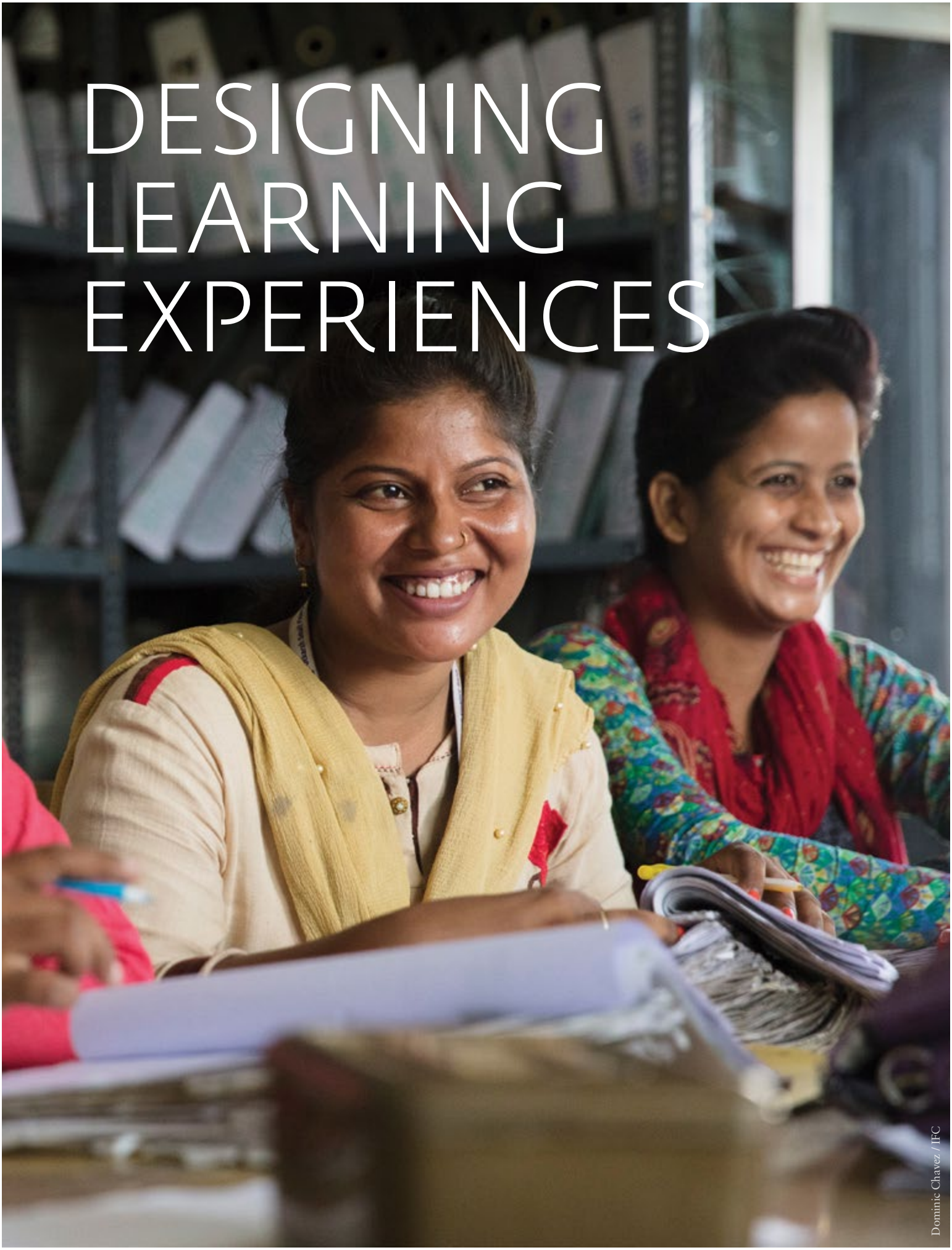
DESIGNING LEARNING EXPERIENCES



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INTRODUCTION

Designing Learning Experiences can range from creating a 15-minute self-paced e-learning tutorial on using a new software application to setting up a social platform for employees to learn from each other or creating instructor-led training delivered in a classroom or even in a field. Content can range from highly technical skills to skills like project management or sales, "softer" skills like communication, and "basic" skills like financial literacy.

Designing Learning Experiences is also referred to as "instructional design," "training design and development," or "course development." Traditionally, people who design learning experiences have been referred to as "instructional designers" or business learning specialists.

Competent design of learning experiences increases the likelihood that you:

- Align learning objectives with desired performance outcomes and business measures.
- Include "need to know" content instead of "nice to know."
- Present content clearly and concisely.
- Provide frequent and effective practice opportunities.
- Create materials that support learning.
- Create tools and methods to measure the participants' new skills and knowledge.
- Create tools and methods to measure how much learning participants use in the "real world."
- Design learning experiences that enable your facilitators and participants to succeed.
- Prepare for delivery.

When *Designing Learning Experiences* for emerging markets, culture, economics, safety concerns, personal circumstances, educational levels, and household obligations add to the challenge of this task. When you address these challenges directly, there is greater likelihood of producing a pragmatic course from which participants can learn efficiently and effectively. As you prepare to design, ask yourself the following questions:

- How can you minimize delivery costs?
- What approaches or support may work best for participants with lower literacy or education levels?
- How should facilitators handle contentious topics to ensure the content and delivery are compatible with cultural norms?
- What activities can you incorporate or adapt to reinforce the participants' persistence, self-esteem, and confidence?
- How should you organize the program schedule and logistics to accommodate household obligations and caregiving responsibilities?
- What extra security precautions do facilitators need to provide to ensure participants' safety?

Designing Learning Experiences starts with a clear understanding of the business measures and desired performance outcomes. The needs assessment provides this information. All content and activities in the learning experience should align directly with achieving these outcomes and measures.

If you cannot confirm that a learning solution will help close identified performance gaps, you are obliged as a training professional to advise the client that an investment in a learning solution might not pay off.

Because the desired performance outcomes should influence the design, you need an understanding of the competencies for Assessing Performance Needs in order to be an effective instructional designer. Because the design of classroom and virtual classroom learning experiences will be delivered by facilitators, you should also have an understanding of the competencies for Facilitating Learning.

The outputs for the *Designing Learning Experiences* competency are the instructional materials for learning experiences. This can include facilitator guides, participant guides, presentation slides,

reference material, job aids, e-learning, self-study materials, tools, posters, or other learning material. The Design Document, which is the output from the *Designing Curricula* competency, provides the outline. In this competency the instructional designer provides the specific details to turn the outline into a tangible and usable product.

Many organizations, including IFC, require detailed outlines for both online and instructor-led learning experiences to identify the learning objectives, topics, content selection and sequencing, suggested instructional approach, learning activities, resources, and time estimates for each topic.

In this competency category, we use the word "storyboard"' in an e-learning context to represent the document that presents all the learning content in sequence, including mock-ups of each screen, narration, instructions for visuals, and programming instructions that tell developers how to program all buttons on the screen and respond to any input participants might enter.

We have listed the design competencies in a linear order, but effective learning experiences are most often the result of an iterative process involving successive prototypes that approximate the ultimate solution. This process includes iterative design (design analysis, learning objectives, and detailed design) and iterative development (development and validation of materials and support for implementation).

For additional information on *Designing Learning Experiences* when conducting training in fragile and conflict-affected situations and gender-inclusive training, please refer to the FCS and gender supplements at the end of this guide.

DESIGNING LEARNING EXPERIENCES

COMPETENCIES AND SUPPORTING COMPETENCIES | This section contains information about the importance of mastering the competencies, tasks for each supporting competency, key outputs, and assessment criteria.

1. Conduct design analysis

Importance

The impact of mastering these competencies is that you:

- Create learning solutions that address performance gaps.
- Design the learning based on desired performance outcomes.
- Design a learning experience suited to the participants and their work and regional environment.
- Have a realistic, manageable plan for the development of the learning experience.

Supporting competencies and tasks

These tasks contribute to mastery of the supporting competencies (in bold). Put a check mark next to each task or subtask within the supporting competency as you complete it:

1a	**Confirm that the learning solution will address the identified performance gap(s)**
☐	Align content with identified performance gaps
☐	Review job, competency, or goal analysis, if available, to clarify desired performance
☐	Confirm that learning and related transfer activities address performance gap(s)
☐	Confirm priority competencies or tasks required to close performance gaps
☐	Confirm whether the program is mandatory for all participants
☐	Confirm and dentify the target audience for the program

1b	**Determine context requirements for learning solutions**
☐	Gather information about participants (for example, their perspective, education, technological literacy)
☐	Identify design constraints (for example, scheduling, location of participants, components of corporate culture, brand standards, style guidelines, cost, equipment)
☐	Identify accessibility requirements (for example, accessibility for e-learning, classroom, websites, job aids)
☐	Identify technical constraints (for example, preferred software or authoring tools, network limitations)
☐	Consider how current and future availability of technology might affect the design (for example, reporting and tracking capabilities, social media)
☐	Advise how technology and tools can support the learning experience (see *Designing Curricula 2e*)

1c Research subject matter

- Identify potential sources of subject matter expertise (for example, subject matter experts, job documentation, learning materials, books, websites, social media, research reports)
- Review existing job-related subject matter resources and learning materials
- Interview subject matter experts to gather initial information

1d Conduct task analysis

- Work with subject matter experts to:
  - Determine whether each task is a procedure, process, set of principles, or a combination
  - Break tasks into component parts
  - Identify relationships among tasks and sub-tasks
  - Identify all skills and knowledge required for successfully mastering the task
- Present results of task analysis in a way that is easy to understand
- Validate task analysis for accuracy and completeness

1e Plan for designing and developing learning solutions

- Define project deliverables (for example, pre-work, case handouts, job aids, participant workbook)
- Determine roles and responsibilities, time, budget, software, and other technology required to design and develop the learning experience
- Develop an efficient and effective project plan for designing and developing the learning experience
- Prepare a preliminary plan for validating and maintaining the learning experience
- Update plans as information and requirements evolve during the design and development process

Key outputs and assessment criteria

Mastering these competencies typically involves the following outputs. The assessment criteria indicate what would make the output appear to be high in quality.

KEY OUTPUTS	ASSESSMENT CRITERIA
Desired performance outcome(s) and performance gap(s)	Analysis acknowledges any assessment of performance needs already conducted
	Gap between current and desired performance outcomes is clear
	Gap is stated in terms of specific performance outcomes
	Analysis confirms that the learning solution and related transfer activities address performance gap(s)
Context requirements for learning	Context requirements are documented, feasible, accurate
	Context requirements include relevant information about the participant, design constraints, and technical constraints
	Impact of context requirements on design is identified
Task analysis	Task analysis is documented and comprehensive
	Task analysis is based on first-hand knowledge of job responsibilities
	Task analysis identifies sub-tasks, skills, and knowledge required to achieve desired performance outcomes
	Task analysis uses active and appropriate verbs
Plan for design and development of learning	Plan includes specifications for deliverables, roles and responsibilities, costs, timing, and software and technology requirements
	Plan identifies detailed review and approval process and responsibilities
	Plan includes initial plans for pilot, translation, printing and distribution, web hosting, and maintenance
	Plan is documented and communicated

2. Establish learning objectives and evaluation

Importance

The impact of mastering these competencies is that you:

- Closely align learning objectives with desired performance outcomes.
- Sequence learning in a way that makes sense.
- Design evaluation of learning objectives before designing the instruction.

Supporting competencies and tasks

These tasks contribute to mastery of the supporting competencies (in bold). Put a check mark next to each task or subtask within the supporting competency as you complete it:

2a Write learning objectives

See *Designing Curricula 3a*

2b Design evaluation of learning objectives

- ☐ Identify appropriate level of evaluation for each learning objective (for example, recall, comprehension, application, analysis, synthesis, evaluation, creation)
- ☐ Identify appropriate type of evaluation for each learning objective (for example, test questions for comprehension, observation of practice or role play for application)
- ☐ Determine how technology can support evaluation of learning (for example, online testing, performance tracking, automated reporting)
- ☐ Determine procedures for administering the evaluation
  - If using high-tech methods, identify costs for purchasing evaluation equipment and data collection services (for example, data usage on cellphones)

2c Develop materials to evaluate learning objectives

- ☐ Prepare assessment forms, checklists, and scoring guidelines to evaluate tasks and skills (for example, checklists for observation of practice or role play for application, case study for analysis)
- ☐ Write test questions and scoring guidelines to evaluate knowledge
  - Determine the number of questions needed to evaluate each learning objective
  - Draft test questions with one definitive correct response and plausible incorrect responses
- ☐ Test online evaluations to confirm that they are usable and accurately track and report data

Key outputs and assessment criteria

Mastering these competencies typically involves the following outputs. The assessment criteria indicate what would make the output appear to be high in quality.

KEY OUTPUTS	ASSESSMENT CRITERIA
Learning objectives	Learning objectives are documented and validated
	Learning objectives for each lesson or task align with the goals for the learning experience
	Appropriate level of learning (for example, recall, comprehension, application, analysis, synthesis, evaluation) is clear for each learning objective
	Learning objectives include observable outcome, condition, and standard for each objective at an application, analysis, evaluation or creation level
	Learning objectives are sequenced for ease of learning
	Learning objectives are aligned with desired performance outcomes
Design for evaluation of learning objectives	Evaluation method is appropriate to level of learning objectives
	Evaluation method provides an observable, measurable outcome for each learning objective
	Evaluation method indicates the conditions under which the assessment occurs
	Evaluation method identifies assessment and administration procedures (for example, scoring, opportunity to retest or re-examine)
	Evaluation method is consistent with context requirements for learning experience
Materials to evaluate learning objectives	Materials to evaluate learning are appropriate to level of learning objectives
	Materials to evaluate learning enable observation of achievement of learning objectives

3. Create detailed design

Importance

The impact of mastering these competencies is that you:

- Select the delivery channel(s) that best support the learning objectives.
- Design learning activities that engage participants and support the achievement of learning objectives.
- Receive approval on the overall design before spending time on developing materials.
- Receive feedback while changes are relatively easy to make.
- Identify potential technology issues.

Supporting competencies and tasks

These tasks contribute to mastery of the supporting competencies (in bold). Put a check mark next to each task or subtask within the supporting competency as you complete it:

3a Prototype designs to get input from stakeholders

See *Designing Curricula 4a*

3b Determine delivery channel(s)

See *Designing Curricula 3c*

3c Create detailed outline for learning experience

- ☐ Determine whether to use existing learning materials, in part or whole, to achieve learning objectives
- ☐ Determine a general strategy for teaching content (for example, demonstration, discovery learning)
- ☐ Co-design learning experience with client, as appropriate
- ☐ Create learning activities to provide key knowledge and skill (for example, demonstration, application activity)
- ☐ Arrange for extra security precautions for facilitators and participants to take prior to program delivery
- ☐ Embed flexibility in the learning experience design
- ☐ Incorporate confidence-building activities and activities to reinforce participants' self-esteem and persistence
- ☐ Incorporate leadership-building activities
- ☐ Find ways to recognize participants' achievements
- ☐ Replace standard measurement descriptions with daily objects of representative size for low-literacy audiences (for example, "two fist-widths apart" instead of "six inches or 15 centimeters apart")
- ☐ Keep examples and activities within the scope of the participants' ability to imagine
- ☐ Plan to include women role models as guest speakers
- ☐ Estimate length of time for units and learning activities
- ☐ Negotiate additional requirements to support learning activities with client(s), sponsor(s) or both
- ☐ Determine requirements for audiovisual materials
- ☐ Confirm that the learning experience meets accessibility requirements

3d Design support for the transfer of learning and sustained performance

- Design any pre-program supports:
  - Identify remedial training or assistance if education levels need bolstering
  - Design optional pre-program courses to bring participants' baseline skills up to acceptable levels for the program
- Design initiatives to support transfer of learning:
  - Create opportunities for participants to practice applying new knowledge and skills
  - Create reminder notices to reinforce key learning points
  - Create notices with tips for improving efficiency or customizing skills for specific situations
  - Create opportunities for participants to receive feedback or assistance on application of new skills
  - Incorporate coaching and mentoring follow-up into the program design as feasible
- Incorporate social networks and peer-to-peer learning
  - Provide facilitation plans in peer-to-peer learning
- Leverage technology to support transfer of learning (for example, automated reminders, performance tracking, performance support, social media use)
- Estimate timing and work effort to support transfer of learning
  - Develop an economically feasible approach to post-program support
  - Develop a plan to support providers with business continuity
  - Identify the costs for providing post-program support
  - Determine who pays the costs of providing post-program support
- Design or advise the design of performance support systems and materials (for example, repositories for videos and job aids)
- Design or advise the design of social media to support transfer of learning (for example, blogs, wikis, discussion forums)
- Design or advise the design of incentives to support transfer of learning (for example, badges, leader boards, bonuses)

3e Prototype learning materials

- Incorporate design requirements (for example, corporate branding, templates, guidelines)
  - For low-literacy audiences, use videos more than text-based methodologies and incorporate more graphics than text into participant materials
- Produce prototypes of learning materials (for example, participant workbook, facilitator guide, slides)
- Produce prototypes of workbook page types (for example, content, instructions, reflection notes)
- Test technology and other logistics
- Confirm that learning materials meet accessibility requirements

3f Prototype digital interface

- Produce prototypes of interface design, including titles, menus, and all navigation elements
- Produce prototypes of screen types (for example, text and graphic, multiple choice, drag and drop)
- Test technology and other logistics
- Confirm that the interface meets accessibility requirements

3g Conduct design walkthrough

- Conduct walkthrough of detailed outline for the learning experience and prototypes with key stakeholders
- Secure approval of detailed outline for the learning experience and prototypes

Key outputs and assessment criteria

Mastering these competencies typically involves the following outputs. The assessment criteria indicate what would make the output appear to be high in quality.

KEY OUTPUTS	ASSESSMENT CRITERIA
Detailed outline for learning experience	Document includes organization need, performance gaps, desired performance outcomes, delivery channel(s), learning objectives, learning strategy, and content and learning activities with estimated duration
	Design supports the learning strategy and achievement and evaluation of learning objectives and is consistent with regional or cultural norms
	Design includes learning activities that engage participants in culturally appropriate ways
	Delivery channel(s) meet(s) criteria identified
	All design choices are based on performance outcomes, learning objectives, resources available, and accepted best practices in performance and learning
Design for supporting the transfer of learning	Design includes realistic activities and tools to support the transfer of learning to the workplace, based on the desired performance outcomes and availability of support in the region
	Design includes estimated time and work effort required for participants and coaches/mentors
	Design uses available technology appropriately
Prototype of digital interface	Prototype includes titles, menus, and navigation elements
	Prototype provides samples and templates of expected page types
	Prototype complies with corporate branding, templates, and guidelines
	Production quality is appropriate to budget
	Technology and other logistics work; back-up strategies are provided in case of failure

4. Develop materials

Importance

The impact of mastering these competencies is that you:

- Develop learning materials that enhance the effectiveness of the learning experience and support learning objectives.
- Support consistent delivery across multiple facilitators.
- Support transfer of learning to the workplace.

Supporting competencies and tasks

These tasks contribute to mastery of the supporting competencies (in bold). Put a check mark next to each task or subtask within the supporting competency as you complete it:

4a	**Write or compile content for participant and instructor materials**
☐	Follow instructional writing principles and organization guidelines
☐	Work within existing templates
☐	Write job aids and other participant materials
☐	Write text for slides, videos, and websites
☐	Write case studies and role plays
☐	Write scripts for audio and video
☐	Write facilitator guides
☐	Develop content with language, examples, and images aligned with social and cultural norms

4b	**Develop layout and visuals for participant and instructor materials**
☐	Develop or advise on visuals that are culturally appropriate to communicate content (for example, pie charts, histograms, photography or illustrations, flow charts)
☐	Develop layouts based on type of content (for example, concept, procedure, principles)
☐	Follow visual design principles
☐	Source graphics from within or outside the organization
☐	Comply with corporate branding templates and style guidelines
☐	Comply with copyright requirements

4c	**Develop storyboards**
☐	Capture all information, including text, images, interactivity, answer prompts, and activities
☐	Capture all programming and production instructions
☐	Comply with privacy, information security, and copyright requirements

4d Manage review and revision cycles with stakeholders, including subject matter experts

- Develop templates to facilitate input from subject matter experts
- Prepare for meetings with stakeholders and subject matter experts
- Compile input and facilitate reviews with multiple stakeholders and subject matter experts
- Review training content and design for contentious issues
- Check that learning experience complies with program guidelines regarding topics or images to avoid
- Get a legal review of course material, if necessary, to confirm it does not violate local laws or put the sponsoring organization in legal liability
- Support the resolution of differences in information and opinions
- Get signed approval for course from subject matter expert or designated client approver

4e Produce web-based learning

- Produce or manage production of audio recording
- Produce or manage production of video
- Produce or manage production of online programs
- Produce or manage production of websites, apps, and other digital content or tools
- Prototype materials for input and approval prior to full production
- Manage production in multiple languages
- Curate external materials for learning (for example, videos, blogs, online courses)
- Designing digitally-based learning experiences that are appropriate for participants 

4f Develop materials to support the transfer of learning and sustained performance

- Develop performance support tools (for example, job aids, automated reminders)
- Develop guidance and tracking (for example, self-assessments, learning progression maps)
- Develop coaching materials for managers and other coaches to support participants (for example, observation checklists, validation cases, roleplays)

4g Develop materials to evaluate participants' reaction

- Use available technology to support evaluation of participants' reaction to the learning experience
- Develop materials to assess reaction (for example, feedback forms, online surveys)

4h Develop materials to evaluate the transfer of learning

- Determine the feasibility of using technology to support evaluation of transfer of learning, including who will pay the costs for purchasing evaluation equipment and data collection services, such as data usage on cell phones
- Develop materials to assess transfer of learning (for example, observation checklists)

4i Validate learning design and materials

See *Designing Curricula 3c* and the following

- Conduct validation and make agreed-upon changes
- Obtain final approval of design and materials

Key outputs and assessment criteria

Mastering these competencies typically involves the following outputs. The assessment criteria indicate what would make the output appear to be high in quality.

KEY OUTPUTS	ASSESSMENT CRITERIA
Participant materials	Participant materials conform to plan for designing and developing learning experience
	Participant materials support learning objectives
	Participant materials follow graphic design and instructional writing principles
	Participant materials are appropriate to the participant's work and regional environment
	Participant materials are accessible
Facilitator materials	Facilitator materials conform to plan for designing and developing learning experience
	Facilitator materials indicate how to support achievement of learning objectives
	Facilitator materials include how to evaluate learning objectives
	Facilitator materials follow graphic design and instructional writing principles
	Facilitator materials provide enough guidance so others who did not design the program can read the material and deliver the course in a consistent manner
	Facilitator materials are organized logically
Storyboards	Storyboards support achievement and evaluation of learning objectives
	Storyboards include all content, text, images, activities, and interactivity
	Storyboards include programming and production instructions
Management of revision and review cycles	Review cycles are planned and realistic
	Subject matter experts and stakeholders feel respected and included
	Signed approval is obtained at key stages of the design and development process
Web-based learning (for example, apps, videos, e-learning)	Learning experience conforms to detailed outline
	Learning materials follow graphic design and instructional writing principles
	Learning experience and materials are accessible
	Learning experience is written at the appropriate reading level

KEY OUTPUTS	ASSESSMENT CRITERIA
Materials to support transfer of learning	Materials support transfer of learning
	Materials clearly identify roles and responsibilities of participant and others (for example, coaches, mentors, supervisors, and peers)
	Materials can be used in the workplace without assistance
Materials to evaluate participant reaction	Evaluation is clear and easy to complete
	Evaluation captures relevant data (for example, confidence in applying new skills on the job, effectiveness of instructional methods and materials)
	Evaluation uses available technology to simplify data collection and reporting
Materials to evaluate transfer of learning	Evaluation is clear and easy to complete
	Evaluation captures relevant data (for example, uptake of new skills, proficiency in applying new skills, and barriers to transfer of learning to the workplace)
	Evaluation uses available technology to simplify data collection and reporting

5. Support implementation

Importance

The impact of mastering these competencies is that you:

- Support internal or external marketing of the learning experience.
- Confirm that materials are in place for the learning experience.
- Help facilitators and administrators prepare for the learning experience.
- Help facilitators and coaches prepare to support transfer of learning to the workplace.
- Establish a realistic and manageable plan for keeping the learning experience up to date.

Supporting competencies and tasks

These tasks contribute to mastery of the supporting competencies (in bold). Put a check mark next to each task or subtask within the supporting competency as you complete it:

5a Manage publication and distribution of materials

- ☐ Monitor completion of translation, publication, distribution or uploading, and storage of all materials
- ☐ Confirm that final materials meet quality requirements

5b Prepare for implementation

- ☐ Implement or update learning management system with program information and materials
- ☐ Write a clear, concise course or program description for communications purposes
  - Use appropriate channels and language to raise awareness about the program
- ☐ Create database to track scheduling requirements
  - Secure resources to provide and track administrative requests and technical support, as required
- ☐ Identify program locations and times that are safe, convenient, and easy to access for all participants and facilitators
- ☐ Select learning environment (on-site or virtual) that accommodates participants with disabilities
- ☐ Determine emergency updates to convey to facilitators and participants on a regular basis
- ☐ Secure resources to provide production assistance for classroom-based or live online learning experiences
  - Identify sufficient, qualified and appropriate facilitators
  - Decide on the appropriate gender of the facilitator and provide gender awareness training if needed
  - Schedule any guest speakers (for example, project sponsor or role models)
- ☐ Provide food and drinks to participants, if appropriate and acceptable to client
- ☐ Arrange for class technology (for example, computers, projectors, easels, chart paper, markers)
  - Confirm that any equipment and other resources required are available and functioning
  - Keep necessary equipment to mitigate the effects of natural environmental challenges (for example, floods, heat, cold) and identify alternative training delivery sources, in case of disruption
  - Prepare materials to orient participants to any required technology
  - Print materials for class sessions, as needed

- Select participants for sessions
- Schedule facilitators for class sessions
- Schedule participants in class sessions
- Advise participants, their supervisors, and coaches of prerequisites and requirements for pre-work and learning
- Provide access to facilitators and participants for online material or sites

5c Prepare support for transfer of learning and sustained performance

- Secure people resources to provide support for transfer of learning
  - Plan for coaching and/or mentoring
  - Plan to include women role models
  - Include social networks and peer learning
- Secure technology required to support transfer of learning (for example, online performance tracking tools, social media platforms)
- Prepare people resources to support activities for transfer of learning
- Follow up on transfer activities

5d Plan for maintenance

- Determine requirements for maintenance of the design and learning materials
- Determine guidelines for deciding whether to make revisions (for example, number of calls for technical support, significant changes to desired performance outcomes)
- Develop plan and budget for maintenance

Key outputs and assessment criteria

Mastering these competencies typically involves the following outputs. The assessment criteria indicate what would make the output appear to be high in quality.

KEY OUTPUTS	ASSESSMENT CRITERIA
Train the trainer/ facilitator session	Facilitators can explain how the design supports learning objectives, desired performance outcomes, and business measures
	Facilitators can demonstrate that they are prepared to deliver learning experience
	Facilitators refer to safety and gender-inclusive guidelines, as required
Administrative and technical support	Administrative and technical support includes plans for tracking questions, comments, and issues and implementing changes, based on feedback
	Administrative and technical support staff can explain their role in supporting the achievement of desired performance outcomes
	Administrative and technical support can answer anticipated questions about the content or technology
	Facilitators and participants have access to any needed online materials or sites
Briefing for coaches and mentors	Coaches and mentors can explain their role in supporting transfer of learning
	Coaches and mentors can explain the participant's role in supporting transfer of learning
	Coaches and mentors state that they are prepared to support transfer of learning
Maintenance plan	Maintenance plan includes roles and responsibilities, process for assessing and handling major revisions and minor modifications, frequency of maintenance cycles, turnaround for changes and corrections, and budget requirements
	Maintenance plan validated with appropriate stakeholders and sponsor