

DESIGNING CURRICULA



INTRODUCTION

Designing Curricula refers to the design of frameworks for interrelated learning experiences, activities, and material intended to build competence for participants over an extended period. Learning experiences might happen face-to-face, online, or a blend of both. An effective curriculum is more than a collection of learning experiences. It may include other experiences, such as structured observation and practice, internships and job rotations, or informational materials, such as guidebooks and job aids.

Designing a curriculum is important when:

- People need to learn a body of knowledge or gain a comprehensive set of skills or competencies.
- The policies, processes, or systems of an industry, organization, or line of work change substantially (for example, the digitization of an industry).
- A number of individuals or cohorts are hired for a role.
- An existing role is changing significantly or new products and services are being launched.
- The learning path to progress from one career or job level to the next, or to maintain currency in a profession, needs to be defined.

The curriculum makes the high-level training strategy more concrete and tactical and acts as a visual roadmap to progress through the learning. The roadmap shows linkages among the curriculum's various components, from business measures and program goals to performance and other outcomes, learning objectives, related learning activities, and evaluation.

Business measures help determine whether the learning has helped the organization close its operational gaps. Performance objectives address the specific behaviors participants need to adapt in the “real world.” Ideally, if participants adapt the new behaviors, it should have the combined effect of closing business gaps. Program goals address broader issues of personal and professional development that can be harder to describe in observable

and measurable terms, for example, “develop a professional identity” or “become a champion for the product line.” Program participants achieve these goals as they go through the curriculum. Performance outcomes differ from learning objectives, which describe what people do while learning and usually apply to just one component of the curriculum. A well-designed curriculum aligns all these different goals and measures with the content and activities of the program.

Competent curriculum design increases the likelihood that you:

- Sequence learning objectives and performance outcomes, so that participants can start applying new knowledge on the job as soon as possible.
- Sequence learning to optimize retention.
- Identify and integrate other goals (for example, personal development or understanding) where feasible.
- Identify the most effective formats and channels for participants.
- Identify a specific path for each job role or experience/education/skill level.
- Identify ways to potentially reuse components of the curriculum at the start of the project, thereby promoting efficiency in developing experiences and materials.
- Specify guidelines, templates, and similar resources to promote consistency during development.
- Integrate cognitive and psychomotor learning effectively.
- Pilot and test various components of the curriculum before full-scale development or rollout of all the experiences and materials.

Effective curriculum design requires you to approach learning as an overall system with the various components working together to develop performance.

In emerging markets, the local culture, economic circumstances, availability of technology, reliability

of infrastructure, and accommodation of personal circumstances, educational levels, and post-training support requirements add complexity to the task of *Designing Curricula*. Addressing these challenges directly results in a curriculum that is better suited to participants' circumstances and more feasible for them to complete.

As you prepare to design, ask yourself the following questions:

- How can you adapt the curriculum and the program content for the local context and audience?
- What digital solution would enhance participants' learning (for example, webinars, social media)?
- How can you design a program that is affordable and sustainable despite potential economic fluctuations?
- Do participants need safety and security training/briefings?
- How can the program contribute toward development of personal resilience and the confidence of participants?
- What coaching or mentoring services can support application of learning?
- What remedial training or assistance might you need to bolster participants' baseline skills to acceptable levels for the program?

The decision to design a curriculum is usually the result of a preliminary assessment of performance needs. However, it is also important to identify specific performance outcomes, which involves assessing performance needs in more detail, and so we include this as one of the initial competencies in this category. *Designing Curricula* is a complex process that requires extensive experience in assessing performance needs and designing learning experiences. For this reason, experienced business learning specialists usually perform curriculum design.

The output for the *Designing Curricula* competency is a Design Document. The Design Document translates the high-level training strategy into a development guide with the tactical details required to create the curriculum or learning experience. It provides lower-level learning objectives, learning experience outlines, and summaries of learning activities within a learning experience. It identifies the duration of each section of the learning experience and identifies how to measure successful completion of each related learning objective. In essence, it is a blueprint or a roadmap for the *Designing Learning Experiences* competency.

For additional information on *Designing Curricula*, 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 CURRICULA

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1. Identify goals, principles, and constraints


Importance

The impact of mastering these competencies is that you:


- Base design on both the explicit and implicit goals of the stakeholders.
- Follow established best practices in design.
- Base design on the real needs of the various learner groups.
- Identify interdependencies and constraints early in the design process.

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	Consult with stakeholders to clarify the business need and goals of the curriculum
<input type="checkbox"/>	Determine the stakeholders to involve
<input type="checkbox"/>	Confirm with stakeholders the need and measures that the curriculum is intended to affect (for example, generate revenue, contain expenses, comply with government/industry/organization guidelines)
<input type="checkbox"/>	Identify the impact the business need has on resources available to develop the curriculum
<input type="checkbox"/>	Confirm the potential goals (for example, minimize time to competence, increase engagement, develop organization values, compete for talent, increase profile of learning function)
<input type="checkbox"/>	Resolve areas of disagreement among stakeholders
1b	Establish overall design principles
<input type="checkbox"/>	Explain the rationale for the chosen educational philosophy, design approach, and design process, for example: <ul style="list-style-type: none">‣ Activities to reinforce participants' persistence, self-esteem, and confidence ‣ Activities to build participants' confidence, leadership skills and problem-solving skills ‣ Incorporating women role models ‣ Incorporating coaching and/or mentoring ‣ Incorporating social networks and peer learning 
<input type="checkbox"/>	Consider any financial constraints of the program 
<input type="checkbox"/>	Align learning with social and cultural norms 
<input type="checkbox"/>	Determine security precautions for facilitators and participants 
<input type="checkbox"/>	Embed flexibility in the program design 
<input type="checkbox"/>	Consider time constraints of participants 
<input type="checkbox"/>	Consider participants family responsibilities 

1c Profile identified groups of participants

- ▶ Profile various groups of participants (for example, participants with or without previous experience, participants hired internally or externally, different demographic groups, participants with different goals)
- ▶ Consider decision-making/agency and how to engage those family members who determine participation in your program 
- ▶ Identify resources available to participants (for example, physical work environment, interactions with others, available tools, capabilities of mentors)
- ▶ Determine the desired proficiency levels of the participants once they successfully complete the curriculum (for example, “qualified to operate the machinery” or “power user”)
- ▶ 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

1d Consider potential of available technology to support curriculum

- ▶ Identify potential for producing learning experiences and materials for either face-to-face or online learning using specialized authoring and audiovisual production technologies
- ▶ Determine suitable digital learning delivery methods that could reduce the need for face-to-face contact and travel and digital tools for applying a skill or knowledge from the training
 - ▶ Determine how various digital solutions would meet the needs of participants, for example, their learning preferences or access to digital tools for reference after the program
 - ▶ Evaluate whether there are barriers to overcome to deliver trainings via technology for participants (for example, not knowing how to use technology, trust in technology, etc.)
 - ▶ Determine whether the use of digital solutions would enable more participants to join the program or receive program materials (for example, scaling the delivery and multiplier effect)
 - ▶ Determine viable digital solutions for participants 
 - ▶ Identify the owners of the access to technology and whether permission is needed from anyone (if so, find out from whom and what kind of permission)
 - ▶ Identify who to involve in digital support
- ▶ Identify communication channels to reach prospective participants and inform them of upcoming training
 - ▶ Use language in the marketing materials that is appropriate for the target group
 - ▶ Identify stakeholders who could promote this training
- ▶ Identify potential for electronically (or digitally) managing development workflows and providing content with enterprise learning technologies
- ▶ Identify potential for managing, personalizing, and tracking participants’ learning experiences and materials with enterprise learning technologies
- ▶ Identify potential for ongoing communication and learning offered through social media
- ▶ Identify potential for distributing learning experiences and materials by internet-connected devices (for example, smartphones, tablets, laptop computers)
- ▶ Identify organizational policies on use of technology that could affect design of the curriculum

1e Identify interdependencies and constraints

- ▶ Consider how location, geography, and number of participants affect the design
- ▶ Determine how local networks can support or reinforce performance training
- ▶ Design the program to allow participants to interact with local leaders
- ▶ Establish fees that are not too expensive to prohibit attendance or participation in activities, but are high enough to have participants take the program seriously and consider it something of value
- ▶ Consider how timing, budget, resources, and quality requirements affect the design
- ▶ Consider how continuing education, certification, or legislative requirements affect the design
- ▶ Consider how other current and anticipated organization initiatives affect the design (for example, product launches, changes to technology or regulatory requirements, role redesign)

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
Summary section of the Design Document	Section describes briefly the design principles that are central to the learning approach for the curriculum
	Section summarizes the sequence of the learning experiences within the full curriculum
	List of learning experiences identifies the target audience and profile for each experience
	Section describes the required technologies for the learning experiences
	Section describes the link between each learning experience and related non-learning solutions (for example, mentoring, coaching)

2. Create a high-level roadmap for the curriculum

Importance

The impact of mastering these competencies is that you:

- Structure and sequence the curriculum based on outcomes and goals.
- Identify how and when to assess and validate proficiency.
- Document learning best practices to guide the design.
- Ensure that you consider how to sustain performance over time.

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	Identify desired performance and other outcomes <ul style="list-style-type: none"> ▶ Review desired performance and other outcomes (see Assessing Performance Needs 2a) ▶ Emphasize importance of performance and other outcomes to participants ▶ Identify motivational reasons to adopt the taught behaviors and content
2b	Sequence performance and other outcomes <ul style="list-style-type: none"> ▶ Determine the order content should flow within each learning experience and between learning experiences ▶ Set priorities, determine prerequisites and dependencies, and define performance and other desired outcomes ▶ Identify assessment checkpoints along the way to confirm proficiency
2c	Identify potential learning and other performance solutions for achieving desired outcomes <ul style="list-style-type: none"> ▶ Identify potential learning and other performance solutions for closing performance gaps or achieving other desired outcomes (see Assessing Performance Needs 4a) ▶ Select learning and other performance solutions to achieve outcomes (see Assessing Performance Needs 4b) ▶ Identify support required for learning (for example, online forums, peer and business-to-business networking, crowd sourcing of materials, coaching and mentoring) ▶ Determine a realistic overall timeframe for participant completion of curriculum
2d	Determine the sequence of learning experiences for identified groups of participants <ul style="list-style-type: none"> ▶ Determine points of entry to the curriculum, based on prior experience or learning, and ways to support participant entry (for example, provision of remedial training)  

1. Identify goals, principles, and constraints

2. Create a high-level roadmap for the curriculum

3. Design a detailed roadmap for the curriculum

4. Prototype curriculum components

5. Prepare to implement and sustain the curriculum

2e Determine how technology and tools can support the curriculum

- ▶ Determine reliability of technological infrastructure in the regions (for example, prevalence of brownouts or blackouts, bandwidth issues, media censorship)
- ▶ Determine the types of devices to use to support the program (for example, smartphones, tablets, classroom polling devices)
- ▶ Determine how to use technology to store and deliver content
- ▶ Determine how to use technology to promote communication and collaboration among participants and facilitators
- ▶ Determine how to use technology for assessment and testing
- ▶ Determine how to use technology to personalize experiences and resources for different groups of participants

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
Structured list of goals for each experience within a curriculum	Performance outcomes state observable outcome and conditions under which outcomes are achieved
	Other desired outcomes are stated as concretely as possible
	List reflects needs and issues identified in the assessment
High level roadmap for the curriculum	<p>The Roadmap</p> <ul style="list-style-type: none"> ▶ Is consistent with identified goals, interdependencies, and constraints ▶ Identifies any prerequisites ▶ Identifies all required and optional components of the curriculum ▶ Shows progression through the curriculum ▶ Shows alternative paths for identified groups of participants, where appropriate ▶ Identifies the goals of the learning experience ▶ Shows assessment checkpoints and identifies when participants should be proficient in specific performance outcomes ▶ Shows timing of components and curriculum as a whole ▶ Explains how to use technology to support the curriculum and provides alternatives in the event of technological failure ▶ Identifies support needed within the work environment ▶ Reflects planned organization initiatives (for example, product launches, changes to technology or regulatory requirements, role redesign)
	All design choices align with overall goals, performance and other desired outcomes, resources available, and accepted best practices in performance and learning

3. Design a detailed roadmap for the curriculum

Importance

The impact of mastering these competencies is that you:

- Link learning objectives and activities to performance and other outcomes.
- Select the most effective and efficient formats and delivery channels for learning.
- Make effective use of available resources to design and develop learning experiences and materials.
- Create curriculum components that participants can easily access.

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	Establish preliminary learning objectives for each curriculum component
▶	Identify the appropriate level of learning for each lesson's or task's learning objective (such as remembering, understanding, applying, analyzing, evaluating, creating)
▶	Write statements describing: <ul style="list-style-type: none"> ▶ The observable outcome for each key skill or knowledge requirement ▶ The conditions under which to perform the task ▶ The standards of acceptable performance
▶	Sequence learning objectives for ease of learning
▶	Validate learning objectives for accuracy and sequence
▶	Align learning objectives with performance and other outcomes
▶	Determine minimum criteria for successful completion of stages or phases of learning
3b	Clarify format for each curriculum component
▶	Determine the purpose of each curriculum component (for example, general awareness, skill practice, transfer of learning)
▶	Identify options for formats and their typical uses (for example, a live or self-study course, user guide, job aid, online support resource)
▶	Identify expectations participants bring to the format (for example, type of information included, how it is structured, writing style)
3c	Determine delivery channel for each curriculum component
▶	Identify options for delivery channel(s) (for example, classroom, virtual classroom, job aid, web-based learning, videos, social learning)
▶	Select appropriate channel(s) based on criteria
▶	Create smaller training segments and alternative training methods to embed flexibility into the program design to address potential disruptions or technological challenges

1. Identify goals, principles, and constraints


2. Create a high-level roadmap for the curriculum

3. Design a detailed roadmap for the curriculum

4. Prototype curriculum components

5. Prepare to implement and sustain the curriculum

3d Develop initial content inventory for curriculum

- ▶ Identify content to include for each component, using preliminary learning objectives as a guide
- ▶ Determine criteria for assessing usability of existing resources (for example, relevance, accuracy, alignment with learning objectives, age of resources)
- ▶ Determine the languages to use to write and deliver the program
- ▶ Review existing materials to determine what to reuse or adapt
- ▶ Obtain a legal review of program content 
- ▶ Determine what third-party materials to use as they are or with modification
- ▶ Determine what new content to develop specifically for the curriculum

3e Plan learning environment for the curriculum

- ▶ Plan how participants will access curriculum components
- ▶ Plan how participants and others (for example, managers, learning and development group) will track progress through the curriculum
- ▶ Develop a visual roadmap for participants to follow
- ▶ Consider how to foster the social component of learning, as appropriate
- ▶ Plan for accessibility to address needs of all participants

- 1. Identify goals, principles, and constraints
- 2. Create a high-level roadmap for the curriculum
- 3. Design a detailed roadmap for the curriculum
- 4. Prototype curriculum components
- 5. Prepare to implement and sustain the curriculum

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 curriculum roadmap	Roadmap identifies each component of the curriculum
	Learning objectives include an observable behavior condition and standard
	Learning objectives align with performance outcomes
	Roadmap identifies an appropriate format for each component that addresses the learning objectives
	Roadmap identifies an appropriate, effective and easily accessible delivery channel for each learning experience
	Proposed evaluation methods are appropriate to the level of learning objectives
	All design choices align with overall goals, performance and other desired outcomes, resources available, and accepted best practices in performance and learning
Initial content inventory	Inventory identifies existing internal and third-party materials to reuse or adapt and which materials to design and develop
Plan for learning environment	Participants can easily access the components of the curriculum
	Participants can see all the learning experiences that comprise the full curriculum
	Participants and others can track progress through the curriculum
	Participants' accessibility needs are met

4. Prototype curriculum components

Importance

The impact of mastering these competencies is that you:

- Make improvements based on designing and testing prototypes.
- Determine how to “scale up” efficiently.
- Develop materials with a consistent look and feel.

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	Design at least one example of each curriculum component as a prototype
<input type="checkbox"/>	Generate a broad range of possible solutions
<input type="checkbox"/>	Create and get input on a series of quick prototypes
<input type="checkbox"/>	Test to inform the next iteration of prototypes
4b	Determine style guidelines for ensuring consistency across subsequent design and development
<input type="checkbox"/>	Determine standards for text (for example, voice, use of terminology, editorial style)
<input type="checkbox"/>	Determine standards for visuals (for example, colors, style of illustration)
<input type="checkbox"/>	Determine a standard approach for each component (for example, job aids, user guides, videos, e-learning, websites)
<input type="checkbox"/>	Determine appropriate technology and e-learning standards
<input type="checkbox"/>	Incorporate corporate branding, if appropriate
4c	Develop templates based on the validated templates and guidelines
<input type="checkbox"/>	Develop templates for each type of component
<input type="checkbox"/>	Develop templates for category of content within components (for example, presentation of text or text and visuals, multiple-choice questions)
<input type="checkbox"/>	Build standardized text into templates (for example, instructions and headings, other standard wording)
<input type="checkbox"/>	Confirm that templates comply with style guidelines
<input type="checkbox"/>	Confirm that templates comply with relevant technology and e-learning standards
<input type="checkbox"/>	Confirm that templates work with the chosen authoring tools

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
Prototypes of curriculum components	Prototypes illustrate look and feel of materials and visual aids
	Prototypes comply with corporate branding, templates, and guidelines
	Technology and other logistics work, with backup strategies in place in case of failure
	Guidelines for ensuring consistency of design and materials are documented
Guidelines for creating consistent components	Guidelines identify definitions and preferred uses of terms for curriculum, as well as terminology to avoid
	Guidelines include a glossary of acceptable synonyms to guide translators in consistent terminology usage, when offering a program in multiple languages
	Guidelines provide consistent text for frequently used instructions
	Guidelines identify the preferred and culturally appropriate stylistic choices for the curriculum, reflecting the client's needs
	Guidelines are clear and thorough
Templates	Templates are provided for each major curriculum document type (for example, facilitator guides, job aids)
	Templates comply with guidelines for ensuring consistency
	Templates work with the chosen authoring tools for the curriculum
	Templates comply with relevant technology and e-learning standards
	Templates address issues of activities, images and image styles, formatting, fonts, colors and layout

5. Prepare to implement and sustain the curriculum

Importance

The impact of mastering these competencies is that you:

- Implement the curriculum successfully
- Prepare participants to transition easily from a previous curriculum to the new curriculum
- Maintain and sustain the curriculum over time

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	Plan for implementation of the curriculum
<input type="checkbox"/>	Determine scope, budget, and timeline for implementation
<input type="checkbox"/>	Plan for the organizational structure and resources required to deliver and manage the curriculum
<input type="checkbox"/>	Plan for staged implementation, considering when various components should become available
<input type="checkbox"/>	Plan for transition of those who have started an earlier version of the curriculum but have not yet finished
<input type="checkbox"/>	Determine when and how to end use of the previous curriculum, if relevant
<input type="checkbox"/>	Plan for technical and administrative support for the curriculum (for example, in-person support for self-study components or training and support of facilitators)
<input type="checkbox"/>	Advise on communications and marketing activities to promote the curriculum
<input type="checkbox"/>	Test technology and other logistics
5b	Plan for validation of the curriculum
<input type="checkbox"/>	Determine what components of design and materials need validation
<input type="checkbox"/>	Determine approach for validation (for example, small group validation, full group pilot)
<input type="checkbox"/>	Determine the appropriate mix of stakeholders to validate the curriculum and detailed content
<input type="checkbox"/>	Plan for revising components based on results of the validation
5c	Plan for evaluating both the components and the curriculum as a whole
<input type="checkbox"/>	Determine method to evaluate participants' reactions
<input type="checkbox"/>	Determine method to evaluate participants' comprehension or learning
<input type="checkbox"/>	Determine method to evaluate participants' transfer (application) of learning
<input type="checkbox"/>	Determine method to evaluate the impact of the curriculum on business goals

5d Plan for maintaining the curriculum

- ▶ Plan how and when to update curriculum
- ▶ Plan how the curriculum can evolve based on needs of the client’s business and needs of participants
- ▶ Establish roles and responsibilities for maintaining the curriculum

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
Implementation plan	Includes rationale for approach, resources required, budget, and comprehensive list of activities and timing, with clear roles and responsibilities
	Addresses needs and concerns of client and other stakeholders
	Addresses transition from the previous to the new curriculum, if relevant
	Addresses providing technical and administrative support for the new curriculum to both participants and trainers/facilitators
	Includes proposals for announcing and promoting the new curriculum
	Addresses validation of components and the curriculum as a whole
	Is approved by client
Maintenance plan	Addresses ongoing maintenance of content
	Addresses how to effectively integrate additions to the curriculum
	Is approved by client