

Tips on how to develop a training course

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Standing Committee



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EOSC Future will provide a user-friendly environment for:



Data discovery



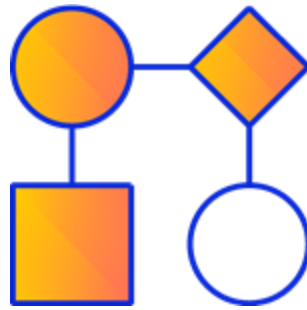
Data storage



Data recomposition




Computing services



Complex workflows



Integratable services



- Home
- Calendar
- Course sections

Accessibility settings

Data Steward Training

Home > Courses > Data > Data Steward Training > 2. Design training in easy steps

<https://moodle.learn.eosc-synergy.eu/course/view.php?id=132§ion=4#tabs-tree-start>

Welcome	1. RDM, FAIR and Open Science	2. Design training in easy steps		
3. Open and responsible research	4. Data management plans	5. RDM service delivery	Completion	
Authors and contributors				

Understanding **how people learn** and **where to start when designing your training activities** can help make your work as a data steward more effective. In this module, the authors will equip you with some of the **tools** to help you create the **best training** for your audience.

By the end of this module, you will:

- Understand the role of pedagogy and learning activities to teach effectively.
- Be able to critically assess the reasons for organising training activities.
- Be able to create the training which meets your aims and the needs of your learners.


Watch a video about pedagogy and training design (20 min).

Introduction to Pedagogy and Training Design
Evaluation

- Different levels of evaluation
- Linked to assessment (formative / summative)
- Needs to be considered in design, not at the end


Kirkpatrick, D. L. (1994). Evaluating training programs: the four levels. San Francisco: Berrett-Koehler.

Watch on YouTube




- Home
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- Course sections <






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 Designing your training in easy steps (40 min)

The objective of this assignment is to help you understand the basics of developing a training course or a learning session. To help you achieve that, fill in **two worksheets A & B** that combine a number of aspects covered in the video, such as the initial training design and the ABC model. You may want to use the additional learning resources on the module page to help you expand on and complete sections of the assignment. A full version of the training analysis template has been provided should you wish to retain a copy to help you design & develop training in the future.

 Training analysis worksheet A & B - short version

Learning resources

-  Introduction to pedagogy and training design - video transcript
-  Introduction to pedagogy and training design - presentation
-  Reference material - learning activities
-  Example filled in training analysis template - full version
-  Training analysis template - full version

<p>Your title and broad topics <i>Include a short descriptive title. Why do learners need to know about your topic/service? What does it offer?</i></p>	
<p>Training goal <i>Why are you doing this training? What would success look like? This can include developing skills, gaining knowledge and changing attitude, improving service awareness/use etc.</i></p>	
<p>Audience <i>Who is your target audience? This could be particular roles (eg researcher, students), knowledge level (eg aimed at beginners) or task based - eg those who want to be able to do a specific task.</i></p>	
<p>Benefits/outcomes for learners <i>What will learners gain from your training? What will they be able to do? What will they know? It is helpful to use the phrase 'By the end of this training you will: Be able to.... Be familiar with... Have practiced... '</i></p>	
<p>Content</p>	

[Training analysis worksheet A & B - short versionFile](#)

<https://moodle.learn.eosc-synergy.eu/course/view.php?id=132§ion=4#tabs-tree-start>

Learning outcomes (this is what your learning activities should achieve):

1. E.g. Be able to practise Open Science.
2. ...
3. ...

	Learning activity 1	Learning activity 2	Learning activity 3			
Topic 1 <i>E.g. Introduction to Open Science</i>	<i>E.g. Acquisition: Video, online forum</i>	<i>E.g. Practice: Use data repositories</i>				
• Duration						
• Assessment (if applicable)						
Topic 2						

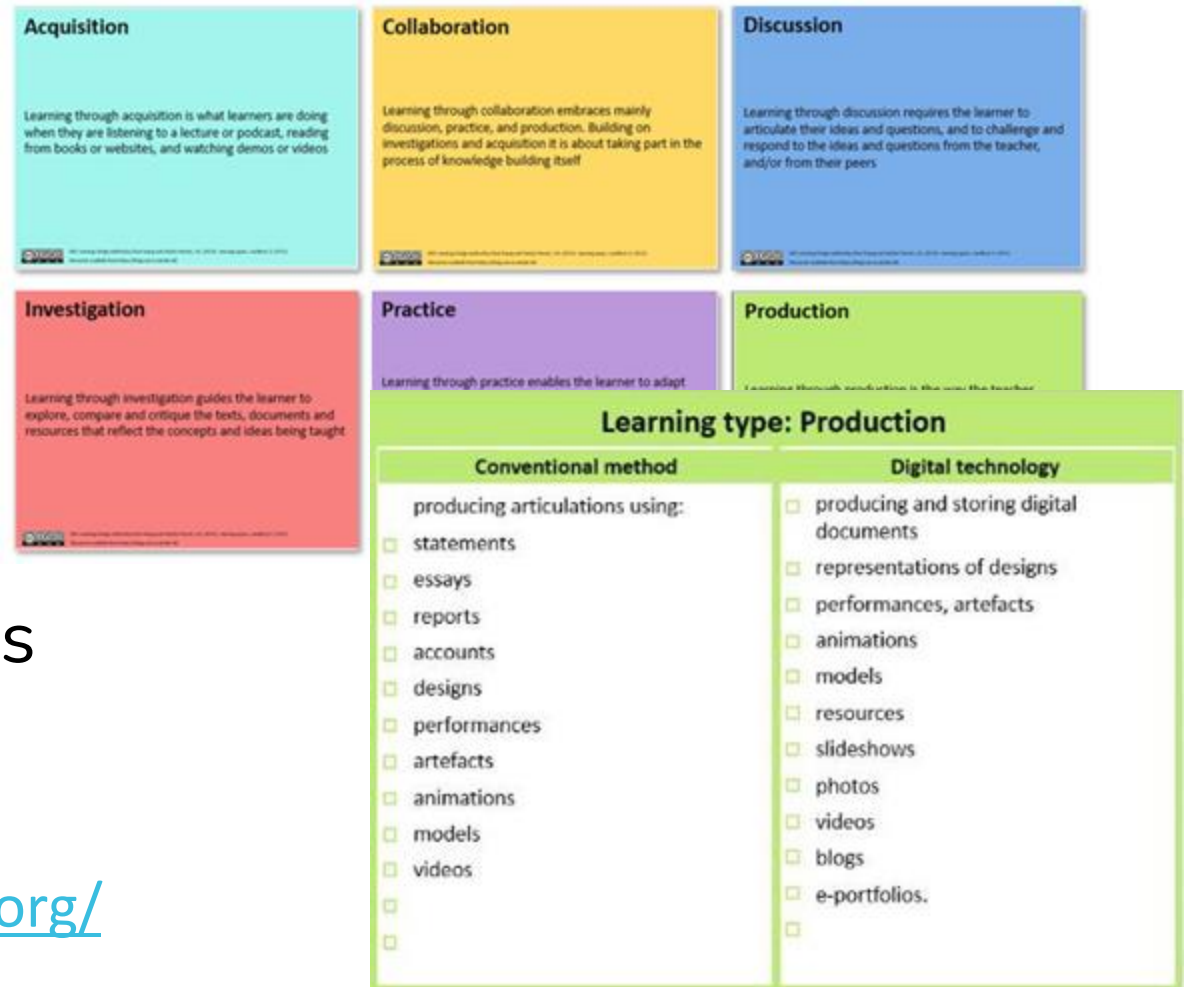


[Training analysis worksheet A & B - short version](https://moodle.learn.eosc-synergy.eu/course/view.php?id=132§ion=4#tabs-tree-start)File

<https://moodle.learn.eosc-synergy.eu/course/view.php?id=132§ion=4#tabs-tree-start>

The ABC learning design method

- Well established
- Quick and simple (1.5 hours)
- Can be done online
- Map learner journey
- Identify learning type activities
- Select specific activities



Acquisition
Learning through acquisition is what learners are doing when they are listening to a lecture or podcast, reading from books or websites, and watching demos or videos

Collaboration
Learning through collaboration embraces mainly discussion, practice, and production. Building on investigations and acquisition it is about taking part in the process of knowledge building itself

Discussion
Learning through discussion requires the learner to articulate their ideas and questions, and to challenge and respond to the ideas and questions from the teacher, and/or from their peers

Investigation
Learning through investigation guides the learner to explore, compare and critique the texts, documents and resources that reflect the concepts and ideas being taught

Practice
Learning through practice enables the learner to adapt

Production
Learning through production is the way the learner

Learning type: Production

Conventional method	Digital technology
producing articulations using:	
<input type="checkbox"/> statements	<input type="checkbox"/> producing and storing digital documents
<input type="checkbox"/> essays	<input type="checkbox"/> representations of designs
<input type="checkbox"/> reports	<input type="checkbox"/> performances, artefacts
<input type="checkbox"/> accounts	<input type="checkbox"/> animations
<input type="checkbox"/> designs	<input type="checkbox"/> models
<input type="checkbox"/> performances	<input type="checkbox"/> resources
<input type="checkbox"/> artefacts	<input type="checkbox"/> slideshows
<input type="checkbox"/> animations	<input type="checkbox"/> photos
<input type="checkbox"/> models	<input type="checkbox"/> videos
<input type="checkbox"/> videos	<input type="checkbox"/> blogs
	<input type="checkbox"/> e-portfolios.
	<input type="checkbox"/>



<https://abc-ld.org/>

ABC Learning types cards

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ABC Learning Design modified by Chae Young and Natalia Perovic, 2012-2016. Learning Types, License: CC BY-NC-SA. (2012)

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Practice

Learning through practice enables the learner to adapt their actions to the task goal, and use the feedback to improve their next action. Feedback may come from self-reflection, from peers, from the teacher, or from the activity itself, if it shows them how to improve the result of their action in relation to the goal



ABC Learning Design modified by Chae Young and Natalia Perovic, 2012-2016. Learning Types, License: CC BY-NC-SA. (2012)

Production

Learning through production is the way the teacher motivates the learner to consolidate what they have learned by articulating their current conceptual understanding and how they used it in practice



ABC Learning Design modified by Chae Young and Natalia Perovic, 2012-2016. Learning Types, License: CC BY-NC-SA. (2012)

Introduction to pedagogy and training design

Adapted from the EOSC Synergy Train the Online Trainer course
Helen Clare, Jisc & Linas Cepinskas, DANS



EOSC-SYNERGY receives funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 857647



E OSC train the trainer

Board 4.1 Preparing to teach about EOSC

EOSC train the trainer

Workspace visible

Member avatars: LB, AI, BK, CV, +19

Invite

Automation

Filter

Show menu

- Your boards
- 4.1 Preparing to teach about E...
- 4.3 Ethics and Legal Issues Rela...

ADMIN: ABC categories

- Acquisition: Listening, reading, watching (books, recordings, videos)
- Discussion: Articulating ideas and questions, challenging/responding to ideas from tutor/peers
- Practice: Learning through practice, reflection, feedback (using models, simulations, role play, scenarios)
- Investigation: Exploration,

+ Add a card

1. Meta overview of EOSC, EOSC as an umbrella

- Key learning objective: introduce EOSC topics
- Time allocation: 1 hr module activities + 1 hr pre-module reading
- Acquisition: Pre-event reading and preparation
- Discussion: what does EOSC mean to you?

+ Add a card

2. How EOSC can be integrated into research

- Key learning objective: learn how the evolving structure/services/resources serves actor groups
- Time allocation: 1.5 hrs + 1 hr pre-reading + 1h pre-investigation
- Acquisition: Pre-event reading and preparation
- Investigation: Pre-event: Explore EOSC links within learner context

+ Add a card

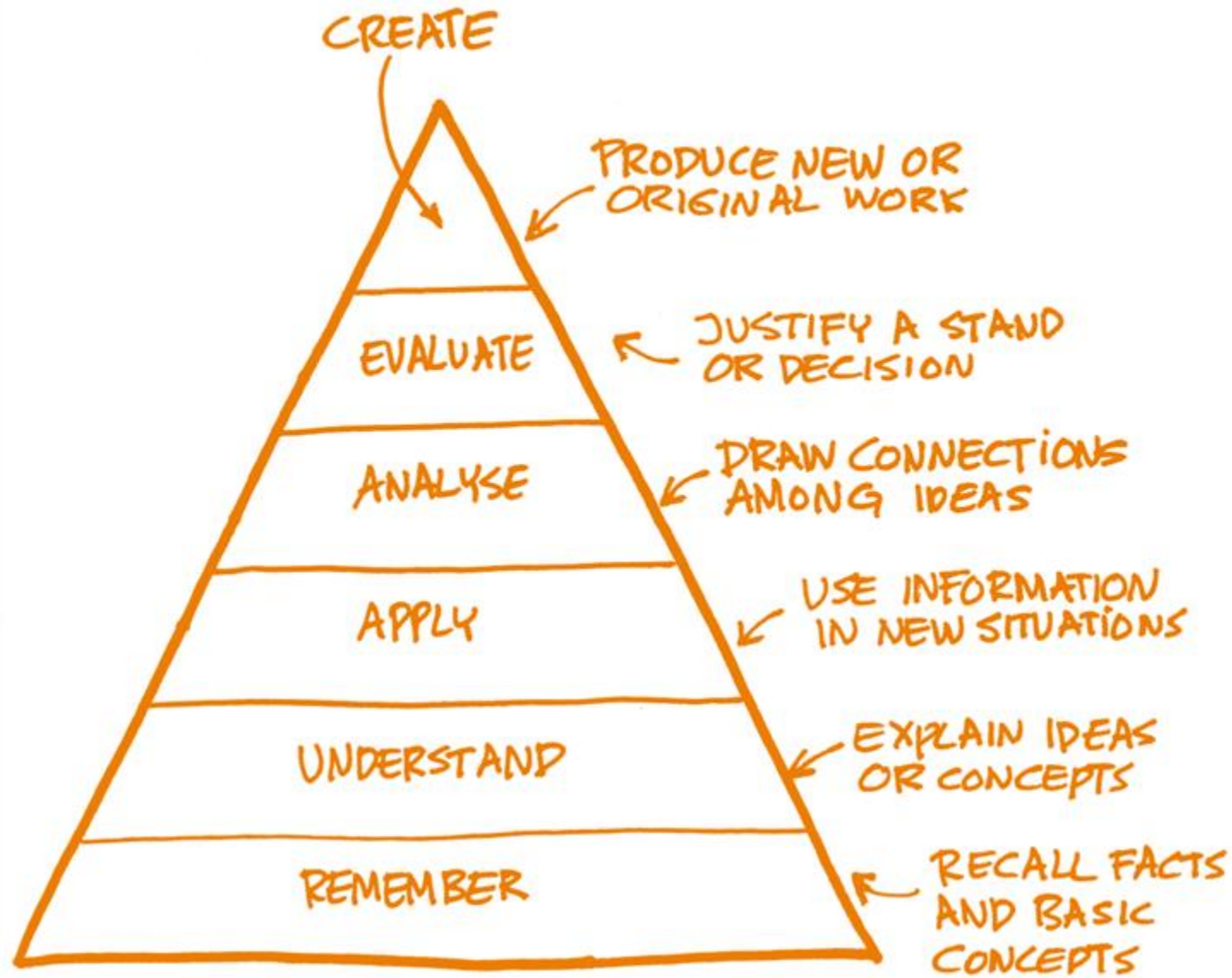
3. Answering questions EOSC

- Key learning objective: b confidence about answer questions about EOSC to groups
- Time allocation: 1h45 + 1 reading
- Resources needed: clean FAQs and sample answer table for participants to f

+ Add a card

You are a guest on these boards. To see other boards and members in this Workspace, an admin must add you as a

BLOOM'S TAXONOMY





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Adult learning theory and Knowles 6 principles of adult learning

ADAPTED FROM: May 5, 2015, Sourced from: Queensland Occupational Therapy Fieldwork Collaborative,

Part of being an effective educator involves understanding how adults learn best (Lieb, 1991). Andragogy (adult learning) is a theory that:

- emphasises the value of the **process of learning**
- uses approaches to learning that are **problem-based and collaborative** rather than didactic
- emphasises more **equality between the teacher and learner.**

1. Adults are internally motivated and self-directed	<ul style="list-style-type: none">• Graded learning -- increase complexity as the program unfolds• Lead the student toward inquiry -- before too many facts• Feedback -- regular, constructive and specific• Goals -- which they complete and "tick off"• Encourage use of resources• Vary learning styles (eg VARK)
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2. Adults bring life experiences and knowledge to learning experiences

- Draw on experiences
- Facilitate reflective learning opportunities

3. Adults are goal oriented

- Link learning to work goals
- Provide real case-studies
- Ask questions -- motivate reflection, inquiry and further research

4. Adults are relevancy oriented

- Reflection -- what they learnt, how to apply it
- Provide some choice -- to reflect individual interests

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5. Adults are practical	Students move from classroom to hands-on problem solving where they can recognise firsthand how what they are learning applies to the work context. <ul style="list-style-type: none">• Be explicit -- about how learning is useful and applicable to the job• Active participation -- try things rather than observe
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6. Adult learners like to be respected	Respect can be demonstrated by: <ul style="list-style-type: none">• Acknowledge -- the wealth of experiences• Regarding them as an equal colleague• Encourage expression -- of ideas, reasoning and feedback
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(7. Adults are pressed for time)	(from Training Principles of Adult Learning White Paper) <ul style="list-style-type: none">• Just in time• Just for me
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FOSTER

**Plan based on learning
outcomes rather than
objectives**



Learning objectives

- Describe the intentions of the instructor by stating the purpose and goals of the course.
- Focus on the content and skills important within the programme.
- May describe what the instructors will do.
- Should be specific and detailed.

Learning outcomes

Learning outcomes are statements that describe or list measurable and essential mastered content-knowledge – reflecting skills, competencies, and knowledge that trainees have achieved and can demonstrate upon successfully completing a course.

Learning outcomes (2)

Outcomes express higher-level thinking skills that integrate course content and activities and can be observed as a behavior, skill, or discrete usable knowledge upon completing the course.

Learning outcomes (3)

Outcomes are exactly what assessments are intended to show - specifically what the trainees will be able to do upon completing the course.

An assessable outcome can be displayed or observed and evaluated against criteria.

Outcomes are clear and measurable criteria for guiding the teaching, learning, and assessment process in the course

Finding a place for your training & messages in the competitive research landscape

- What methods do you, and could you, use to drive **attention** to your training activities?
- What methods do you, and could you, use to drive up **attendance** at your training activities - how can you turn **REGISTRATION** (i.e. interest) into **ATTENDANCE** (i.e. action)



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Advertising strategies: This table is an abbreviated version from [Quizlet](#)

Technique	What does this mean?	Event	Online
Loaded Words	Words with strong associations (eg University Rankings!)		
Transference	Associates positive words, images and ideas with a product and its users		
Testimonial	Endorsement by a celebrity or expert		
Bandwagon	Feel like everyone else has the product and if you don't, you will be left out.		
Snob Appeal	The opposite of bandwagon -> using the product means the consumer is better, smarter, richer and so on...than anyone else.		
Repetition	Repeats catchphrase, name or logo over and over so that it "sticks"		
Flattery	Consumer's vanity: implying smart, rich, popular people buy the product.		
Plain Folks	"people just like you" use the product.		

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Emotional Appeals	Appeals to the consumer's fears, joys, sense of nostalgia.		
Facts and Figures	Uses statistics, research or other data		
Special Offer	Offers a discount, coupon, free gift or other enticement		
Urgency	Makes you feel like you need the product right away		
Ethos	Establishes credibility or character of the company		
Pathos	Evokes an emotional response in the consumer		
Logos	Appeals to logic or reason - often have evidence and statistics		



References

- Introduction to pedagogy and training design FAIRsFAIR video https://www.youtube.com/watch?v=97aIKc_EOkk
- Link to pedagogy section of EOSC-Synergy/FAIRsFAIR course with templates <https://moodle.learn.eosc-synergy.eu/course/view.php?id=132§ion=4#tabs-tree-start>
- Open Science Training Handbook <https://www.fosteropenscience.eu/content/open-science-training-handbook>

THANKS

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