Online Learning Framework
Promoting shared standards and providing guidance for the development of online learning solutions at the 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. It uses microlearning opportunities such as instructional videos, tutorials, articles and other tools to support its implementation.

Contact

The Organizational Learning, Performance Management and Staff 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.

RECOMMENDED READING

COMPLIANCE AND IMPACT OF MANDATORY TRAINING ACTIVITIES
To enhance the effectiveness and accessibility of current and future mandatory training programmes, this report builds on industry best practices and existing internal UN guidance to identify effective solutions for better long-term impact, compliance and relevance.

DOWNLOAD PDF (2.5 MB)
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. **ANALYSIS**
   - Examining the context of the learning programme and determining its suitability, feasibility and scalability

2. **DESIGN**
   - Designing the instructional strategies, activities and assessments that will achieve the learning objectives

3. **DEVELOPMENT**
   - Developing activities that will help learners improve their performance

4. **IMPLEMENTATION**
   - Delivering the learning products to the learners

5. **EVALUATION**
   - Measuring the efficiency and effectiveness of the learning programme
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 analysis, a needs assessment and goal setting.
1. Analysis

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

ESSENTIAL ELEMENTS

☐ Conduct a training needs assessment (TNA), or a learning needs analysis (LNA), to identify the need, motivation, objectives and scope of the learning activity (or suite of activities).

☐ Determine if training is feasible and scalable.

☐ Based on the analysis conducted, determine whether to move forward with the project.

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

☐ Identify a subject matter expert (SME) to support with content development and learning goals.

☐ Identify a learning expert to support with instructional design, development and implementation.

☐ Analyse the tasks staff members 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.

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

☐ Explicitly link learning objectives to organizational goals, team needs and learning activity’s purpose(s).
RESOURCES

COURSE

LYNDA.COM: NEEDS ANALYSIS, INSTRUCTIONAL DESIGN ESSENTIAL SERIES
This course provides step-by-step instructions on how to conduct several types of needs analyses.

COURSE

LYNDA.COM: 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

ONLINE EDUCATION: 7 KEY TRENDS IN 2018
This article discusses current trends to have in mind in order to develop successful online learning.

COURSE

LYNDA.COM: 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 the design phase, the outputs from the analysis phase 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
2. Design
Designing the instructional strategies, activities and assessments that will achieve the learning objectives

2.1 KEEP IN MIND THE NEEDS OF THE TARGET AUDIENCE

Developers and owners of online learning activities should consider the time commitment required to complete them and the workload of participants, as well as other existing trainings. Learning offerings should be as concise and as relevant as possible.

☐ Use micro-learning opportunities and empower learners to use available resources. Learning activities should not present information in lengthy videos, which are harder to retain and complete. Shorter bits of content enable participants to absorb more information without feeling overwhelmed.

☐ 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 (more details and specific examples can be found in the 2018 mandatory training report).
### 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). E.g. At the end of this learning activity, learners will be able to: differentiate between proximate and root causes of conflict, assess different options for UN engagement in post-conflict areas, justify recommendations based on analyses of recent events.
- 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

- Determine basic computer configuration and minimum Operating System requirements.
- 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.
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
LYNDA.COM: ORGANIZATIONAL LEARNING AND DEVELOPMENT
This course focuses on learning and development programmes and how they help organizations to attract and retain talent. It 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 User Experience & Accessibility
3.3 Promoting Gender Equality and Cultural Diversity
3.4 Using Appropriate Language, Tone & Style
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.
- 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 by various stakeholders, such as SMEs and clients, before a final quality assurance review; incorporate any recommended changes before implementation.
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.

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.
3.2 User Experience & Accessibility

Designing activities that will help 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. To achieve this goal, user experience (UX) and accessibility are key to ensure that all participants benefit similarly from an engaging online learning experience.

User Experience (UX) is the overall experience of a person when using a product, system or service. It comes from the user’s individual perception of different aspects of human-computer interaction, such as appeal, information, content, accessibility, credibility, relevance and ease of use. Through adequate user experience, learners are motivated to engage with the content, take actions and return to the website when needed.

Accessibility is an essential element of UX as its purpose is to ensure that all learners, regardless of their disabilities, are able to navigate, understand and interact with the online content.

The Web Content Accessibility Guidelines WCAG 2.1, developed by the World Wide Web Consortium (W3C), are the reference standards for web content accessibility. According to their four main principles, making online learning accessible means that at all times, content should be **P.O.U.R.**, which is an acronym for:

<table>
<thead>
<tr>
<th>PERCEIVABLE</th>
<th>OPERABLE</th>
<th>UNDERSTANDABLE</th>
<th>ROBUST</th>
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<tbody>
<tr>
<td>Information and user interface components must be presentable to users in ways they can perceive.</td>
<td>User interface and navigation must be operable</td>
<td>Information and the operation of user interface must be understandable.</td>
<td>Content must be robust enough that it can be interpreted reliably by a wide variety of user agents, including assistive technologies.</td>
</tr>
<tr>
<td><strong>EXAMPLES</strong> Providing captions to videos will help learners with hearing disabilities. Providing text descriptions for images will make the content accessible for those with visual disabilities.</td>
<td><strong>EXAMPLES</strong> Using the keyboard or assistive technologies, participants with motor function disabilities can navigate websites.</td>
<td><strong>EXAMPLES</strong> Linking to definitions or a glossary to provide the definition of a word or phrase used in an unusual or restricted way.</td>
<td><strong>EXAMPLES</strong> Modern websites offer opportunities for interacting with the content and display information in a more dynamic way. This higher level of interactivity requires all objects of a website to be appropriately marked up so that screen readers can interpret whether it is currently expanded or collapsed.</td>
</tr>
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CONVENTION ON THE RIGHTS OF PERSONS WITH DISABILITIES (CRPD)


TREATY

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

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

UN PROGRAMME

ACCESSIBILITY STANDARDS

The Department of Public Information 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.

STANDARDS

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.

SERVICES

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

UX FOUNDATIONS: ACCESSIBILITY

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

VIDEO

LYNDA.COM

RESOURCES
WEB CONTENT ACCESSIBILITY GUIDELINES
WCAG 2.1
The Web Content Accessibility Guidelines (WCAG) 2.1 were developed by the World Wide Web Consortium (W3C) in cooperation with individuals and organizations internationally, with the goal of providing a single shared standard for web content accessibility.

SECTION 508
This website addresses several key topics such as how to create accessible products and how to test for accessibility. It also defines accessibility requirements when buying products and services.

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.

LYNDA.COM
TEACHING TECHNIQUES: MAKING ACCESSIBLE LEARNING
Find out about the different types of disabilities and 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.

LYNDA.COM
ACCESSIBILITY FOR WEB DESIGN
Learn practical accessibility techniques and tactical strategies to ensure your web designs can be viewed and used by everyone. Topics include how to incorporate images, sound, and video.

UNICEF LEARNING ACTIVITY: WEB ACCESSIBILITY TRAINING
Available as a Unicef learning activity, with this 30-minute self-paced course you will 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

ESSENTIAL ELEMENTS

- 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

ESSENTIAL ELEMENTS (CONTINUED)

☐ 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 based on this testing that will enhance the user experience.

RESOURCES

PLAYLIST
LYNDA.COM: 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
LYNDA.COM 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.
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.
- 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. For example, avoid statements such as “Press the green button to submit your results.” Instead, use phrasing such as “Press the button labeled [Submit] to share your answers”.

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.
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.

<table>
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<th>RESOURCES</th>
</tr>
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<tr>
<td><strong>VIDEO TRAINING</strong></td>
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<tr>
<td>Learn how to create more accessible Word documents, Excel workbooks and Powerpoint slides.</td>
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<tr>
<td><strong>TEMPLATES</strong></td>
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<tr>
<td>Learn how to use the available accessible templates for Office and how to make your own using accessibility guides.</td>
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<tr>
<td><strong>ARTICLE</strong></td>
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<tr>
<td>Learn how to run the Accessibility Checker tool in Office to identify any accessibility issues in your documents.</td>
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</table>
Use a size and type of font that enhances legibility and the reading experience. Limit the number of fonts used.

Ensure that the text can be enlarged (font size can be increased).

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 may change the voice inflection with exclamation points but they 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 using small font sizes (e.g. footnotes).

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

Avoid blinking or moving text.

**RESOURCES**

**ARTICLE**

WEBAIM: FONT READABILITY

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

**ARTICLE**

HOW TO NAVIGATE WEB TYPOGRAPHY WITHOUT EXCLUDING ANY USERS

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

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.

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.

- Provide “alt text” when graphical elements (photos, infographics, charts, etc.) convey key information. The alternative text explains in simple and concise terms the role and message of the image. Consider adding a descriptive text next to or below the image if you need to provide more information.

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

RESOURCES

ARTICLE
WEBAIM: ALTERNATIVE TEXT
Learn how to add alternative text for images and how to write text that represents well the visual equivalent.

GUIDELINES
DIAGRAM CENTER IMAGE DESCRIPTION GUIDELINES
Learn how to write alternative text for different contexts and formats. These guidelines have been developed in conjunction with the Digital Image And Graphic Resources for Accessible Materials.

VIDEO
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.

RESOURCES

TOOL

DICTATE WITH YOUR VOICE IN OFFICE
Find out about the different types of disabilities and 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

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.

☐ Break content into separate sections to avoid scrolling through a lot of text.

☐ Ensure that navigation mechanisms are repeated on all pages of the website and that they appear in the same relative order each time they are repeated. Label the menus and buttons appropriately. Place the search box in the same spot on each page.

☐ Include “Skip Navigation” and “Back to Top” links as they are commands often used by learners with visual impairment.

☐ Ensure all content can be read by screen readers.

☐ Use semantic HTML code to make it easy for screen readers to understand. Semantic HTML or semantic markup requires using appropriate and correct HTML elements and tagging to identify content and enforce hierarchy. (e.g. headings <h1>, <h2>, button <button>, numbered lists or ordered lists <ol>, bulleted lists or unordered lists <ul>, etc).

☐ Provide alternative activities to replace drag-and-drop ones by using a matching activity with typing the correct number or letter.

RESOURCES

VIDEO

LYNDA.COM
OVERVIEW OF SCREEN READERS
Find out how screen readers work. Screen readers are one of the most popular software used by people with visual impairments to operate their computer, phone or tablet.

ARTICLE

USING NVDA TO EVALUATE WEB ACCESSIBILITY
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. 39).

RESOURCES

UNESCO DECLARATION

UNESCO Universtal Declaration on Cultural Diversity
Full text of the 2001 UNESCO declaration on cultural diversity.

UN STRATEGY

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

VIDEO

WHAT IS UNCONSCIOUS BIAS?
This video discusses different kinds of unconscious bias and their effects.
3.3 Promoting Gender Equality and Cultural Diversity

ESSENTIAL ELEMENTS

- 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**

**LYNDA.COM: 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 DPI 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

**ESSENTIAL ELEMENTS**

- 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.
4. Implementation
Delivering the learning products to the learners

**ESSENTIAL ELEMENTS**

- 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.

**RESOURCES**

**QUICK GUIDE**

**IMPLEMENTATION IN LEARNING**
This quick guide outlines the basic steps involved in implementing training.

**QUICK GUIDE**

**SUCCESSFUL E-LEARNING IMPLEMENTATION**
This quick guide covers the basic steps involved in e-learning implementation.

**QUICK GUIDE**

**TEN STEPS TO SUCCESSFUL LEARNING IMPLEMENTATION**
This quick guide shows 10 steps for successful online learning implementation.
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 questions; 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.

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 iterations and future programmes.
5. Evaluation

Measuring the efficiency and effectiveness of the learning programme

ESSENTIAL ELEMENTS

- 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.
This is a quick guide to Kirkpatrick’s four levels of learning evaluation.

**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.
<table>
<thead>
<tr>
<th>TERM</th>
<th>DEFINITION</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accessibility</td>
<td>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)</td>
<td></td>
</tr>
<tr>
<td>Adult Learning Principles</td>
<td>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.</td>
<td></td>
</tr>
<tr>
<td>Alternative input devices</td>
<td>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</td>
<td></td>
</tr>
<tr>
<td>Assessment (Formative)</td>
<td>This type of assessment is conducted through the course to reinforce the concepts taught.</td>
<td></td>
</tr>
<tr>
<td>Assessment (Summative)</td>
<td>This type of assessment is conducted at the very end to gauge the learning acquired by the learner.</td>
<td></td>
</tr>
<tr>
<td>Assistive Technologies</td>
<td>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</td>
<td></td>
</tr>
<tr>
<td>TERM</td>
<td>DEFINITION</td>
<td></td>
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<td>-----------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td><strong>Evaluation (Level 1)</strong></td>
<td>Reaction - how satisfied were participants with the training?</td>
<td></td>
</tr>
<tr>
<td><strong>Evaluation (Level 2)</strong></td>
<td>Learning - how much have participants learned? (increase in knowledge, skills, experience)</td>
<td></td>
</tr>
<tr>
<td><strong>Evaluation (Level 3)</strong></td>
<td>Behaviour - are participants using what they have learned?</td>
<td></td>
</tr>
<tr>
<td><strong>Evaluation (Level 4)</strong></td>
<td>Results - what impact has the training had on the organization?</td>
<td></td>
</tr>
</tbody>
</table>
| **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 |
<table>
<thead>
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| 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 developed 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 magnification 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        |
<table>
<thead>
<tr>
<th>TERM</th>
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<tr>
<td>SMART Objectives</td>
<td>These are objectives that must be Specific, Measurable, Achievable, Realistic, and Time sensitive (SMART)</td>
</tr>
<tr>
<td>Subject-Matter Expert (SME)</td>
<td>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</td>
</tr>
<tr>
<td>Speech input software</td>
<td>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</td>
</tr>
<tr>
<td>Text readers</td>
<td>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</td>
</tr>
<tr>
<td>Two-Level Feedback</td>
<td>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.</td>
</tr>
<tr>
<td>Usability</td>
<td>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)</td>
</tr>
<tr>
<td>Usability Testing</td>
<td>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</td>
</tr>
</tbody>
</table>
Online Learning Framework
Promoting shared standards and providing guidance for the development of online learning solutions at the United Nations

Contact
Organizational Learning, Performance Management and Staff Development Section: learning@un.org
Office of Human Resources
United Nations