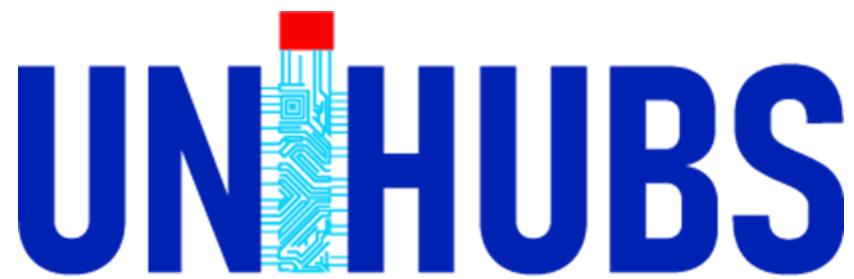




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Training Toolkit for HEIs & DIHs

D3.2



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Dissemination Level

P	Public	
PP	Restricted to other programme participants (including the EC services)	
RE	Restricted to a group specified by the consortium (including the EC services)	
CO	Confidential, only for members of the consortium (including the EC services)	

Document Control Sheet

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INTRODUCTION

About the UNIHUBS project

UNIHUBS is a collaborative Erasmus Capacity Building initiative that aims to strengthen the capacity of Higher Education Institutions (HEIs) in Kenya, Ghana, and Tanzania by connecting them with Digital Innovation Hubs (DIHs) and European partners from the Netherlands and Greece.

The project focuses on enhancing the relevance of HEIs to the digital innovation labor market through curriculum modernization, co-creation of educational materials, and experiential learning. It promotes innovative, learner-centered teaching methods and fosters collaboration between academia and industry to improve graduate employability.

The UNIHUBS project provides a unique platform to catalyze changes, foster collaboration among HEIs, DIHs, and policymakers to drive innovation, build sustainable partnerships, and equip graduates with the skills needed to thrive in the labor market.

Purpose of this Toolkit

The Training Toolkit for HEIs & DIHs under Work Package 3, Activity T3.2 Development of training material for HEIs and DIHs staff, addresses the training needs of the African Higher Education Institutions and Digital Innovation Hubs. Drawing from Work Package 2 results and in line with the provisions of the UNIHUBS framework, as well as the outcomes of D3.1. Training Needs Analysis under Work Package 3. Consequently, this Training Toolkit focuses on the development of training material on co-creation and innovative teaching methodologies and experiential learning approaches, for educators and digital innovation professionals.

Stimmuli, the leading partner of this activity, analyzed the reports and came up with the focus areas of skills and training needs that are included in the report. To create the toolkit, the leading partners and the other EU partners adapted and built upon training materials and best practices from previous projects (e.g., AfriConEU) and projects mentioned in the Best Practices Report (e.g., DSI-Africa, dLab). In addition, the suggested resources under each module have been enriched with scientific publications and additional study material for users interested in more in-depth engagement.

The toolkit has been designed in a way that can be easily adapted and replicated in various institutional and interdisciplinary contexts and enhance deliverables impact and sustainability. Additionally, the authors try to include and develop resources that are downloadable to address low bandwidth issues, and limited access to technological infrastructure. The Training Toolkit for HEIs & DIHs encompasses 5 different thematic fields:

1. Digital Pedagogy Capacity
2. Entrepreneurship Integration
3. Co-creation Methodologies
4. Digital and Soft Skills
5. Impact of Teaching

The objectives of the UNIHUBS Training Toolkit for HEIs & DIHs are the following:

- ⇒ To create comprehensive training resources for staff at HEIs and DIHs, focusing on co-creation, innovative teaching, and experiential learning.
- ⇒ To promote collaboration and knowledge sharing between HEIs, DIHs, and other digital innovation stakeholders across Africa.
- ⇒ To familiarize educators and innovation professionals with collaborative, student-centered, and digitally enhanced teaching practices.
- ⇒ To build capacity in co-creation methodologies that support joint curriculum development, interdisciplinary projects, and stakeholder engagement.
- ⇒ To adapt and build upon training materials and best practices from previous projects, ensuring contextual relevance and scalability.
- ⇒ To create a well-structured training toolkit that includes a centralized list of available resources.

How to use this Toolkit

This toolkit is designed to help educators and innovation professionals in delivering a consistent, engaging learning experience across the five thematic modules that address their needs. To maximize the value of this document, begin by exploring each module's structure and contents before starting to infuse elements into your curriculum or workshop.



Figure 1: Module components. AI generated figure with Napkin AI.

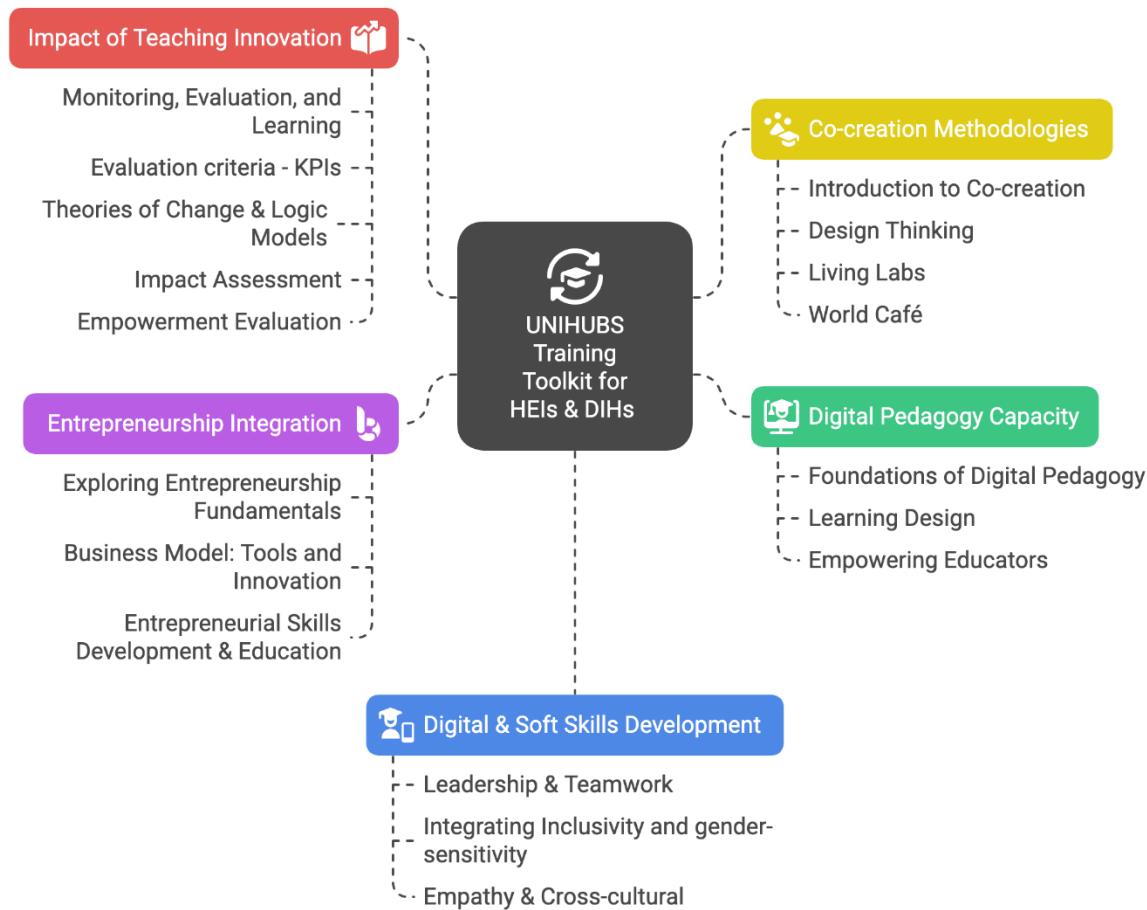
Inside each thematic module, you will find

- **Learning outcomes and goals** that clarify what participants will achieve or understand by completing each module. The Learning outcomes describe what participants will achieve by completing the module. On the other hand, goals define the objectives of the module, respectively.
- Definitions of **Key Concepts** to establish a shared understanding. These can be integrated directly into your curriculum to ensure alignment among participants.
- Recommended **Materials** are to be used directly or to offer extra knowledge. They can be incorporated into existing material or curriculum or utilized to develop new material. The proposed material can be used to enhance sessions and encourage deeper engagement.
- **Interactive Activities or Tools** include templates, interactive games, and best practices. These resources are intended to enhance participation and audience interest. Select the items most relevant to your training objectives or audience needs, and feel free to tailor them to fit within your session plans.
- **Facilitation Tips** are provided to support a smooth delivery and engagement. This training toolkit intends to foster interaction and maintain participant motivation. Utilize the tips that match your style and context.

As you explore the Training Toolkit, create a list of the resources that will enable you to easily reference, share, and reuse valuable content across multiple sessions and modules.

MODULES

This Training Toolkit for HEIs & DIHs encompasses 5 thematic modules as they are presented in the Figure below.



Made with  Napkin

Figure 2: Structure of the UNIHUBS Training Toolkit for HEIs and DIHs. AI generated figure with Napkin AI.

Digital Pedagogy Capacity

Introduction

In today's rapidly evolving educational landscape, fostering digital pedagogy capacity is essential for trainers and educators committed to student-centered learning. The "Digital Pedagogy Capacity" equips trainers to design an innovative learning experience that leverages digital tools, inclusive frameworks, and active learning. An interactive activity, the "UNIHUBS Design Dash," has been developed for this module to involve participants in designing a short learning experience.

Learning Outcomes

By the end of this module, participants will be able to:

- Design engaging, student-centered learning experiences enhanced by digital technologies and active learning strategies.
- Apply frameworks like Universal Design for Learning (UDL) and DigCompEdu to plan inclusive, adaptive digital lessons.
- Utilize game-based and challenge-driven methods to foster deeper participant engagement.
- Evaluate digital tools and pedagogical approaches for effectiveness in diverse educational contexts.

Learning Goals

This module aims to:

- Enable trainers to design and facilitate widely engaging, student-centered, digitally enhanced learning experiences using game-based, challenge-driven instructional design.
- Promote innovative teaching through the integration of game-based, scenario-driven, and challenge-based instructional design.
- Foster a mindset of experimentation, collaboration, and continuous reflection for sustainable educational transformation.

Key Concepts

- ✓ **Student-centered Learning**¹: refers to a wide variety of educational programs, learning experiences, instructional approaches, and academic-support strategies that are intended to address the distinct learning needs, interests, aspirations, or cultural backgrounds of individual students and groups of students.
- ✓ **Active Learning**²: refers to any instructional method that engages students in the learning process beyond listening and passive note taking. Active learning

¹ <https://www.edglossary.org/student-centered-learning/>

² <https://teaching.berkeley.edu/teaching-strategies/teaching-your-course/active-learning>

approaches promote skill development and higher order thinking through activities that might include reading, writing, and/or discussion.

- ✓ **Digitally (Mediated) Learning³:** is a multifaceted approach that leverages digital technologies – software, hardware, and networks – to enhance and transform the learning experience. While often used interchangeably, it's crucial to distinguish digital learning from related terms like 'e-learning' and 'online learning.' Digital learning is the overarching concept, encompassing a broader range of technology-enhanced educational practices, whereas e-learning typically refers to structured learning being delivered electronically, and online learning specifically signifies learning that occurs entirely over the internet.

Material

To foster an impactful learning experience, educators and facilitators must explore digital pedagogy principles and methodologies to design a curriculum that is student-centered and will engage students.

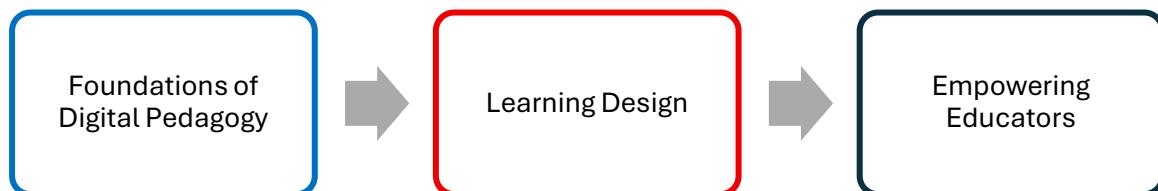


Figure 3: Thematic subsections that are addressed on the Digital Pedagogy Capacity Module.

Foundations of Digital Pedagogy

To enhance participation, diverse learning methodologies can be adopted, complemented by digital technologies. Immersive technologies and digital tools can be utilized to put students at the center of the learning experience and require students' active participation.

Overview of different pedagogical methods	
Description	It outlines pedagogical methods that can be utilized to develop digital and human skills. By providing a detailed exploration of various innovative educational strategies, the guide aims to inspire and empower youth workers to create meaningful and impactful learning experiences.
Resource Type	Guide
Link	https://www.metaverselearninghub.eu/wp-content/uploads/2024/07/MLH-Report-of-Pedagogy_June24.pdf
Pedagogical Innovations	
Description	Annual trend report exploring emerging pedagogies in education. This edition features themes such as playful learning, embodied learning, and AI-assisted teaching—offering actionable insights for designing innovative, future-facing learning experiences.

³ <https://www.cln.org/what-is-digital-learning-definition/>

Resource Type	Report
Link	https://iet.open.ac.uk/file/innovating-pedagogy-2020.pdf
Scaffolding design thinking for learners	
Description	It explores innovative developments and research in the field of educational technology. It provides critical insights into digital tools and methods that enhance learning and teaching practices. The journal serves as a key resource for academics and practitioners interested in advancing education through technology.
Enhancing Learner-Centered Learning in the Digital Era	
Description	It proposes the "Digital Pedagogy for Sustainable Education Transformation" (DP4SET) framework to enhance learner-centered education in the digital era. It emphasizes digital competence, evidence-based practice with quality digital resources, applicable digital technology environments, and synergy between teachers and trustworthy AI.
Resource Type	Academic article
Link	https://link.springer.com/article/10.1007/s44366-024-0031-x

Learning Design

Learning designs can promote inclusivity, effectiveness, and future-ready classrooms. Utilizing learning designs might ensure gender inclusivity and marginalized groups to the education process.

Universal Design for Learning	
Description	A flexible framework that supports inclusive teaching through "multiple means" of engagement, representation, and action. Offers principles, checkpoints, and design strategies to make learning accessible and effective for all learners.
Resource Type	Guidelines/Framework
Link	https://udlguidelines.cast.org/
Inclusive design/justice frameworks and guides	
Source 1	
Description	It explores how inclusive design and design justice frameworks can be applied in higher education to support learners who have historically been marginalized. It emphasizes the importance of critically examining instructional and curricular design to ensure equity and access for all students.
Resource Type	Article
Link	https://er.educause.edu/articles/2020/10/inclusive-design-and-design-justice-strategies-to-shape-our-classes-and-communities
Source 2	
Description	The section "Diverse Participation and Perspectives" emphasizes involving people with a wide range of needs, preferences, and skills in the design process. Using multimodal communication and inclusive group processes, and ensuring accessibility and usability

	of design tools for all participants. This guide is practical, flexible, and applicable to digital learning environments, curriculum design, and classroom interactions.
Resource Type	Guide
Link	https://guide.inclusivedesign.ca/insights/
Ensuring Gender Inclusivity	
Description	The section “Gender Balance: Teaching Methods into practice” focuses on practical methods and tools for creating inclusive learning environments that support all students, especially women and marginalized groups in STEM. The section “Development of Gender Equitable Inclusive Teaching Material” explores how gender norms influence education and provides strategies to critically address and transform these norms within STEM teaching practices.
Resource Type	Training
Link	https://women-stem-up.eu/training-programme/

Empowering Educators

While innovative frameworks and inclusive principles serve as a solid foundation, the transformation of the learning experience is highly influenced by educators' perception and intentions. Therefore, it is vital to cultivate educators' digital competencies and empower them.

Digital Competences for Educators	
Description	A comprehensive framework that defines six key areas of digital competence for educators. Provides self-assessment tools and development pathways to enhance teaching, learning, and professional engagement in digitally enriched environments.
Resource Type	Framework
Link	https://joint-research-centre.ec.europa.eu/digcompedu_en
The Teacher Digital Competency (TDC) framework	
Description	It introduces a comprehensive framework for Teacher Digital Competence (TDC), moving beyond basic digital literacy. It emphasizes a holistic approach that integrates pedagogical, content, and technological knowledge, aiming to better prepare educators for the complexities of teaching in digitally rich environments.
Resource Type	Academic article
Link	https://link.springer.com/article/10.1007/s11423-020-09767-4

Interactive Activity: “UNIHUBS Design Dash” Card Game

The “UNIHUBS Design Dash” is a fast-paced, collaborative card game where teams draw cards from different decks to design a short learning activity. The game is student-centered, digitally enhanced, and realistic in its teaching contexts.

Game overview

- Teams use randomized cards to create a student-centered, digitally enhanced lesson.
- **Materials:**
 - *Learner Cards*: Student personas and challenges.
 - *Tool Cards*: Digital/low-tech tools (e.g., Kahoot, Jamboard).
 - *Engagement Strategy Cards*: Pedagogy/strategy prompts.
 - *Wild Cards*: Constraints or special opportunities.
- **Gameplay Steps:**
 - Each team draws cards (1 Learner, 2 Tool, 1 Engagement, 1 Wild).
 - Teams have 20min to design a 15–30-minute activity, sketching: Learning objective, Student activities, teacher's role, implementation aspects.
 - Teams present their lesson; the group reflects on design choices.

Ideas & Tips

- Encourage experimentation; no “wrong” solutions in the game.
- Use collaborative digital spaces (e.g., Miro) for online adaptation.
- Prompt teams to reflect on digital inclusion and learner context.

The game is available on this link:

https://www.dropbox.com/UNIHUBS Toolkit_Interactive Activities & Best Practices

Facilitation Tips

- **Foster Safe Experimentation:** Emphasize that creativity, risk-taking, and iteration are vital. Assure participants there are no “wrong” solutions—every idea can spark learning and improvement.
- **Encourage Rapid Prototyping:** Motivate students/teams to quickly sketch lesson ideas, then refine with peer feedback. Focus on practical iteration over perfection.
- **Support Collaboration:** Utilize digital platforms (e.g., Miro, Padlet, Jamboard) for brainstorming, sharing, and teamwork—especially for online or hybrid groups. Encourage respectful, open conversations.
- **Encourage Innovation:** Recognize creative and inclusive solutions developed during gameplay.
- **Highlight Flexibility:** Show how activities can be adapted across formats (in-person, online, blended). Offer practical examples of tool substitutions and alternative strategies.

Entrepreneurship Integration

Introduction

Entrepreneurship exceeds the startup launching. It's a concept that can be applied interdisciplinary, and this module aims to support educators and learners in embedding entrepreneurial thinking and practices into diverse fields. This module will aid educators' efforts to develop adaptable and opportunity-oriented courses or workshops. It introduces the EntreComp Framework that has interdisciplinary applications for developing and assessing entrepreneurial skills.

Learning Outcomes

By the end of this module, participants will be able to:

- Design cross-disciplinary activities that embed entrepreneurial skills and mindsets within diverse subject areas.
- Utilize business model tools (and specifically Business Model Canvas) to conceptualize and develop value-based initiatives.
- Utilize external enablers (e.g., technology, regulation, culture) in shaping opportunities and challenges for entrepreneurial actions.

Goal

This module aims to:

- Empower educators and learners to integrate entrepreneurial thinking and skills across curricula and professional contexts.
- Inspire a culture of creativity, innovation, and proactive problem-solving in multidisciplinary settings.
- Equip participants with tools and methodologies to design, launch, and iterate on entrepreneurial projects, both independently and in teams.

Key concepts

- ✓ **Entrepreneurship**⁴: the process of designing, launching, and managing a new business or venture. It typically involves innovation, risk-taking, and the goal of achieving financial and social value. While often associated with startups, entrepreneurship spans from launching a tech company to founding a nonprofit or transforming internal business units.
- ✓ **Business model**⁵: is a description of how an organization creates, delivers, and captures value. It has a formal structure that consists of four basic components: the value proposition, customers, a financial model, and capabilities.

⁴ <https://esmt.berlin/knowledge/blog/what-is-entrepreneurship>

⁵ <https://www.gartner.com/en/finance/glossary/business-model>

Material

The following material explores a series of interconnected thematic fields to illuminate the evolving landscape of entrepreneurship. Therefore, it aims to reveal the practical and conceptual tools that empower entrepreneurial action.

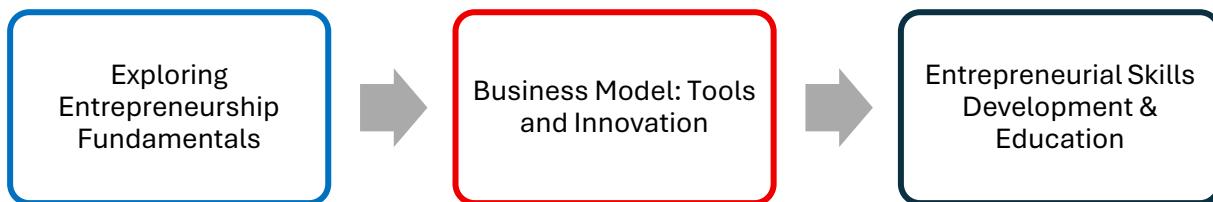


Figure 4: Thematic subsections that are addressed on the Entrepreneurship Integration Module.

Exploring Entrepreneurship Fundamentals

Starting by exploring the content of entrepreneurship and the influence that external factors have on creating opportunities and challenges that can be exploited by entrepreneurial pursuits.

Introduction to Entrepreneurship	
Description	It explores the evolving nature of entrepreneurship in the modern global economy. It begins by reviewing various definitions of entrepreneurship, emphasizing its dynamic and multifaceted character. Also, it highlights how entrepreneurship is not limited to starting new businesses but also includes innovation within existing organizations (intrapreneurship), social entrepreneurship, and digital entrepreneurship.
Resource Type	Academic article
Link	https://doi.org/10.1002/joe.22217
External Enablers of Entrepreneurship	
Description	It introduces the External Enabler (EE) Framework, which explains how macro-level changes—like technological, regulatory, or sociocultural shifts—can enable entrepreneurial action. It provides a structured way to analyze how such changes create opportunities and how entrepreneurs can strategically respond.
Resource Type	Academic article
Link	https://journals.sagepub.com/doi/pdf/10.1177/10422587211010673

Business Model: Tools and Innovation

Business Model Canvas is a fundamental tool that helps entrepreneurs shape their ideas and define how their value proposition will be created, delivered, and captured. The Business Model Canvas can not only be used to design, launch, and manage ventures but also as a tool to facilitate internal transformation in established organizations.

Business Models 101	
Description	Introduces key concepts of business models with a focus on social entrepreneurship. It covers foundational tools such as the Business Model Canvas, stakeholder and market analysis, and planning for fundraising and sustainability. Designed to support learners in developing socially impactful business strategies.
Resource Type	Online course
Link	https://www.welfareproject.eu/courses/e-learning/lesson/introduction-to-business-models/
Business Model Innovation	
Description	Product and service innovation are essential, but business model innovation can deliver lasting competitive advantage, particularly in disruptive times. This article helps leaders leverage innovative business models to tackle their most pressing challenges and capture their greatest opportunities.
Resource Type	Online site
Link	https://www.bcg.com/capabilities/innovation-strategy-delivery/business-model-innovation
Business Model Canvas	
Description	A detailed Business Model Canvas Template. Includes Value Proposition, Customer Segments, Channels, Revenue Streams, Key Resources, Key Activities, Key Partners, and Cost.
Resource Type	Presentation
Link	https://drive.google.com/file/d/1S1iejUJq8Kdov84uAbVC6RPr_aKYavGs/view

Entrepreneurial Skills Development & Education

Entrepreneurship is a mindset and a skill that enables innovation and value creation across sectors. The last subsection of this module focuses on presenting ways that could help educators encourage and cultivate students' entrepreneurial skills and incorporate them into their education process.

Entrepreneurship – From Ideas to Reality	
Description	8 sessions covering topics like how to generate and evaluate business ideas, building a business model, funding and legal structures, assessing your entrepreneurial skills, and creating a pitch and growth plan.
Resource Type	Online course
Link	https://www.open.edu/openlearn/money-business/entrepreneurship-ideas-reality/content-section-overview?active-tab=content-tab
Integrating Entrepreneurial Competences	
Description	Practices from various institutions focusing on experiential learning, digital entrepreneurship, and ecosystem collaboration. Also, it promotes transversal, cross-disciplinary approaches and challenge-based learning.
Resource Type	Webinar presentation

Link	https://heinnovate.eu/sites/default/files/event_summary_files/2025-05/IntegratingEntrepreneurialCompetencesInHECurricula.pdf
Enhancing employability through enterprise education	
Description	Case studies from universities across the UK that have successfully embedded enterprise and entrepreneurship into their curricula.
Resource Type	Collection of good practices
Link	https://www.etctoolkit.org.uk/media/1043/enhancing_employability_through_enterprise_education_good_practice_guide.pdf

Best Practice: The EntreComp Framework

The European Entrepreneurship Competence (EntreComp) Framework is a structured, descriptive reference framework with 3 main areas, 15 competences, and 8 progression levels. A practical competence model for developing and assessing entrepreneurial skills, adaptable to any context, with clear progression levels and interactive application possibilities.

The EntreComp Framework stands out for its action-oriented and transferable design, enabling individuals and organizations to use it far beyond theoretical study. Its structure supports direct application in self-assessment, curriculum development, skill gap analysis, and personalized or institutional entrepreneurial planning. By accommodating a variety of contexts - whether in education, policy development, startup culture, or employability initiatives - the framework urges users to engage actively, turning entrepreneurial competencies into practical tools for growth and development rather than simply concepts to be understood.

How to Use It

1. **Self-Assessment Activity.** Learners score themselves on each competence and identify areas to improve.
2. **Competence Mapping.** Match current skills with the 15 EntreComp areas to create a personal development plan.
3. **Scenario Challenges.** Present business scenarios and ask learners which competences are most needed and why.
4. **Progression Tracking.** Allow learners to map themselves from *foundation* to *expert* over time.

The material is available on this link:

https://www.dropbox.com/UNIHUBS Toolkit_Interactive Activities & Best Practices

Facilitation Tips

- **Encourage Exploration:** Support participants in connecting entrepreneurship concepts with their disciplines and contexts, emphasizing relevance beyond traditional business scenarios.

- **Promote Active, Hands-On Learning:** Integrate activities such as business model mapping, real-world scenario challenges, and EntreComp self-assessments to promote practical application.
- **Build Cross-Disciplinary Bridges:** Facilitate group discussions and teamwork across varied backgrounds, urging participants to share diverse perspectives on entrepreneurship.
- **Highlight the Value of Failure:** Frame experimentation, iteration, and learning from setbacks as essential parts of the entrepreneurial journey.

Co-Creation Methodologies

Introduction

Co-creation is an approach that brings together diverse stakeholders to collaboratively design innovative solutions, drawing on collective creativity and shared expertise. This module introduces key co-creation frameworks, including Design Thinking, Living Labs, and World Café, to help educators and facilitators foster inclusive, participatory problem-solving processes.

Learning Outcomes

By the end of this module, participants will be able to:

- Discover and explain foundational co-creation frameworks such as Design Thinking, Living Labs, and World Café.
- Facilitate creative, collaborative problem-solving sessions that engage diverse groups effectively.
- Apply co-creation tools and techniques to foster inclusive dialogue, ideation, and prototyping.
- Design participatory workshops and activities that encourage shared ownership and innovation.

Goal

This module aims to:

- Build participants' competence in facilitating and applying diverse co-creation methodologies across educational and professional contexts.
- Empower educators and facilitators to create dynamic, inclusive environments where creativity and collaboration thrive.
- Strengthen the ability to engage stakeholders meaningfully in the design process, ensuring solutions are user-centered and impactful.
- Promote understanding of how different co-creation approaches can be adapted to fit specific goals, group sizes, and challenges.

Key concepts

- ✓ **Design Thinking**⁶: is a non-linear, iterative process that is used to understand users, challenge assumptions, redefine problems, and create innovative solutions to prototype and test.
- ✓ **Living Labs**⁷: are real-world environments where research and experimentation take place openly and collaboratively. They help to ensure that

⁶https://www.interaction-design.org/literature/topics/design-thinking?srstid=AfmBOor20lsajm5YMBYWqVyo4l3cjdX4vALaDOj63Tn9NoSVF5_lvZY

⁷<https://ec.europa.eu/newsroom/rtd/items/810822/en>

the solutions developed are practical, user-friendly, and address real-world needs.

- ✓ **World Café**⁸: a simple, effective, and flexible format for hosting large group dialogue. Each element of the method has a specific purpose and corresponds to one or more of the design principles.

Material

In the evolving landscape of education and professional development, participation serves as a catalyst for transforming passive audiences into active co-creators. By utilizing diverse co-creation methodologies, educators and facilitators promote a culture where shared ownership and innovation are not only encouraged but expected.

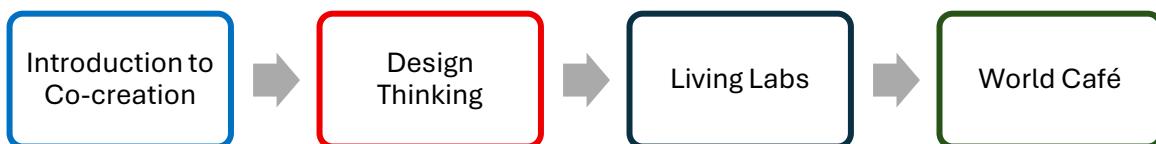


Figure 5: Thematic subsections that are addressed on the Co-Creation Methodologies Module.

Introduction to Co-Creation

The module kicks off by exploring the importance of co-creation and the various tools, templates, and methodologies that educators and facilitators can exploit and adapt to fit their learning goals. A key element of co-creation methods is participation, as it produces solutions and results that address current needs.

Co-Creation 101	
Description	A collection of co-creation tools, including methods, templates, activities, and others, by the UNaLAB Horizon project.
Resource Type	Webpage
Link	https://unalab.enoll.org/
Benefits of Co-Creation	
Description	It presents an overview of the benefits of co-design in service design projects to help the people involved articulate more precisely and realistically which benefits to aim for.
Resource Type	Academic article
Link	https://www.researchgate.net/Benefits_of_Co-design_in_Service_Design_Projects
Co-creative Workshop Methodology	
Description	A comprehensive handbook explaining how to design, implement, and analyze co-creation workshops.
Resource Type	Handbook
Link	https://www.scribd.com/document/472536201/U4IoT-CoCreativeWorkshopMethodology-Handbook

⁸ <https://theworldcafe.com/key-concepts-resources/world-cafe-method/>

Facilitating Co-Creation Methodologies	
Description	A comprehensive guide for diverse techniques for facilitators interested in implementing co-creation methods.
Resource Type	E-book
Link	https://download.e-bookshelf.de/download/0000/5874/32/L-G-0000587432-0002384959.pdf

Design Thinking

Design thinking provides a flexible, iterative roadmap for problem-solving, inviting teams to deeply explore user experiences, challenge assumptions, and prototype bold new solutions.

Design Thinking 101	
Source 1	
Description	A short video introducing the steps and application of Design Thinking methodology.
Resource Type	Video
Link	https://www.youtube.com/watch?v=Gu6BHj-I2do
Source 2	
Description	A document to guide design thinking steps.
Resource Type	Bookleg
Link	https://dschool.sfo3.digitaloceanspaces.com/documents/dschool_bootleg_deck_2018_final_sm2-6.pdf
Tools for Design Thinking Sessions	
Description	A collection of over 50 Design Thinking templates for virtual and physical Design Thinking workshops.
Resource Type	Website
Link	https://en.dt-toolbook.com/tools
Co-creation and the New Landscapes of Design	
Description	The evolution in design research from a user-centered approach to co-designing is changing the roles of the designer, the researcher, and the person formerly known as the 'user'.
Resource Type	Academic article
Link	https://www.researchgate.net/235700862_Co-creation_and_the_New_Landscapes_of_Design

Living Labs

Living labs are based on the previously mentioned attributes but extend them further by transforming real-world settings into experimental grounds where research meets practice, and ideas are tested in genuine contexts.

Living Labs 101	
Description	A comprehensive introduction to the origins, evolution, and future outlook of the Living Lab movement.
Resource Type	Booklet

Link	https://zenodo.org/records/14764597
Living Labs Framework	
Description	Overall framework and methodology for the implementation of Living Labs under the SE4Ces project, focused on the development of innovative curricula on Social Economy.
Resource Type	Report
Link	https://socialeconomy4ces.auth.gr/images/resources-publications-reports/SELLframeworkreport.pdf
Living Labs Training	
Description	Training toolkit for the effective preparation and implementation of a SE Living Lab.
Resource Type	Training toolkit
Link	https://socialeconomy4ces.auth.gr/images/resources-publications-reports/SE4Ces training toolkit.pdf

World Café

The World Café method offers an adaptable and effective structure to facilitate purposeful conversation and leverage design principles by cultivating collective intelligence and sparking innovative insights.

World Café 101	
Source 1	
Description	A short introductory video outlining the process of world cafe methodology.
Resource Type	Video
Link	https://www.youtube.com/watch?v=V6AUyf_vQI
Source 2	
Description	A comprehensive guide explaining the rationale, principles, and method of World Cafe conversations.
Resource Type	Guide
Link	https://www.betterevaluation.org/sites/default/files/world_cafe_re_source_guide.pdf
Facilitating a World Café Workshop	
Source 1	
Description	A short guide with key instructions for world cafe hosts and facilitators.
Resource Type	Guide
Link	https://www.theworldcafe.com/wp-content/uploads/2015/07/Cafe-To-Go-Revised.pdf
Source 2	
Description	A short video tutorial explaining step-by-step how to run a World Café workshop.
Resource Type	Video
Link	https://www.youtube.com/watch?v=Tfpuyu84pg6k
Planning Tools	

Description	Templates and slide decks from AfriConEU Horizon project's Brokerage event and The World Café Site to be used as an example for preparing your workshop.
Resource Type	Templates & Slides
Link	<ul style="list-style-type: none"> • Planner: https://toolkit.africoneu.eu/workshop-planner/ • Kit: https://toolkit.africoneu.eu/worldcafe-kit/ • Check List: https://theworldcafe.com/wp-content/uploads/2015/07/Tool_Kit_CheckList.pdf • Slide Deck: https://toolkit.africoneu.eu/worldcafe-slides/

Best Practice: PERMALABS Project

The PERMALABS Living Labs best practice offers a dynamic, hands-on blueprint for transforming sustainability education through collaborative innovation and real-world impact. This best practice breaks down the steps for developing vibrant, multi-phase sessions where students, educators and experts join forces to creatively solve problems. Everybody is involved in this methodology, facilitation brings tools, structure, and openness, and on the other hand shared ownership and experimentation enhance learning.

The living lab best practice methodology can be directly applied for developing co-creation sessions in educational settings. Facilitators should understand the process and customize their activities to match their specific context and participants group.

To use this material effectively, facilitators should:

- Reference the roadmap and prompts while planning and running the sessions.
- Introduce the Living Labs concepts and purposes to the involved stakeholders.
- Utilize tools or adapt proposed tools to fit their needs and goals.

The material is available on this link:

https://www.dropbox.com/UNIHUBS Toolkit_Interactive Activities & Best Practices

Facilitation Tips

- **Rotate Group Roles:** Regularly change participant roles during sessions to encourage active involvement, broaden perspectives, and develop varied skills.
- **Encourage Documentation:** Foster meticulous recording of ideas, insights, and decisions through visible means such as flipcharts, post-its, or digital collaboration tools.
- **Capture Ideas Visually:** Use visual tools to map discussions and outputs, helping participants to see connections and maintain focus.
- **Leverage Technology:** For remote or hybrid settings, use collaborative digital platforms to support interaction and documentation.
- **Promote Open Dialogue:** Encourage respectful listening and equal participation to create a safe space for sharing diverse thoughts and critiques.

Digital & Soft Skills Development

Introduction

In an increasingly interconnected and digital world, effective leadership requires not only strategic vision but also inclusive mindsets and empathetic engagement. This module explores essential skills for leading diverse teams and fostering inclusive environments that value cross-cultural awareness and empathy. Emphasis is placed on inclusive and gender-sensitive teaching approaches, recognizing the importance of equity and respect in all collaborative settings.

Learning Outcomes

By the end of this module, participants will be able to:

- Advance digital literacy to confidently and critically use digital tools for communication, information sharing, and collaboration.
- Enhance leadership skills that align teams and foster innovation through adaptable leadership styles and effective change management.
- Promote inclusion and gender sensitivity by applying practical tools and equitable teaching practices.
- Develop empathy and cross-cultural competence to interact effectively and respectfully with diverse groups.

Goals

This module aims to:

- Improve digital literacy as a foundational competency for communication and problem-solving in modern settings.
- Foster inclusive practices and gender-sensitive approaches in teaching and team settings.
- Build empathy and cross-cultural skills necessary for respectful and effective engagement in globalized contexts.
- Encourage collaborative teamwork dynamics that leverage diverse perspectives and strengths.

Key concepts

- ✓ **Digital literacy**⁹: involves the confident and critical use of a full range of digital technologies for information, communication, and basic problem-solving in all aspects of life. It is underpinned by basic skills in ICT: the use of computers to retrieve, assess, store, produce, present, and exchange information, and to communicate and participate in collaborative networks via the Internet.

⁹ <https://uis.unesco.org/en/glossary-term/digital-literacy>

- ✓ **Cross-cultural competence**¹⁰: a critical component in the context of Diversity, Equity, and Inclusion (DEI), as it enables individuals to interact effectively with people from different cultural backgrounds. Understanding and respecting diverse cultural perspectives is essential for fostering inclusive environments in workplaces, schools, and communities.
- ✓ **Leadership**¹¹: a set of mindsets and behaviors that align people in a collective direction, enables them to work together and accomplish shared goals, and helps them adjust to changing environments.

Material

This section of the toolkit is designed to equip educators, facilitators, and learners with foundational competencies that foster effective teamwork, drive innovation, and build inclusive environments.

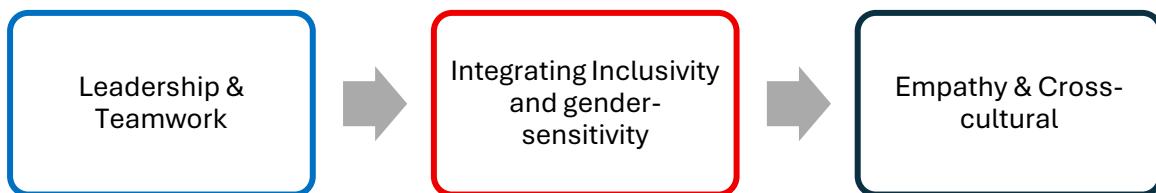


Figure 6: Thematic Fields that are addressed on the Digital and Soft Skills Module.

Leadership & Teamwork in the Digital Age

Through different leadership styles, educators can cultivate innovation by understanding each member's strengths. Furthermore, the section explores different leadership characteristics that educators need to cultivate in their students and highlights the importance of collaboration and teamwork.

Leadership Styles & Innovation	
Source 1	
Description	Academic study exploring how different leadership styles influence innovation, with a focus on the role of human capital.
Resource Type	Academic article
Link	https://www.mdpi.com/2076-3387/13/2/47
Source 2	
Description	This short course includes an overview of tips for developing a leadership style, communication skills for leaders, and other resources to support and inspire future leaders.
Resource Type	Training
Link	https://femstem.cs.ucy.ac.cy/leadership-2/
Source 3	

¹⁰ <https://oxford-review.com/the-oxford-review-dei-diversity-equity-and-inclusion-dictionary/cross-cultural-competence-definition-and-explanation/>

¹¹ <https://www.mckinsey.com/featured-insights/mckinsey-explainers/what-is-leadership>

Description	Defines the visionary leadership style, emphasizing goal orientation, inspiration, innovation, and empowerment.
Resource Type	Article
Link	https://cmoe.com/glossary/visionary-leadership-style/
Change Management is a Leadership Competence	
Description	Discusses how change management is a vital leadership skill, especially during organizational transitions and transformations.
Resource Type	Article
Link	https://www.prosci.com/blog/change-management-as-a-leadership-competency
Key Leadership Characteristics	
Description	Outlines key traits such as dauntlessness, decisiveness, ingenuity, and resilience that contribute to the success of female CEOs.
Resource Type	Article
Link	https://thewomenleaders.com/traits-that-make-a-successful-female-ceo/
Building Effective Collaboration - Teamwork	
Description	The short course on teamwork focuses on enhancing collaboration skills, understanding team dynamics, and improving communication and cooperation among team members. It provides practical strategies for building trust, resolving conflicts, and achieving common goals effectively.
Resource Type	Booklet
Link	https://femstem.cs.ucy.ac.cy/teamwork-2/

Integrating Inclusivity and Gender-Sensitivity

Creating equitable learning environments is fundamental. The material below helps educators promote gender awareness and inclusivity, especially in STEM fields where representation often lags.

Gender and inclusion training	
Description	The Women STEM UP training programme is a free, EU-funded online course designed to help university professors and lecturers create more inclusive and gender-aware STEM education environments. It focuses on addressing gender biases, promoting equality, and supporting the participation of women and other underrepresented groups in science, technology, engineering, and mathematics.
Resource Type	Training
Link	https://women-stem-up.eu/training-programme/
Templates & Exercises	
Description	Interactive exercises, templates, and other training material are available to download and ready to use. The material can be used either by a facilitator or by more to train educators, or by individual educators who can go through the templates and training content to get ideas for inclusion activities in their classroom.
Resource Type	Report

Link	https://www.hertechventure.eu/project-results/
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Empathy & Cross-Cultural Skills

Finally, empathy and cross-cultural skills are vital for building respectful, effective relationships. The toolkit introduces frameworks and guides for developing cultural intelligence and self-awareness.

Exploring Cross-Cultural Competences	
Description	This comprehensive guide explores the definition of cultural competence, its historical and theoretical foundations, and practical strategies for developing it. It also discusses cultural intelligence and the importance of self-awareness in intercultural interactions.
Resource Type	Article
Link	https://extension.psu.edu/what-is-cultural-competence-and-how-to-develop-it
Model of Cross-Cultural Competence	
Description	It presents the ARC model of cross-cultural competence, based on research with experienced professionals in intercultural settings. It outlines 12 core competencies and offers practical insights into how to build effective relationships across cultures.
Resource Type	Article
Link	https://www.globalcognition.org/cross-cultural-competence/
Empathy	
Description	A video explaining empathy.
Resource Type	Video
Link	https://www.youtube.com/watch?v=1SETRABZNtQ&t=20s

Best Practice: METAVERSE LEARNING HUB & SKILL QUEST

The Metaverse Learning Hub and Skill Quest best practice enhance skill development through immersive, interactive games designed to help youths develop skills like teamwork, communication, and online safety. Tackling the challenges participants get feedback and the chance to practice skills in engaging, gamified environments. The evidence-based resources and adaptable activities help facilitators foster confidence, empower digital engagement, and prepare participants for digital life.

This best practice material serves as a comprehensive toolbox for facilitators aiming to develop interactive digital skills programs for youth. Therefore, it can be used as a resource to design and deliver a gamified learning experience.

The material is available on this link:

https://www.dropbox.com/UNIHUBS Toolkit_Interactive Activities & Best Practices

Facilitation Tips

- **Use Circle Time or Small Breakouts:** Create safe, intimate spaces for participants to share experiences and perspectives, encouraging active participation and deeper connection.
- **Model Empathy and Inclusion:** Demonstrate inclusive language, respectful listening, and empathetic responses to set the tone and encourage these behaviors among participants.
- **Support Diverse Voices:** Facilitate equitable participation by inviting quieter members to contribute and valuing all cultural perspectives.
- **Integrate Digital Tools:** Use collaborative digital platforms and multimedia resources to engage participants and enhance digital literacy.

Impact of Teaching Innovation

Introduction

Impact evaluation helps educators/facilitators to understand the effectiveness and value of programs, policies, and interventions over time. Foundational concepts and practical frameworks needed to design and implement robust evaluation processes are explored.

Learning Outcomes

By the end of this module, participants will be able to:

- Apply methodologies and frameworks such as MEL planning and logic models to design structured evaluation plans.
- Utilize a combination of qualitative and quantitative evaluation tools to measure learning progress and program impact.
- Engage stakeholders in participatory evaluation processes to foster empowerment and inclusive feedback.
- Reflect on evaluation results to inform adaptation, continuous learning, and enhanced program effectiveness.

Goals

This module aims to:

- Build participants' competency in designing, conducting, and interpreting impact evaluations.
- Equip learners with practical skills to create and use evaluation tools that accurately measure progress and outcomes.
- Promote the integration of participatory and empowerment-focused approaches in evaluation practices.
- Enhance the ability to set meaningful Key Performance Indicators (KPIs) and utilize data for evidence-based decision-making.
- Encourage critical reflection on evaluation findings to support program improvement and accountability.

Key concepts

- ✓ **Impact evaluation**¹²: a type of evaluation that assesses the long-term effects of a program, policy, or intervention on its intended beneficiaries. It involves examining whether the program has achieved its intended outcomes and whether any unintended consequences have occurred.

¹² <https://www.evalcommunity.com/career-center/impact-evaluation/>

- ✓ **Evaluation tools**¹³: are used to assess the learning progress of students, measure their skills, and identify areas that need improvement. These tools can range from quizzes and assignments to more complex standardized tests.

Material

The last module of this toolkit is designed to walk you through impact evaluation and each critical dimension—offering guidance, and templates.

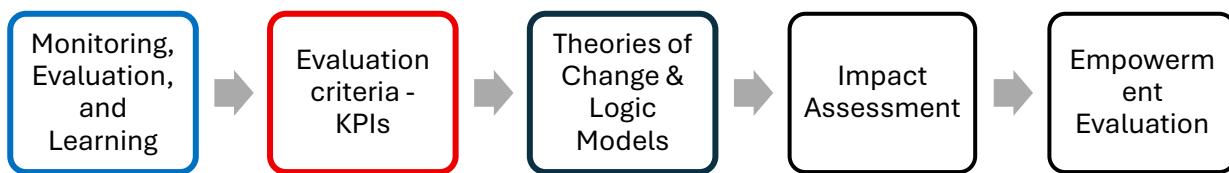


Figure 7: Thematic Fields that are addressed on the Impact of Teaching Module.

Monitoring, Evaluation, and Learning (MEL)

The MEL model is presented through a series of guides and video seminars that outline core practices, roles, and impact assessment strategies. The MEL model aims to increase effectiveness and maximize positive outcomes.

MEL 101	
Source 1	
Description	This MEL guide aims to strengthen your organizational MEL practices; enhance your capacity to become more effective; and maximize your impact, through review and learning with partners and the communities you work with.
Resource Type	Guide
Link	https://intdevalliance.scot/wp-content/uploads/2023/08/MEL_Support_Package_4th_June.pdf
Source 2	
Description	An engaging video seminar introducing MEL, roles and responsibilities, and the impact assessment process for social investors and development partners.
Resource Type	Video
Link	https://www.youtube.com/watch?v=P6IHstu8plw
MEL Planning and Data Collection	
Source 1	
Description	A process and toolkit to conduct a standard baseline assessment of M&E capacity.
Resource Type	Article
Link	https://www.measureevaluation.org/pima/m-e-capacity/me-capacity.html

¹³ <https://teachers.institute/assessment-for-learning/evaluation-tools-education-types-differences/>

Source 2	
Description	Template with instructions for MEL planning.
Resource Type	Template
Link	https://preparecenter.org/wp-content/uploads/2022/08/MEL-Plan-Template.docx

Evaluation Criteria – Key Performance Indicators

The included sources offer detailed frameworks and templates for establishing clear objectives, assigning ownership, and setting measurable benchmarks. It helps you discover how KPIs can be harnessed for performance measurement and used to provide robust evidence for decision-making.

Evaluation Criteria	
Source 1	
Description	These criteria provide a normative framework used to determine the merit or worth of a development intervention (policy, strategy, programme, project, or activity). They serve as the basis upon which evaluative judgements are made.
Resource Type	Report
Link	https://www.oecd.org/en/topics/sub-issues/development-co-operation-evaluation-and-effectiveness/evaluation-criteria.html
Source 2	
Description	A guide through the process of developing clear objectives and key performance indicators (KPIs) to support a strategy. It describes the processes to ensure that KPIs have targets and owners. It shows how to build KPIs that provide evidence that objectives are being met (or not!).
Resource Type	Guide
Link	https://www.intrafocus.com/Developing-Meaningful-Key-Performance-Indicators.pdf
Source 3	
Description	Performance Measurement: The essentials of KPIs.
Resource Type	Academic Article
Link	https://www.researchgate.net/publication/378059130_Key_Performance_Indicators_The_Complete_Guide_to_KPIs_for_Business_Success

Theories of Change & Logic Models

Understanding how change happens is central to evaluation. The resources on Theories of Change (ToC) and Logic Models will help learners map the progression from activities to impact.

Theory of Change (ToC)	
Source 1	
Description	A collection of explanatory resources for developing ToC.

Resource Type	Article
Link	https://www.theoryofchange.org/what-is-theory-of-change/
Source 2	
Description	A template for drafting ToC.
Resource Type	Article
Link	https://www.changethegameacademy.org/in/shortmodule/theory-of-change-toc/a-framework-for-a-theory-of-change-in-word-and-pdf
Logic Models	
Source 1	
Description	How do we develop a Logical framework? To create one, we need to link the impact, outcome, output, and activities with logic. We usually start with Impact or the goal and go downwards until the activity.
Resource Type	Video
Link	https://www.youtube.com/watch?v=d0NPxGgGMtM
Source 2	
Description	A short tutorial presentation on problem trees
Resource Type	Presentation
Link	https://evaluationtoolbox.net.au/material-download/306
Source 3	
Description	A logframe matrix is a concise document that outlines the key features that lead to a project achieving its goal
Resource Type	Article
Link	https://evaluationtoolbox.net.au/logframe-matrix/

Impact Assessment

For those seeking to demonstrate and understand the effects of their interventions, the Impact Assessment section presents comprehensive guides, planning tips, and engaging videos that can support both newcomers and seasoned evaluators.

Impact Evaluation 101	
Source 1	
Description	Detailed guide with links to advanced resources for understanding, designing, and implementing impact evaluations and assessments.
Resource Type	Article
Link	https://www.betterevaluation.org/methods-approaches/themes/impact-evaluation
Source 2	
Description	Tips for designing an impact assessment plan for capacity development programmes.
Resource Type	Article
Link	https://stimmuli.eu/2022/09/13/4-tips-for-designing-an-impact-assessment-plan-for-capacity-development-programmes/
Source 3	

Description	Animated videos are particularly useful for impact evaluation novices or for training purposes.
Resource Type	Video
Link	https://www.youtube.com/playlist?list=PLIgll04OkMwID0I-rOWYEsNmd8fkHH8lo

Empowerment Evaluation

Finally, the subsection Empowerment Evaluation offers insight into how empowerment strategies can foster learning, social change, and transformative program development.

Empowerment Evaluation 101	
Source 1	
Description	This article discusses the key principles of Empowerment Evaluation, its applications, advantages, challenges, and future directions. It also emphasizes the importance of stakeholder participation, capacity building, learning and improvement, and social change.
Resource Type	Article
Link	https://www.evalcommunity.com/career-center/empowerment-evaluation-theory/
Source 2	
Description	This set of teaching materials is designed to introduce individuals to empowerment evaluation, and it is intended to be a resource for facilitating an introductory lecture on the topic. The materials consist of a PowerPoint presentation and a set of content notes to assist the facilitator.
Resource Type	Article
Link	https://www.betterevaluation.org/sites/default/files/empowerment_evaluation.pdf
Source 3	
Description	It describes the implementation of empowerment evaluation to transform the curriculum in Stanford University's School of Medicine.
Resource Type	Academic Article
Link	https://www.researchgate.net/profile/44646570_Empowerment_Evaluation_A_Collaborative_Approach_to_Evaluating_and_Transforming_a_Medical_School_Curriculum/

Facilitation Tips

- Collect Session Feedback:** Encourage feedback collection after each session to gauge understanding, gather insights, and inform adjustments.
- Combine Data Types:** Emphasize the importance of integrating qualitative data (e.g., interviews, focus groups) with quantitative metrics (e.g., tests, surveys) for a comprehensive evaluation.

- **Empower Participants:** Involve learners and stakeholders in designing and adapting evaluation tools, fostering ownership and meaningful engagement.
- **Visualize Results:** Use visual aids like charts, logic models, and dashboards to aid comprehension and facilitate discussion.