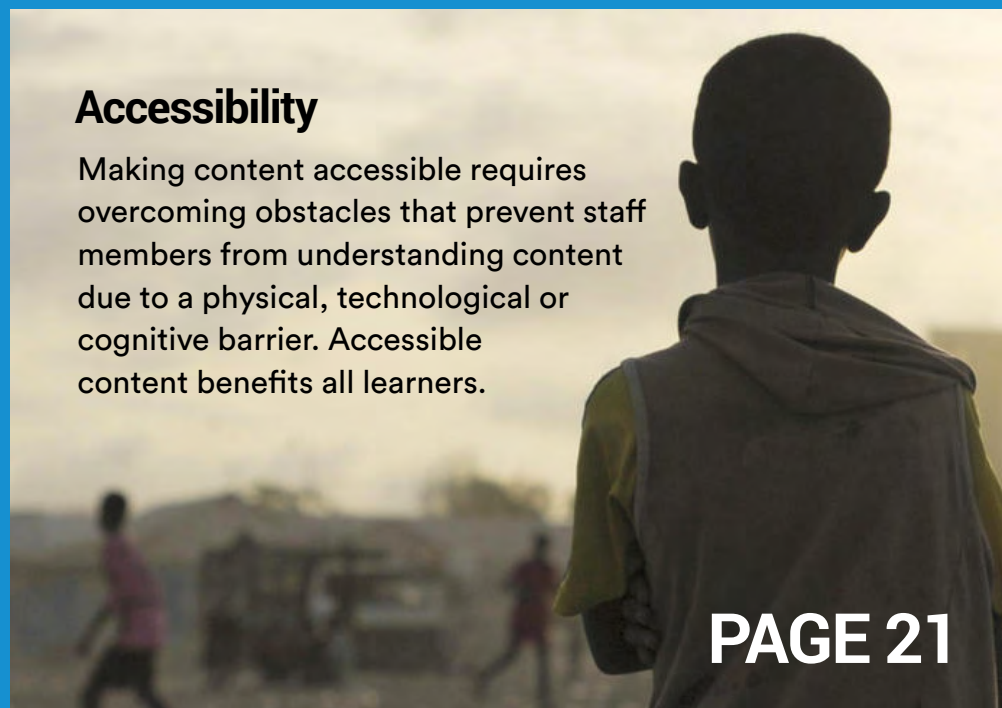
Phase 1: Analysis

The analysis phase examines the context of the learning programme and determines its suitability, feasibility and scalability. It often includes a training needs assessment and analysis.

1. Analysis

Examining the context of the learning programme and determining its suitability, feasibility and scalability

Conduct a training needs assessment (TNA), or learning needs analysis (LNA), to identify and analyse the problem and specify the need and motivation for training (or suite of activities).

Determine if training is feasible, scalable, and the desired solution.

Discuss with the client (the team who requested the learning activity) the need and motivation for the training.

Analyse the tasks employee need to perform which are related to the learning goals.

Gather samples of target performance (what learners should be able to do after participating in the training).

Gather samples of subpar performance and data on what "needs improvement".

Collect information on target learners' background, characteristics, behaviour, experience with the domain and learning needs to inform the design of the learning activity.

Identify subject matter experts (SMEs) to support content design and development.

Identify learning experts to support instructional design, development, implementation and evaluation.

Develop overarching goals based on data available (learner background information, input from SME(s), previously developed course content).

Explicitly link learning objectives to organisational goals, team needs and learning activity's purpose(s).
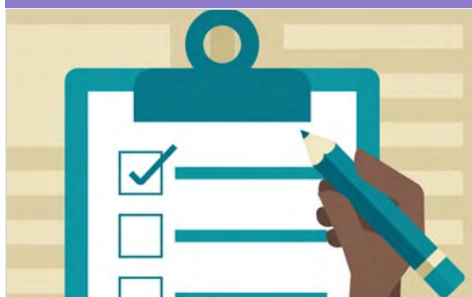
RESOURCES

COURSE

LINKEDIN LEARNING: NEEDS ANALYSIS, INSTRUCTIONAL DESIGN ESSENTIAL SERIES

This course provides step-by-step instructions on how to conduct several types of needs analyses.

COURSE

**LINKEDIN LEARNING: WRITING EFFECTIVE LEARNING OBJECTIVES**

This course focuses on how to write learning objectives for different contexts. It explores the language and structure to be used, discusses how to align objectives with assessments and provides strong and weak examples.

GUIDE

TRAINING NEEDS ANALYSIS: A STEP-BY-STEP GUIDE TO IDENTIFY PERFORMANCE GAPS IN YOUR ORGANIZATION

This guide provides tips on the steps involved in conducting a training needs analysis.

ARTICLE
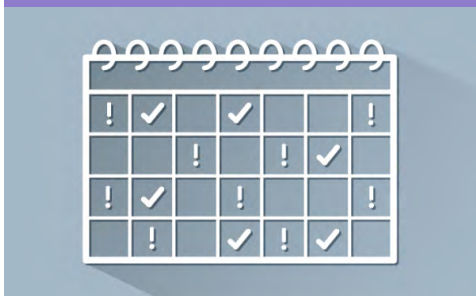
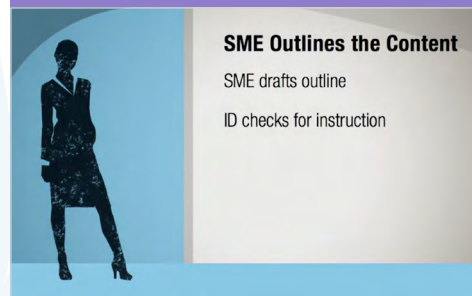**10 TIPS TO CREATE ONLINE TRAINING FOR BUSY EMPLOYEES**

This article presents 10 tips to create online training courses for your busy employees, so that they always have time to train.
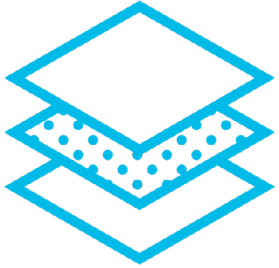
ARTICLE

KEY TRENDS IN ELEARNING IN 2020

This article discusses current trends to have in mind in order to develop successful online learning.

COURSE

LINKEDIN LEARNING: WORKING WITH SUBJECT MATTER EXPERTS

In this course, you will discover how to translate the knowledge of subject matter experts (SMEs) into engaging instructional content.

Phase 2: Design

In this phase, the outputs from the analysis are used to create an outline of the learning process and determine the instructional strategies, activities and assessments that will be used to achieve the goals of the learning programme. This phase typically includes writing objectives, selecting a delivery modality, sequencing the learning process, conceptualizing activities and determining how learning will be measured.

2.1   Target Audience
2.2   Learning Objectives
2.3   Technology
2.4   Learning Modalities
2.5   Evaluation Mechanisms

1   2   3   4   5

2. Design

Designing the instructional strategies, activities and assessments that will achieve the learning objectives

2.1 KNOW AND UNDERSTAND YOUR AUDIENCE

The more you know and understand the background and needs of your audience, the better you can design training.

Consider the time commitment required to complete a training and make it concise and as relevant as possible. Most experts confirm that a good length for e-Learning is fifteen and thirty minutes. Bigger chunks of content should not exceed 1.5 hours.

Use various instructional strategies, such as microlearning, and enable learners to learn in a collaborative environment. Shorter bits of content enable participants to absorb more information without feeling overwhelmed.
Where applicable, present content in videos, instead of text.

Consider the context, backgrounds, experience and needs of the target audience.

Ensure the learning activity caters to a variety of learning styles and follows adult learning principles.

Include activities that encourage critical thinking and reasoning skills and avoid mechanical repetition.
For more ideas on this topic, refer to the self-learning section on Bloom's taxonomy, (p. 12) which classifies learning objectives into levels of complexity and specificity.

Consider reinforcement opportunities depending on the goals, learning needs and the context, deciding if and when continuous learning is advantageous.

2.2 DEVELOP LEARNING OBJECTIVES

Based on available data (learner background information, input from SME(s), content from previous learning activities):

Formulate learning objectives from the learner's perspective.

Create module-level learning objectives that align with overall training programme goals.

Ensure learning objectives are Specific, Measurable, Achievable, Realistic and Time bound (SMART): 1) Use clear language to explain what participants should learn or be able to do after the training. 2) Identify the subject [noun] you want learners to learn. 3) Consider Bloom's taxonomy to identify the level of knowledge you want to learn. Level of learning will influence assessment you choose to measure learning. 4) Use Bloom's taxonomy and select an observable action verb to describe desired behavior at the approriate level. 5) Make learning relevant and valuable to learners.
6) Do not deliver training on subjects learners won't do on the job for a long time.

Distinguish between overall activity learning objectives and module-level objectives.

Differentiate between task objectives and learning activity objectives. For task objectives, think about what learners will accomplish to demonstrate that learning has occurred (the observed state). Example task objective: "Learners will be able to identify instances of gender inequality in videos of meeting interactions."

For learning activity objectives, articulate the knowledge and skills learners should acquire by the end of the learning activity (the intended state). E.g. "Learners will be able to identify opportunities for women empowerment in the workplace."

2.3 ENSURE TECHNOLOGY IS SUSTAINABLE AND FEASIBLE

Follow recommended technical, design and accessibility standards.

Provide alternative solutions to learners with technological/location-related challenges. For example, provide alternative video hosting and viewing sites for access in multiple locations and provide low bandwidth, small learning activity packages for learners with slow internet connections.

Ensure changes to the learning activity can be made with internal resources.

Determine the minimum bandwidth requirement (if applicable).

Determine the characteristics, possibilities and limitations of the learning management system (LMS) to be used and ensure consistency of access across platforms (if applicable).

2.4 MATCH EXPECTED LEARNING OUTCOMES WITH THE APPROPRIATE LEARNING MODALITY

Take the perspectives of the key stakeholders into consideration, such as the client, subject matter experts, learners and reviewers, while designing the learning activity. Based on the learning needs analysis of the target audience, the available resources and the established programme goals and learning objectives, and with the support of the subject matter expert and the learning expert, determine the core content, essential to be included in the learning activity, and what content is supplementary.

Ensure internal consistency and proper flow between tasks, activities and modules. Ensure a gradual increase in complexity.

Consider creating self-learning resources to make key information available to the learners at the point of need.

- Resources should be readily available and easily accessible to staff after the learning activity has concluded.
- Learning activities should familiarize learners with these online resource centres and equip them with strategies to find or recall key concepts learned, enabling learners to draw on learning resources at the point of need.
- Easy-to-understand instructional videos, small guides, factsheets, checklists, job aids, infographics, Q&A, and tips, among others, are some of the different types of online learning resources that can be updated when needed.

Select the appropriate modality for the learning activity. Options of **learning modalities** include:

Depending on **WHERE** the training takes place:

- Online instruction (all learning activities are done online with no required face-to-face activities)
- Blended instruction (a combination of modalities online + face to face, instructor-led+ self-paced)

Depending on the presence/absence of an **INSTRUCTOR**:

- Self-study (using self-learning resources, such as instructional videos, toolkits, checklists, ebooks, etc.)
- Self-study with subject matter expert (self-learning resources supplemented with tutoring, mentoring, coaching by an expert)
- Instructor-led group work (tutor delivering the content to a group of learners)

Depending on **WHEN** the interaction takes place:

- Synchronous with sessions taking place in a virtual classroom at a specific time and participants interacting via chat or videoconferencing in real-time
- Asynchronous with learners and instructor not interacting at the same time (e.g. via email, online forums)

2.5 ESTABLISH MECHANISMS TO ASSESS LEARNING AND IMPACT

Establish key performance indicators (KPIs) to measure success of the learning activity (e.g., participant satisfaction, compliance rates).

Determine how learning objectives will be measured (e.g., via quizzes, scenario-based assessments, group discussions, etc.). Assessments should reflect real-life situations and help learners realize the impact of learning on their performance.

Consider application of well-established evaluation models to analyze and evaluate the results of your training, such as Kirkpatrick's four levels of training evaluation model.

RESOURCES

CHECKLIST

BLOOM'S TAXONOMY

This resource contains lists of measurable verbs and assessment types for each of level in Bloom's Taxonomy.

COURSE

LINKEDIN LEARNING: ADULT LEARNERS, INSTRUCTIONAL DESIGN ESSENTIALS

This course covers the fundamentals of adult learning by discussing theory principles and techniques.

FACT SHEET

SEVEN TOP FACTS ABOUT THE ADULT LEARNING THEORY

This short fact sheet outlines the main principles of adult learning theory.

ARTICLE

NINE TIPS TO APPLY ADULT LEARNING THEORY TO E-LEARNING

This article provides tips on how to apply principles of adult learning to e-learning.

QUICK GUIDE

ADULT LEARNING PRINCIPLES

This quick reference guide covers the fundamentals of adult learning.

COURSE

LINKEDIN LEARNING: ORGANIZATIONAL LEARNING AND DEVELOPMENT

This course covers adult learning theory and methods, outlines the basics of instructional design and explains different kinds of learning programmes.

Phase 3: Development

Based on the outputs from the design phase, the development phase elaborates on the instructional content and activities that will help learners improve their performance.
It involves writing the content and developing activities and assessments that are both accessible for all learners and that integrate cultural diversity and a gender perspective in all areas of online learning programmes.

3.1   Learning Activities
3.2   Accessible Learner Experience
3.3   Promoting Gender Equality and Cultural Diversity
3.4   Using Appropriate Language, Tone & Style

1   2   3   4   5

3.1 Learning Activities

Developing activities that will help learners improve their performance

Consistently follow design guidelines, style sheets and branding guidelines (e.g., font size and type, colour scheme, icon design, graphic design, etc.)

Allow learners to relate personal experiences and to apply their background knowledge and skills to the learning process. For example, use reflection-type activities and open-ended questions. For more information, refer to adult learning theory in the resources section of Phase 2: Design.

Produce content that is relevant and appropriate to achieve learning objectives.

Employ context-relevant scenarios.

Ensure each learning module specifies the learning objective(s) addressed in that module.

Manage learners' expectations and provide clear instructions on how to complete each activity and state its success criteria (if applicable).

Clearly align tasks and assessments to learning objectives, enabling adequate measurement of achievement.

Use graphics, media and interactive tools to enhance the learning experience and engage learners.

Use various strategies to make assessments engaging for learners. Use gamification when opportune (e.g., badges, coins, level-ups, power-ups, avatars).

Ensure the learning activity is reviewed and validated by various stakeholders, such as SMEs and clients, before a final quality assurance review; incorporate any recommended changes before implementation.

Address accessibility in early stages of the development.

Make sure selected authoring tool complies with accessibility standards. Be aware of its limitation and adjust the content, activities or structure, if neccessary.

SOURCES

Use visual as well as written and audio input. For UN multimedia resources, go to their **website**. For information about permissions and copyrights, e-mail **permissions@un.org**.

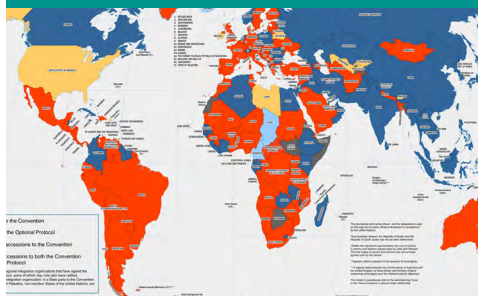Credit all sources used, whether taken from online or printed resources.

Cite source materials using a consistent style (**UN Editorial Manual**).

When using photos or videos of people, have them sign a personal release agreement.

Provide a list of all references used at the end of the learning activity.

RESOURCES

TREATY

CONVENTION ON THE RIGHTS OF PERSONS WITH DISABILITIES (CRPD)

Adopted in 2006 at United Nations Headquarters in New York, the Convention on the Rights of Persons with Disabilities and its Optional Protocol (A/RES/61/106) is an international human rights treaty to protect the rights of persons with disabilities.

UN PROGRAMME

THE UN PROGRAMME ON DISABILITY / SECRETARIAT FOR THE CONVENTION ON THE RIGHTS OF PERSONS WITH DISABILITIES

This UN Programme falls within the Division for Inclusive Social Development (DISD) of the United Nations Department of Economic and Social Affairs (DESA). Their mission is to promote the rights and advancement of persons with disabilities.

STANDARDS

ACCESSIBILITY STANDARDS

The Department of Global Communications has been designated by the General Assembly as the focal point for web accessibility. As such, this website includes guidelines and tools to promote web accessibility in the UN system.
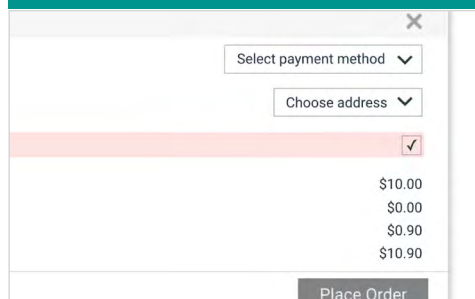
SERVICES

ACCESSIBILITY CENTRE AT UNHQ

The Accessibility Centre at the United Nations Headquarters supports the inclusion and greater participation of persons with disabilities in all the activities of the Organization.

VIDEO

UDACITY
WHAT IS ACCESSIBILITY?

Learn about the concept of accessibility and how it benefits all users. Practical examples are discussed in this 2-minute video to illustrate how accessibility can enhance everyone's experience.

VIDEO
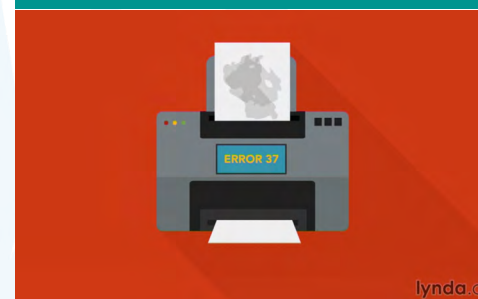
LINKEDIN LEARNING
UX FOUNDATIONS: ACCESSIBILITY

In this LinkedIn Learning video, learn more about the difference between User Experience and Accessibility and the need for a holistic approach when addressing both.

RESOURCES

STANDARDS

WEB CONTENT ACCESSIBILITY GUIDELINES WCAG 2.1

The Web Content Accessibility Guidelines (WCAG) 2.1 provide a single shared standard for web content accessibility.

### TOOL

BROWSER EXTENSION: WAVE

The WAVE Chrome and Firefox extensions evaluate web content for accessibility issues directly within Chrome and Firefox browsers.

TOOLKIT

CBM DIGITAL ACCESSIBILITY TOOLKIT

This digital accessibility toolkit presents tools and recommendations for producing accessible content, as well as tips and resources on how to communicate accessibility requirements.

COURSE

Preview This Course
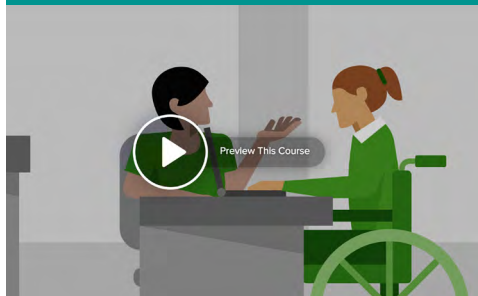
LINKEDIN LEARNING TEACHING TECHNIQUES: MAKING ACCESSIBLE LEARNING

Learn how to use assistive technologies such as screen readers and closed captioning.

GUIDELINES

Learning for All:

Guidelines on the Inclusion of Learners with Disabilities in Open and Distance Learning

UNESCO: LEARNING FOR ALL

Guidelines on the inclusion of learners with disabilities in open and distance learning

COURSE

UNICEF LEARNING ACTIVITY: WEB ACCESSIIBLITY TRAINING

Learn the basics about web accessibility and how to create websites that are more accessible to all users.

User Experience

Designing the best online learning experience for all users

Ensure that the learning activities are hosted in a user-friendly website or learning content management system that has a responsive interface on any device, such as phones, tablets, laptops and desktops and that it has been tested on each before release.

Test the learning activities on various browsers/operating systems before releasing the final version to ensure proper functioning and access to all elements (files, videos, links, etc.). Provide information about the recommended browsers in which to view the learning activities.

Ensure that the interface or "look and feel" of the learning activity is clean and minimalist. This will ensure the content takes the attention of the learner.

Ensure all online learning activities have an offline version available.

Ensure user-friendly access to additional learning resources and make them available at the point of need.

Easy-to-find instructions, FAQs and/or tutorials should be provided to help learners familiarize themselves with the learning platform and the activities (e.g. how to access a webinar, etc.).

Allow learners to save their work, exit and resume the learning activity as needed.

Ensure that the progress of the learning activity can be tracked and bookmarked by learners via its interface.

Ensure that all external links open in a new window without disrupting the flow of the learning process.

User Experience

Provide dialog boxes that confirm when the learners have clicked the "delete" button.
Also provide "Reset"" or "Undo" buttons to reset a form or field.

Provide links to download any plug-in required for the learning activities.

Ensure that alternative file types and smaller file sizes are available for download.
Ensure large files are clearly marked to inform learners about the time it will take to download those files
(e.g. 2018 Report (PDF 30Mb: large version and 4Mb: reduced file size).

Run your own usability testing with a pilot group to find out how learners interact with the learning activities
in order to make improvements that will enhance the user experience.

RESOURCES

PLAYLIST

LINKEDIN LEARNING COLLECTION: LEARN THE FOUNDATIONS OF USER EXPERIENCE

Learn about key concepts and processes in User Experience and how to apply them. Topics include best practices in layout design, responsiveness, accessibility and usability testing.

CHECKLIST

ENSURING USABILITY

This checklist can be used to measure the usability of online activities.

COURSE

LINKEDIN LEARNING UX FOUNDATIONS: USABILITY TESTING

Learn about best practices on how to run a basic usability test. From recruiting the right participants to analyzing results in a meaningful way, learn how to enhance learners' experience.

3.2 Accessible Learner Experience

Designing activities that will help all learners improve their performance

"Full and effective participation and inclusion in society" is one of the guiding principles of the Convention on the Rights of Persons with Disabilities. This section contains accessiblity guidelines for creating online learning activities, as well as tools and additional resources. For more detailed information on this topic, we invite you to become familiar with Accessibility Guidelines for the United Nations.

Universal Design and learning

The foundational principles for the design of accessible eLearning courses are based on Universal Design. The 7 Principles of Universal Design, guide the design of environments, products and communications to make them accessible to all people, regardless of age, disability or other factors. Extending the principles of Universal Design to specific requirements for accessible eLearning courses is facilitated by the Web Content Accessible Guidelines (WCAG) 2.1, Levels A and AA. They have been developed by the Web Accessibility Initiative (WAI) of the World Wide Web Consortium (W3C), the main international standards organization for the Internet. E-learning is a type of web-based content, and therefore, standards outlined in WCAG apply.

Web Content Accessibility Guidelines (WCAG) 2.1 (June 2018)

- Level A (minimum) guidelines cover the most basic web accessibility features. Websites MUST meet these guidelines.

- Level AA (mid-range) guidelines address the most common barriers for disabled users. A website SHOULD meet these requirements which remove significant barriers to accessing web content for a wide range of people with disabilities such as blindness and low vision, deafness and hearing loss, limited movement, and speech disabilities.

This WCAG checklist will help validate compliance with the guidelines.

Many eLearning authoring tool vendors mention Section 508 accessibility compliance. This standard is limited to U.S. federal agencies and is not applicable to UN courseware projects.

Accessibility

This section contains accessibility guidelines for creating online learning activities, as well as tools and additional resources. For more detailed information on this topic, we invite you to become familiar with the UN Accessibility Standards.

COLOUR

Ensure that there is enough contrast when choosing colour combinations by using a **colour checker**.

For low-vision learners, use on-screen text with a contrast ratio of 4.5:1 or higher except for large text, incidental text or logotypes.

Use colour schemes that are colour-blind-friendly. In addition to colours, use ample line spacing should to enhance readability.

Avoid using colour as the only means of conveying information, prompting an action or response, or distinguishing visual elements. Ensure that all information conveyed with colour is also available without colour.
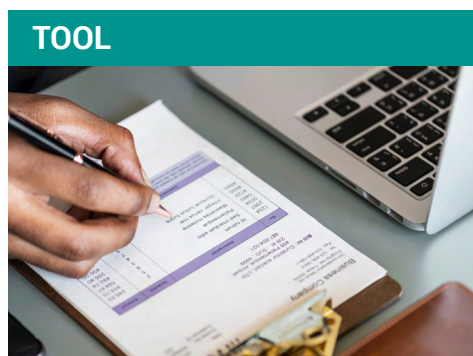
RESOURCES

ARTICLE

UNDERSTANDING WCAG 2 CONTRAST AND COLOUR REQUIREMENTS

This article explains the terms and principles needed to understand WCAG requirements for contrast and colour.
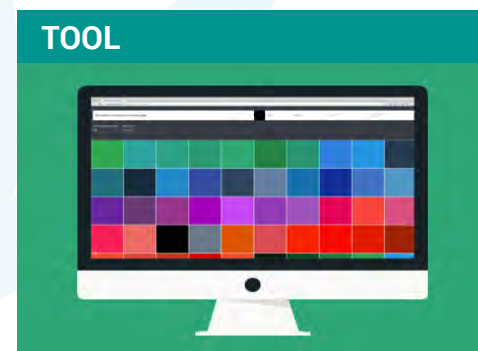
TOOL

WEBAIM COLOUR CONTRAST CHECKER TOOLS

A designer tool for assessing the contrast ratio for foreground and background colour combinations based on WCAG guidelines.

TOOL

COLOURSAFE

A designer tool for generating accessible colour palettes based on WCAG guidelines.

DOCUMENTS

Ensure that the documents you create are accessible and can be read by a screen reader.

Include alternative text for all visual content (pictures, graphics, shapes, charts, embedded objects, videos, etc.)

Use built-in tools such as headings, lists and styles to organize the content following a logical order and to make it easier for screen readers to read your documents (e.g. Heading 1, Heading 2, Heading 3, numbered lists, bulleted lists, etc.)

Use a simple table structure and specify column header information. Avoid tables with split or merged cells, nested tables, or completely blank rows or columns.

Add meaningful hyperlink text to provide accurate information about the destination page (e.g. include the full title of the destination page or a text that can make sense as a standalone information).

Identify document language. If a part of the document is written in a different language, define the language individually.

When exporting from one format to another, ensure that the file is converted correctly. When saving, select "Options" and ensure that "Document structure tags for accessibility" is checked. Do not print to PDF as the file will not be correctly tagged.

Provide access to a downloadable text version of the course as an accessible PDF.
Learn more about creating and verifying an accessible PDF.

RESOURCES

VIDEO TRAINING	TEMPLATES	ARTICLE
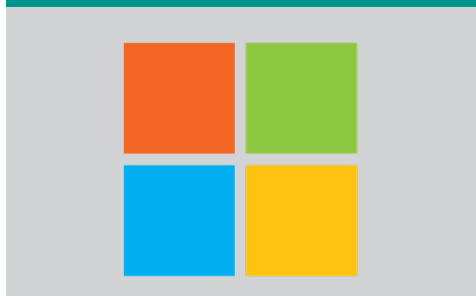
MAKING YOUR CONTENT ACCESSIBLE IN MICROSOFT OFFICE

Learn how to create more accessible Word documents, Excel workbooks and Powerpoint slides.
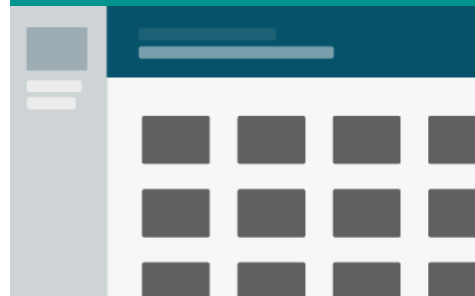
ACCESSIBLE TEMPLATES FOR MICROSOFT OFFICE

Learn how to use the available accessible templates for Office and how to make your own using accessibility guides.

USE THE ACCESSIBILITY CHECKER TO FIND ACCESSIBILITY ISSUES

Learn how to run the Accessibility Checker tool in Office to identify any accessibility issues in your documents.

TEXT

The term "Reading Order" refers to the sequential presentation of content by screen readers. Generally reading order should proceed left to right, top to bottom – header first, then main navigation, then page navigation (if applicable) and finally the footer
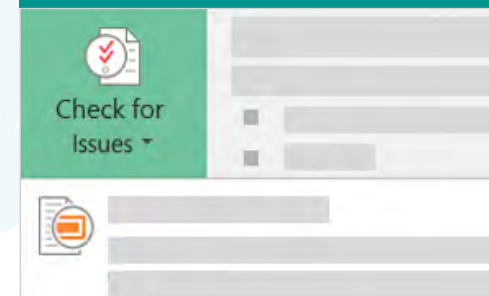
Use a size and type of font that enhances legibility and the reading experience. Limit the number of fonts used.

Ensure that the user can change the font size. Allow text resizing without assistive technology up to 200 percent.

Limit the use of font variations such as bold, italics, and all capital letters. To add emphasis to a sentence or phrase, use exclamation points instead of capital letters. Screen readers can interpret a text with all capital letters as an acronym.

Ensure sufficient contrast between the text and the background to prevent text from blending into the background.

Avoid text that is visible only on a rollover or hover state. Using a button that activates a layer with the information is preferable.

Avoid using small font sizes (e.g. footnotes) and blinking or moving text.

Avoid using font colour, shape, type or font variation to convey meaning.

ALT TEXT

Provide text equivalents, alt-text, for every non-text element onscreen. Alt-text should be blank for decorative images, lines and shapes.

Alt-text should describe the instructional intent of an image rather than the image itself.

When using images to identify controls, status indicators, or other programmatic elements, assign a consistent meaning to those images throughout the course. Apply a consistent use of alt-text for these indicators.

The recommended alt-text length is 125 characters. This accommodates the JAWS screen reader alt-text field. Note: This recommendation is not within the WCAG guidelines.
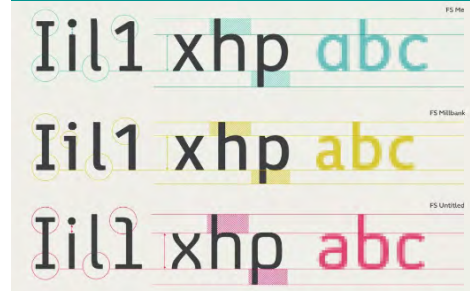
RESOURCES

ARTICLE

WEBAIM: FONT READABILITY

This article uses practical examples to illustrate best practices and present recommendations for choosing fonts that improve readibility.

ARTICLE

HOW TO NAVIGATE WEB TYPOGRAPHY WITHOUT EXCLUDING ANY USERS

This article on CreativeBloq disects they way fonts affect readability of web content.

Use language that is appropriately tailored to the audience.

Use a spell-checker to ensure the grammar and spelling are correct.

Include the full meaning of abbreviations and acronyms the first time you mention them in a text. Use the <abbr> or <acronym> HTML elements to ensure they are identified as such for screen reader users.

Be concise and relevant. Avoid tangential or extraneous information and focus on the content.

Be cautious with colloquialisms, non-literal text or jargon. Provide a glossary with definitions when jargon or less common words are used.

RESOURCES

ARTICLE

GUIDELINES AND TIPS FOR USING PLAIN LANGUAGE

A set of recommendations for communicating more clearly based on a combination of best practices for writing documents and writing for the web.

GUIDE

HOW TO MAKE INFORMATION ACCESSIBLE

A guide for producing easy-to-read documents that has been developed by Change, an organisation led by people with disabilities.

ARTICLE

TEST YOUR DOCUMENT'S READABILITY

Learn how to use the Microsoft Word readability checker to determine the difficulty level of your texts and ensure it matches the target audience and course type.

HYPERLINKS

Ensure that all hyperlinks are functional, clickable and that they open in a new window.

Name hyperlinks according to the content they are linking to. Avoid using "click here" or "more".

When the link is pointing to a file, provide information on the file format and size (e.g. 2018 Report (PDF 450Kb) - PDF, Word doc, audio, video).

SOCIAL MEDIA

Learn about how to improve accessibility in social media as learners with disabilities may find it difficult to interact with popular platforms such as Facebook, Twitter and Youtube. Keep yourself updated on best practices as social media evolves.

RESOURCES

ARTICLE

WEBAIM: LINKS AND HYPERTEXT

Learn about best practices to ensure that links are accessible for both screen readers and keyboard users.

ACCESSIBILITY HUB

SOCIAL MEDIA ACCESSIBILITY

Learn about the most common accessibility issues in Social media and how to avoid them. Queen's University Accessibility provides clear information on them.

ARTICLE

ACCESSIBILITY FEATURES AVAILABLE IN FACEBOOK

Learn about the features and technologies that help people with disabilities to make the most out of Facebook such as how to navigate the news feed when using a screen reader.

MULTIMEDIA

Ensure that media files, such as videos and images, are compatible with all devices, like desktops, laptops, tablets and mobile phones. They should be available in high-resolution and downloadable formats.

Ensure that graphics and visuals are used exclusively to achieve learning objectives and enhance the learning experience. Avoid using decorative graphics for the sake of filling in white space.

Ensure that alternative media is available for input and output processes, such as transcripts, voice recognition, keyboard, touchpad.

Ensure that media is compatible with prevailing standards and formats. Avoid using Flash.

Be careful when you use icons as they need to be easy-to-understand, consistely used and may have different interpretations across cultures.

RESOURCES

ARTICLE	GUIDELINES	VIDEO

WEBAIM: ALTERNATIVE TEXT

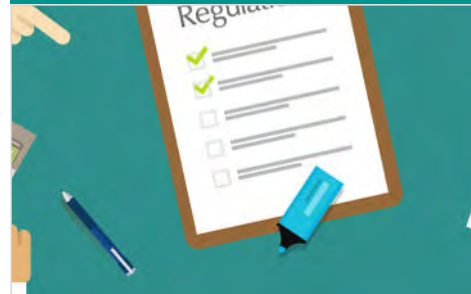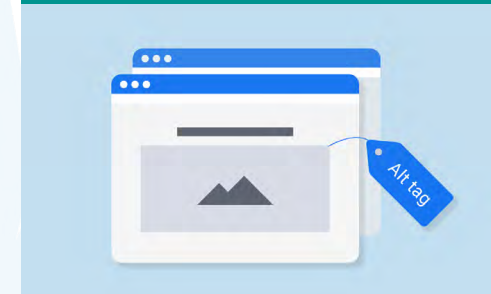Learn how to add alternative text for images and how to write text that represents well the visual equivalent.

DIAGRAM CENTER IMAGE DESCRIPTION GUIDELINES

Learn how to write alternative text for different contexts and formats.

IMPROVE ACCESSIBILITY WITH ALT TEXT

Learn how to easily add alternative text to a picture, shape, chart or SmartArt graphic. This tutorial was created by Microsoft Office.

AUDIO & VIDEO

Provide closed captioning.

Provide a transcript for any audio and/or video-based activity.

Ensure narration is available for all written components (e.g. if a video opens with on-screen text to provide context, that text must be read orally).

If possible, provide audio descriptions of videos to enhance the user experience of learners with visual impairments.

Make Play/Pause/Stop/Rewind and Forward buttons available at all times for the learner to interact with videos. Also provide volume and mute controls.

Avoid playing videos automatically when a page opens as they will overlap with the screen reader.

CAPTIONS

Captions are text versions of the spoken word presented in web audio and video. Although captions are primarily for learners who have hearing issues, they are also helpful for learners who may not be fluent in the language the content is presented in. Web accessibility guidelines recommend captions should be:

**Synchronized** – Text content should appear at approximately the same time as the audio would be heard.

Equivalent – Caption content should be equivalent to the spoken version. Non-speech information that is important for understanding (i.e. meaningful sound effects and speaker identification) should be included.

Accessible – Captions should be readily accessible and available as needed. Closed captions avoid the need for non-impaired learners to watch a word-for-word transcript of what they are listening to and potential cognitive overload.

The difference between captions and subtitles is that subtitles are intended as translations for hearing people while captions are used by those who have little or no hearing.
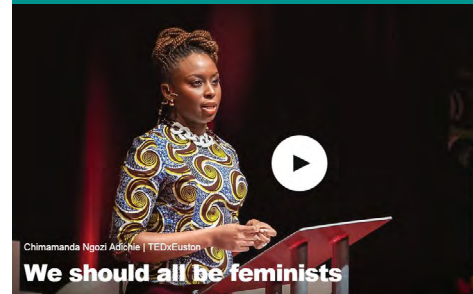
RESOURCES

TOOL
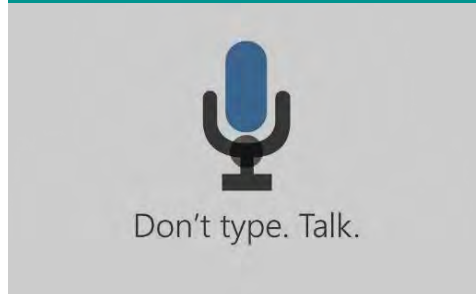
DICTATE WITH YOUR VOICE IN OFFICE

Find out how to use assistive technologies such as screen readers and closed captioning, and encourage learners to seek the learning supports that will help them succeed.

EXAMPLE

We should all be feminists

CHIMAMANDA GOZI´S TED TALK: WE SHOULD ALL BE FEMINISTS

See an example of a video that includes both closed-captions and a transcript.

ARTICLE

YOUTUBE HELP
USE AUTOMATIC CAPTIONING

Learn about how to use Youtube for generating automatic captions and how to review them to ensure they are accurate.

NAVIGATION

Ensure the interface can be navigated without a mouse by using the keyboard. This can be tested by pressing the tab key on your keyboard to see the cursor move through links, form fields and objects. Provide shortcut instructions on the course HELP page: right and left arrows to page forward and back; spacebar to pause/play media playback, activate buttons and respond to quiz questions; arrow keys for drop-down lists and the player menu.

Minimize persistent onscreen navigation. Provide a mechanism to bypass blocks of content that are repeated on multiple Web pages.

Screen readers cannot activate a simple hyperlink. Create a Storyline-generated transparent button over a hyperlink so it can also be accessed via a keyboard and screen reader.

Avoid interactivity that requires a mouse. Drag-and-drop and hotspot interactions are not accessible to mobility-impaired learners. Use a text-based or keyboard-controlled alternative for: matching drop-down interactions; a link that opens a layer with a text-based alternative for a freeform drag-and-drop interaction; a slider alternative for a hotspot interaction. Sliders should respond to keyboard arrow keys.

Useful keyboard shortcuts during eLearning development and QA testing include:

- **Shift + Tab:** This keystroke will reverse the tab order.
- **Press "h"** (Navigate by headings): This keystroke should take the focus to all the headings on the page and also announce their heading level. The purpose is to determine if the reading order is logical and the hierarchy of headings is correct.
- **Press "g"** (Navigate to graphics): This keystroke will read out alt-text of the graphics.
- **Insert + F7**: This keystroke will show a list of all links to help determine if the link names are descriptive.
- **Press "f"**: The keystroke activates the focus to go to the next form field. For example the edit box/button. The label of the field should be read. This can also be checked by creating a list of form fields by pressing Insert + F5.

RESOURCES

VIDEO

**LINKEDIN LEARNING
OVERVIEW OF SCREEN READERS**

Find out how screen readers work. They are one of the most popular software used by people with visual impairments to operate their computer, phone or tablet.
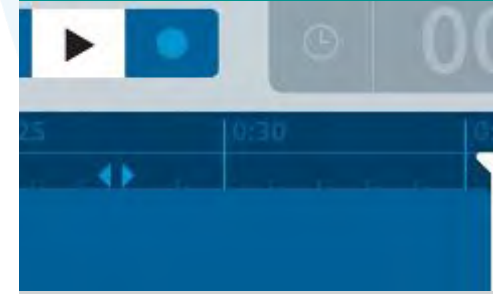
ARTICLE

**DESIGNING FOR SCREEN READERS
COMPATIBILITY**

Learn how to use NVDA to evaluate the accessibility of your website. NVDA is one of the most popular screen readers. It is free to download and available in multiple languages.

VIDEO

SCREEN READER DEMO

Watch a short demonstration of how a visually impaired person uses a screen reader to go navigate a website.

3.3 Promoting Gender Equality and Cultural Diversity

In alignment with both the System-wide Strategy on Gender Parity and the Universal Declaration on Cultural Diversity, this set of standards recommends a series of elements to integrate cultural diversity and gender perspectives in all areas of online learning programmes (administration, course content, evaluation, communications and feedback) and eliminate unconscious bias.

The objective behind mainstreaming gender is to design and implement development projects, programmes and policies that:

1. Do not reinforce existing gender inequalities (Gender Neutral)
2. Attempt to redress existing gender inequalities (Gender Sensitive)
3. Attempt to re-define women and men's gender roles and relations (Gender Positive/Transformative)

The degree of integration of a gender perspective in any given project can be seen as a continuum. Learn more about gender terms via the Glossary (p. 42).

RESOURCES

UNESCO DECLARATION	UN STRATEGY	VIDEO

UNESCO UNIVERSAL DECLARATION ON CULTURAL DIVERSITY
Full text of the 2001 UNESCO declaration on cultural diversity.

UN STRATEGY ON GENDER PARITY
The United for Gender Parity webpage contains several resources on the topic, from current data to learning activities.

WHAT IS UNCONSCIOUS BIAS?
This video discusses different kinds of unconscious bias and their effects.

3.3 Promoting Gender Equality and Cultural Diversity

Promote gender equality and ensure the learning activity demonstrates consideration and respect for cultural diversity.

Produce content that is free of stereotypes and bias based on gender, ethnicity, nationality, culture, religion, age or background.

Include a multi-dimensional representation of gender that challenges gender-based stereotypes, unconscious bias and other formats of sexist representation.

Ensure the content is gender inclusive (including images, texts, audio recordings, videos and instructions).

Ensure the activity reflects a gender-sensitive approach.

Use gender-inclusive language in all products related to the learning activity (brochures, posters, websites, etc.).

Ensure respect and equality throughout the learning activity.

Use gender-inclusive names, gender-neutral themes and a balanced mix of characters, and include characters, people and names from diverse cultural and ethnic backgrounds.

Ensure that course information and content reflect a balanced presence of genders and that they are free of stereotypes and bias.

Ensure that the course registration process encourages participation of all genders.

Integrate a gender-positive and gender-transformative approach.

Incorporate visual material (illustrations, images, videos) that reflect cultural and ethnic diversity.

RESOURCES
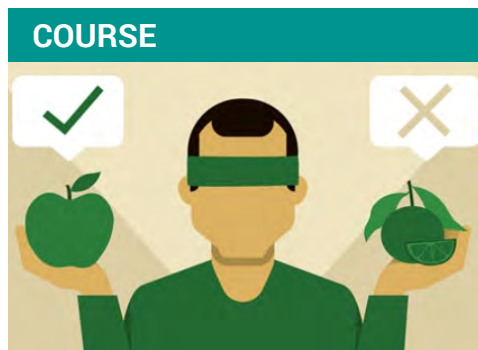
COURSE

LINKEDIN LEARNING: UNCONSCIOUS BIAS

This course covers basic types of unconscious bias and how to identify them when making decisions.

CHECKLIST

UN GENDER CHECKLIST FOR CONTENT CREATION

This checklist was developed by DGC to ensure a balanced and inclusive portrayal of women and men.

GUIDELINES

UN GENDER-INCLUSIVE LANGUAGE

This set of resources are aimed at helping United Nations staff to communicate in a gender-inclusive way in the six official languages of the Organization.

3.4 Using Appropriate Language, Tone & Style

Use an encouraging, friendly and inclusive tone.

Tailor language, tone and style to the target audience.

Ensure consistency in the language, tone and style used throughout.

Ensure accurate use of grammar, vocabulary, punctuation and spelling.

Use simple, clear and concise sentences. Avoid using long sentences.

Ensure content is understandable, especially for staff with lower levels of proficiency in the language, or with limited time to process language.

Adhere to the **United Nations Editorial guidelines**.

Incorporate multilingualism and make training available in as many official languages as possible.

Include a glossary of subject-specific terminology.

Avoid jargon as much as possible. When jargon is used, include it in a glossary and provide definitions using simple language.

RESOURCES

UNITED NATIONS EDITORIAL MANUAL

This online style manual contains guidelines to be followed in drafting, editing and reproducing United Nations documents, publications and other written material.
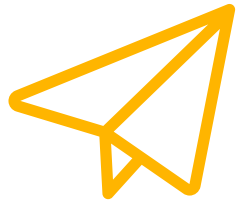
Phase 4: Implementation

In this phase, the learning products and services are delivered to the learners. Its purpose is an efficient and effective learning experience that supports learners' mastery of objectives and promotes the desired change in behaviour and performance. It includes testing all elements, monitoring progress and performance and tracking completion rates.

1 2 3 4 5

4. Implementation

Delivering the learning products to the learners

Conduct a thorough review of all elements of the learning activity and make any necessary adjustments.

Ensure the learning activity is free of errors before launch.

Ensure easy access to registration information and learning activity description.

Advertise the learning opportunity widely (to the target audience).

Collect learner demographics for future reporting and evaluation (e.g. gender and location).

Monitor learner engagement, progress and course completion rates.

Ensure user support.

RESOURCES

QUICK GUIDE

IMPLEMENTATION IN LEARNING

This quick guide outlines the basic steps involved in implementing training.

ARTICLE

7 FACTORS FOR ENSURING A SUCCESSFUL ELEARNING IMPLEMENTATION

This article covers the most important steps involved in e-learning implementation.

ARTICLE

RECOMMENDED PROCESS OF ELEARNING IMPLEMENTATION

The steps outlined by Dr. RK Prasad can prove to be helpful for adopting eLearning.

ESSENTIAL ELEMENTS FOR INSTRUCTOR-LED COURSES

Select instructors that have the necessary expertise and competencies to facilitate the learning activity.

If needed, ensure SMEs are available to answer specialized participant question; determine how they will be available (e.g. via email contact with instructor, by co-leading sessions, etc.).

Ensure the focus is on learning instead of teaching.

Ensure assessments target the right level (neither too hard for the learner to give up nor too easy to make them feel bored).

Collect information on learners' background, characteristics, behaviour and learning needs

Ask learners what they expect to learn from the training and how it could help them in their work.

Provide timely feedback on participant performance throughout the activity.

Ensure facilitators provide guidance and accompany participants throughout the learning process.

Provide specific guidelines to address non-responsive learners.

Provide users with technical support throughout the couse.

EXCELLENT ELEMENTS FOR INSTRUCTOR-LED COURSES

Have a training plan for continuous professional development of trainers.

Ensure that the learning activity incorporates different kinds of feedback, from facilitators, learners and other stakeholders.

Provide individualized feedback that includes analysis of areas of strength as well as areas for improvement, making specific recommendations and suggesting strategies.

Provide adequate guidance related to the instructional approach used to ensure maximum participation.

Build a learning community for the exchange of best practices.

Create a space for learners to share how they intend to apply/have applied the knowledge gained.

Phase 5: Evaluation

This phase measures the efficiency and effectiveness of the learning programme. Its purpose is to ensure that the learning process meets the identified needs, resolves the identified problem and results in improved performance.

It includes quantitative and qualitative methods and different levels of evaluation. Outputs from this phase will be used to improve the learning process in subsequent interations and future programmes.

1   2   3   4   5

5. Evaluation

Measuring the efficiency and effectiveness of the learning programme

Evaluate training sustainability, feasibility and scalability.

Track Key Performance Indicators (KPIs) and conduct evaluation surveys using Kirkpatrick's and other evaluation methods.

Continuously monitor the learning activity and its success.

Collect feedback (via surveys, email communication) from participants who complete the activity as well as from those who don't finish it.

Choose the most appropriate level of evaluation based on programme goals.

- Measure participants' reaction (Kirkpatrick's Level 1).
- Measure participants' learning (Kirkpatrick's Level 2).
- Measure change in participant's behaviour at work after completing the training (Kirkpatrick's Level 3).
- Measure the strategic impact of the learning activity (Kirkpatrick's Level 4).

Develop a plan for learning activity updates and new versions (How often will you conduct updates and release new versions? Who will be responsible for each task involved?)

Develop a plan for updating content and ensuring its availability at the point of need.

Ensure the design, content or methodology is revised as needed.

Incorporate feedback into new versions of the activity.

Manage versions and keep track of updates.

ESSENTIAL ELEMENTS FOR INSTRUCTOR-LED COURSES

Provide opportunities for learners to provide feedback about the activity during and after the learning process.

Incorporate feedback to improve the course while in progress.

Gather feedback from the facilitation team on course design, preparation, administration and delivery.

ESSENTIAL ELEMENTS FOR SELF-PACED COURSES

Provide a mechanism for participants to submit requests and complaints.

RESOURCES

QUICK GUIDE

KIRKPATRICK'S MODEL
This is a quick guide to Kirkpatrick's four levels of learning evaluation.

DIAGRAM

KIRKPATRICK'S FOUR LEVELS OF TRAINING EVALUATION
This detailed grid describes Kirkpatrick's four levels of training evaluation and includes examples.

ARTICLE

7 KPIS TO MEASURE TRAINING EFFECTIVENESS
This article covers how KPIs and learning analytics are tied together.

GLOSSARY

TERM	DEFINITION
Accessibility	Accessibility addresses discriminatory aspects related to equivalent user experience for people with disabilities, including people with age-related impairments. For the web, accessibility means that people with disabilities can perceive, understand, navigate, and interact with websites and tools, and that they can contribute equally without barriers. Source: World Wide Web Consortium (W3C)
Adult Learning Principles	These principles govern how adults learn. There are several schools of thoughts and leaders in this field. However, the common principles are related to autonomy, adult learners like to take charge of their learning, self-direction, learning should empower adults and instill confidence in them, and motivation, adults are intrinsically motivated to learn and achieve.
Alternative input devices	Some users may not be able to use a mouse or keyboard to work on a computer. These people can use various forms of devices, such as: - Head pointers: A stick or object mounted directly on the user's head that can be used to push keys on the keyboard. This device is used by individuals who have no use of their hands. - Motion tracking or eye tracking: This can include devices that watch a target or even the eyes of the user to interpret where the user wants to place the mouse pointer and moves it for the user. - Single switch entry devices: These devices can be used with other alternative input devices or by themselves. They are typically used with on-screen keyboards, which have a cursor moving across keys they can be activated via a switch. This also works on a webpage: the cursor moves through the webpage and if the user wants a to click on a link or button they activate the switch. Source: Berkeley Web Access
Assessment (Formative)	This type of assessment is conducted through the course to reinforce the concepts taught.
Assessment (Summative)	This type of assessment is conducted at the very end to gauge the learning acquired by the learner.
Assistive Technologies	Assistive technology is a generic term that describes tools used by people with disabilities to accomplish tasks. The following technologies help people use computers to access the web: screen readers, screen magnification software, text readers, speech input software, alternative input devices Source: Berkeley Web Access

TERM	DEFINITION
Evaluation (Level 1)	Reaction - how satisfied were participants with the training?
Evaluation (Level 2)	Learning - how much have participants learned? (increase in knowledge, skills, experience)
Evaluation (Level 3)	Behaviour - are participants using what they have learned?
Evaluation (Level 4)	Results - what impact has the training had on the organization?
Gender Neutral	Gender is not considered relevant to development outcome. (Gender norms, roles and relations are not affected (worsened or improved)). Source: Gender Equality Glossary
Gender Sensitive	Gender is a means of reaching set development goals. (Addressing gender norms, roles and access to resources in so far as needed to reach project goals.) Source: Gender Equality Glossary
Gender Positive	Gender is central to achieving positive development outcomes. (Changing gender norms, roles and access to resources a key component of project outcomes.) Source: Gender Equality Glossary
Gender Transformative	Gender is central to promoting gender equality and achieving positive development outcomes. (Transforming unequal gender relations to promote shared power, control of resources, decision-making, and support for women's empowerment.) Source: Gender Equality Glossary
Gender Mainstreaming	The primary objective behind gender mainstreaming is to design and implement development projects, programmes and policies that: do not reinforce existing gender inequalities (Gender Neutral), attempt to redress existing gender inequalities (Gender Sensitive), attempt to re-define women and men's gender roles and relations (Gender Positive/Transformative). Source: Gender Equality Glossary

TERM	DEFINITION
Inclusion	Inclusive design, universal design, and design for all involves designing products, such as websites, to be usable by everyone to the greatest extent possible, without the need for adaptation. Inclusion addresses a broad range of issues including access to and quality of hardware, software, and Internet connectivity, computer literacy and skills, economic situation, education, geographic location; and language — as well as age and disability. Source: World Wide Web Consortium (W3C)
Instructional Designer (ID)	A person who is responsible for designing and developing a course or a training (any modality, such as online, web-based, classroom-based, blended) from start to finish, keeping the learner at the helm at all times.
Key performance indicators (KPIs)	A measurable value that demonstrates how effectively a company is achieving key business objectives
Multiple-Choice Question (MCQ)	This is a type of question that has only one option as the correct answer. It is develped using a radio button, where only a single option can be selected by the learner.
Multiple Multiple -Choice Question (MMCQ)	This is a type of question where only one option can be selected.
Responsive web design	A web design approach aimed at crafting sites to provide an optimal viewing experience across platforms and devices. Source: Usability Gov
Rubrics	It is a set of instructions or rules against which the assignment or activity is graded.
Screen magnifi-cation software	Software that allows users to control the size of text and or graphics on the screen. Unlike using a zoom feature, these applications allow the user to see the text enlarged in relation to the rest of the screen. This is done by emulating a handheld magnifier over the screen. Source: Berkeley Web Access
Screen Reader	Software used by blind or visually impaired people to read the content of the computer screen. Examples include JAWS for Windows, NVDA, or Voiceover for Mac Source: Berkeley Web Access

TERM	DEFINITION
SMART Objectives	These are objectives that must be Specific, Measurable, Achievable, Realistic, and Time sensitive (SMART)
Subject-Matter Expert (SME)	A person who is knowledgeable about a job or set of tasks and can perform to standards. Their experience and knowledge designates them as technical experts. They must know what is critical to the performance of the task and what is nice-to-know. They must have recent job experience, otherwise, their knowledge of the task may have been outdated by new procedures or equipment. Source: Wordnet
Speech input software	Provides people with difficulty in typing with an alternate way to type text and also control the computer. Users can give the system some limited commands to perform mouse actions. Users can tell the system to click a link or a button or use a menu item. Examples would be Dragon Naturally Speaking for Windows or Mac. Please note both Windows and Mac have some speech recognition utilities, but they cannot be used to browse the web. Source: Berkeley Web Access
Text readers	Software used by people with various forms of learning disabilities that affect their ability to read text. This software will read text with a synthesized voice and may have a highlighter to emphasize the word being spoken. These applications do not read things such as menus or types of elements - they only read the text. Source: Berkeley Web Access
Two-Level Feedback	This feedback mechanism should be used for closed-ended questions, such as MCQs, MMCQs, Drag and Drop, Match the Following type questions. In the first attempt, if the learner is incorrect, the learner should be slightly nudged towards the correct answer, reminding them of the concept and prodding them to think again. On the second attempt, whether they are correct or incorrect, the right answer should be stated as a reinforcement strategy. The first feedback acts as cue or a hint to help the learner. It could also come in form of a question.
Usability	The Web Accessibility Initiative, developed by the World Wide Web Consortium (W3C), defines it as follows: Usability and user experience design is about designing products to be effective, efficient, and satisfying. Specifically, ISO defines usability as the "extent to which a product can be used by specified users to achieve specified goals effectively, efficiently and with satisfaction in a specified context of use" (in ISO 9241-11). Source: World Wide Web Consortium (W3C)
Usability Testing	Refers to evaluating a product or service by testing it with representative users. Typically, during a test, participants will try to complete typical tasks while observers watch, listen and takes notes. The goal is to identify any usability problems, collect qualitative and quantitative data and determine the participant's satisfaction with the product. Source: Usability Gov

Online Learning Framework

Guidance for the development of online learning solutions at the United Nations

Contact

Organizational Development Section: **learning@un.org**

Office of Human Resources

United Nations