Introduction to pedagogy and training design

Adapted from the EOSC Synergy Train the Online Trainer course
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Before we start

- Our aim is to help you create the best training you can
- Meeting your aims and the needs of your learners
- We are starting from the assumption that training is the right solution!

- What makes a good / bad training experience?

Cathy Moore's action mapping workflow
https://blog.cathy-moore.com/action-mapping-workflow-at-a-glance/

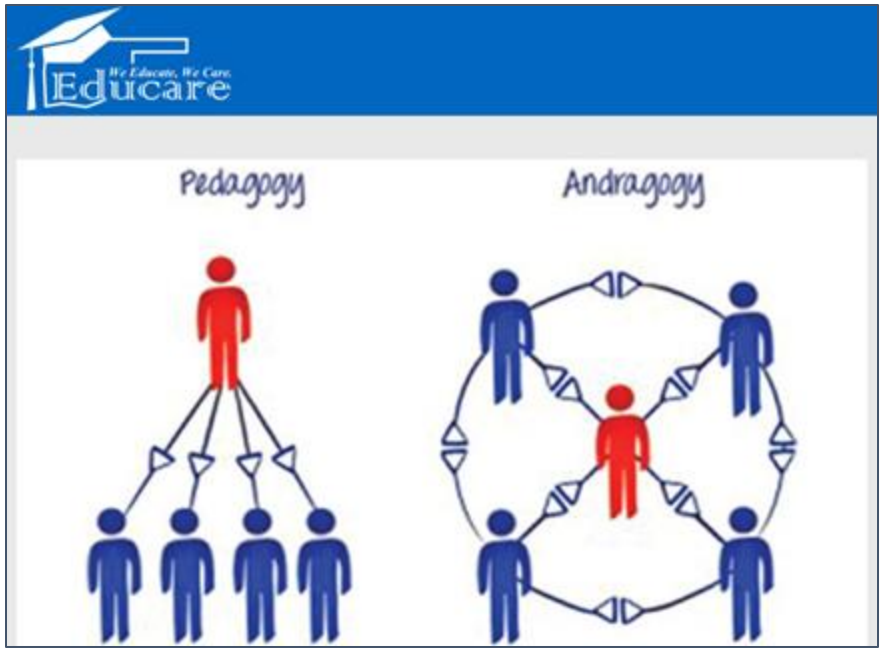
Pedagogy

“the art, science, or profession of teaching”

www.merriam-webster.com

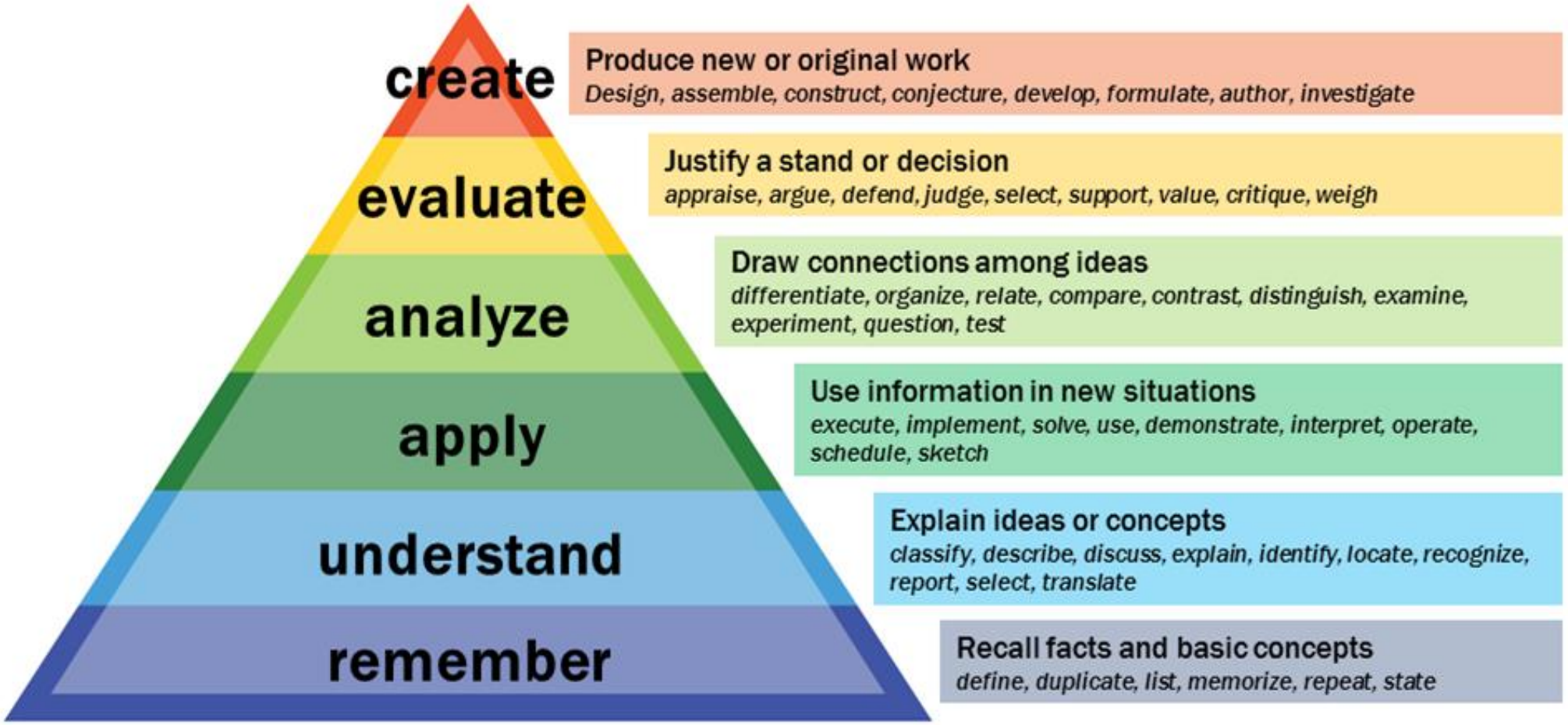
“the study of the methods and activities of teaching”

dictionary.cambridge.org

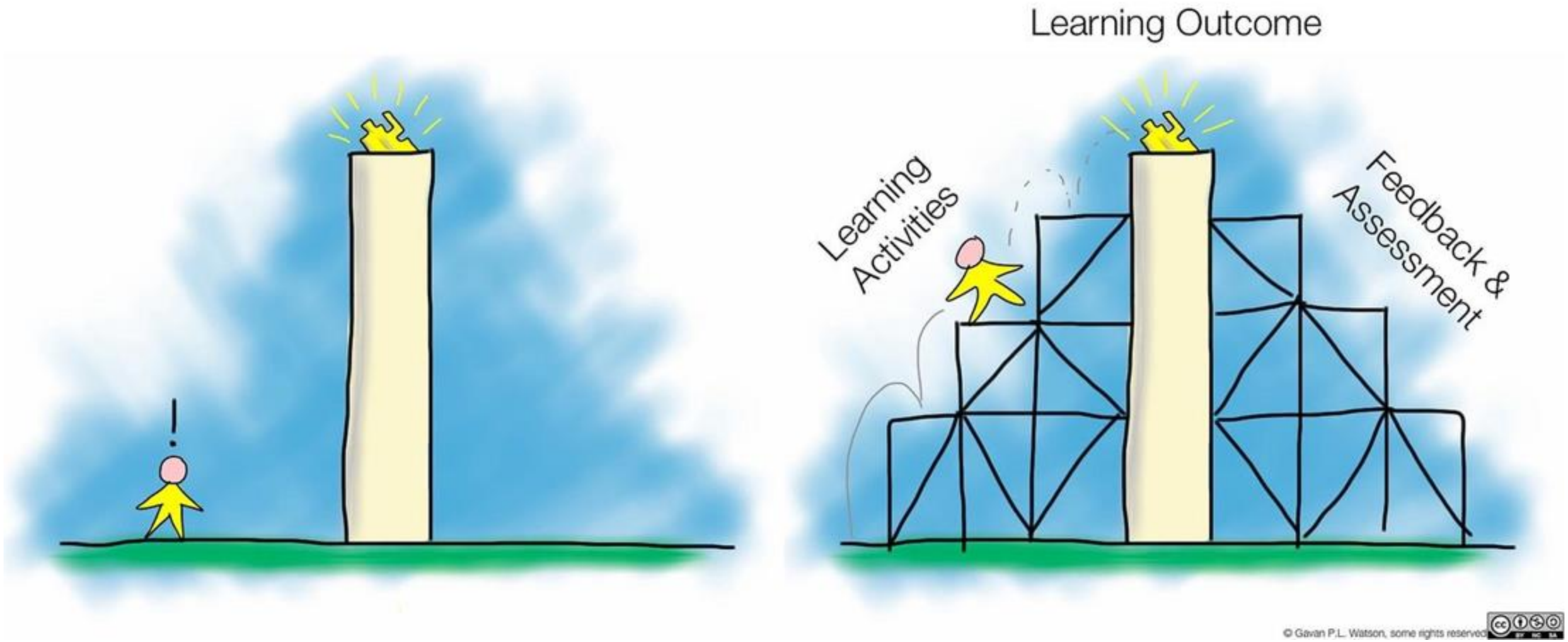


www.educarepk.com/pedagogy-vs-andragogy.html

Bloom's taxonomy



Scaffolding

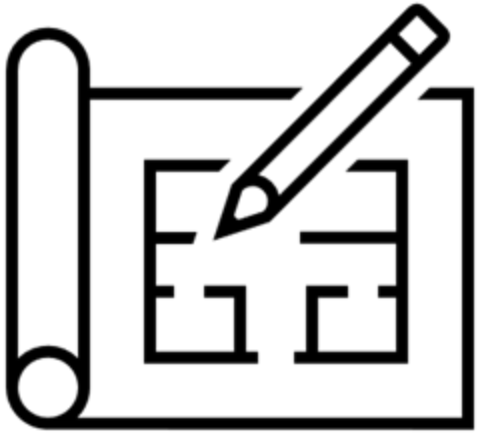


Why are you doing training?

- Teach others a topic/skill
- Encourage best use / practice
- Change attitudes
- Promote open science
- Gather feedback on services
- Build a user community…

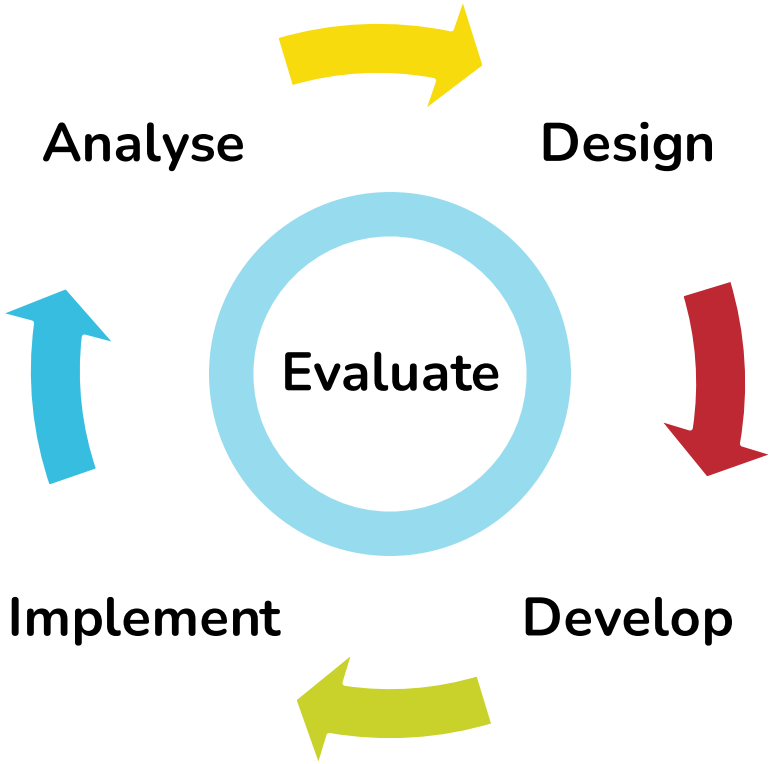
Reasons to think about design

- Make your course more effective
- Choose suitable methods and tools
- Make best use of resources
- Make materials easy to use and re-use
- Meet legal requirements
- Save yourself time
- To measure the success of your training



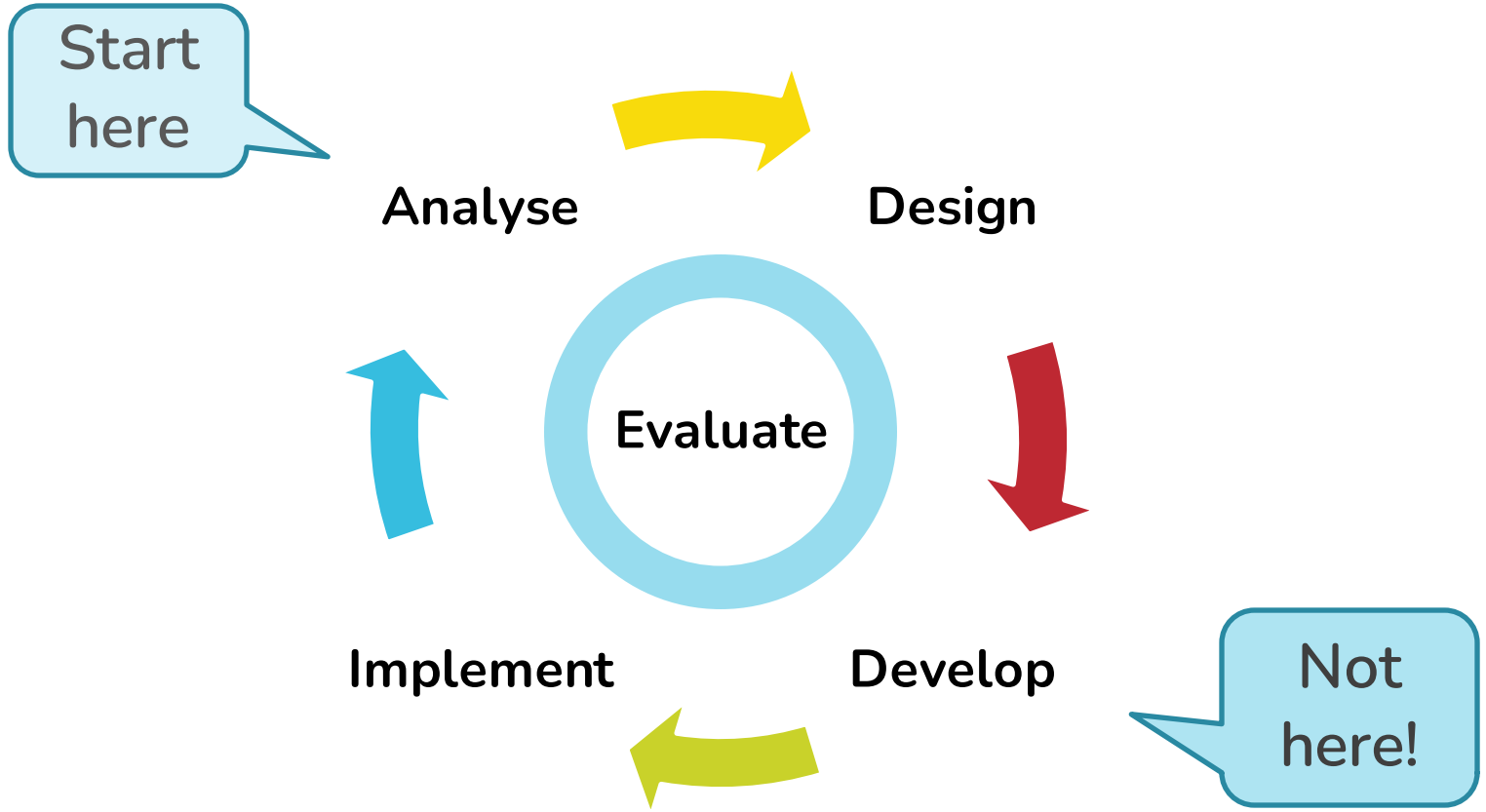
How to think about good design

- Many models available
- ADDIE gives an overarching framework
- Other models can be used to guide each stage



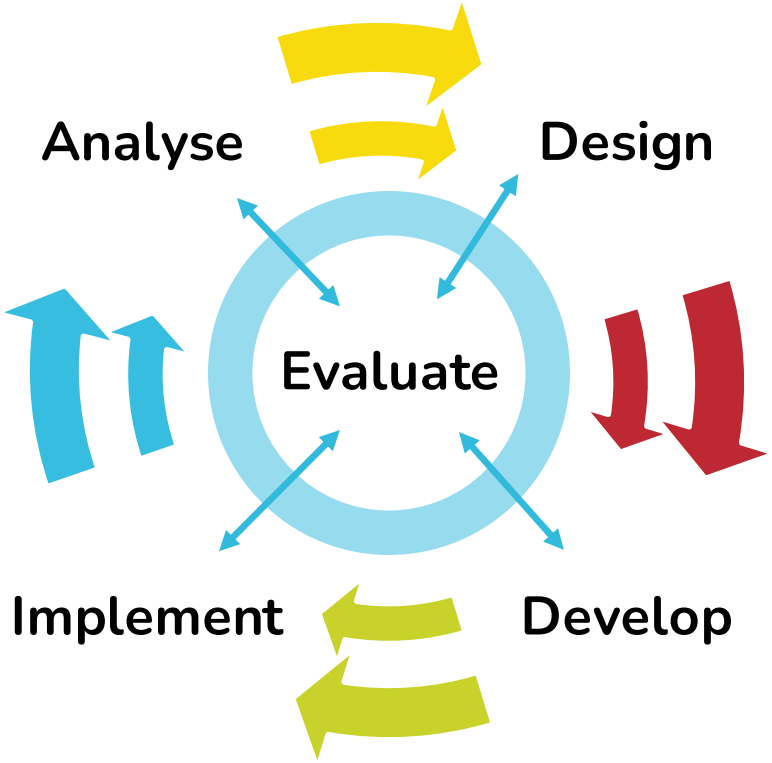
In reality

- It’s tempting to jump straight into development
- Don’t skip analysis and design



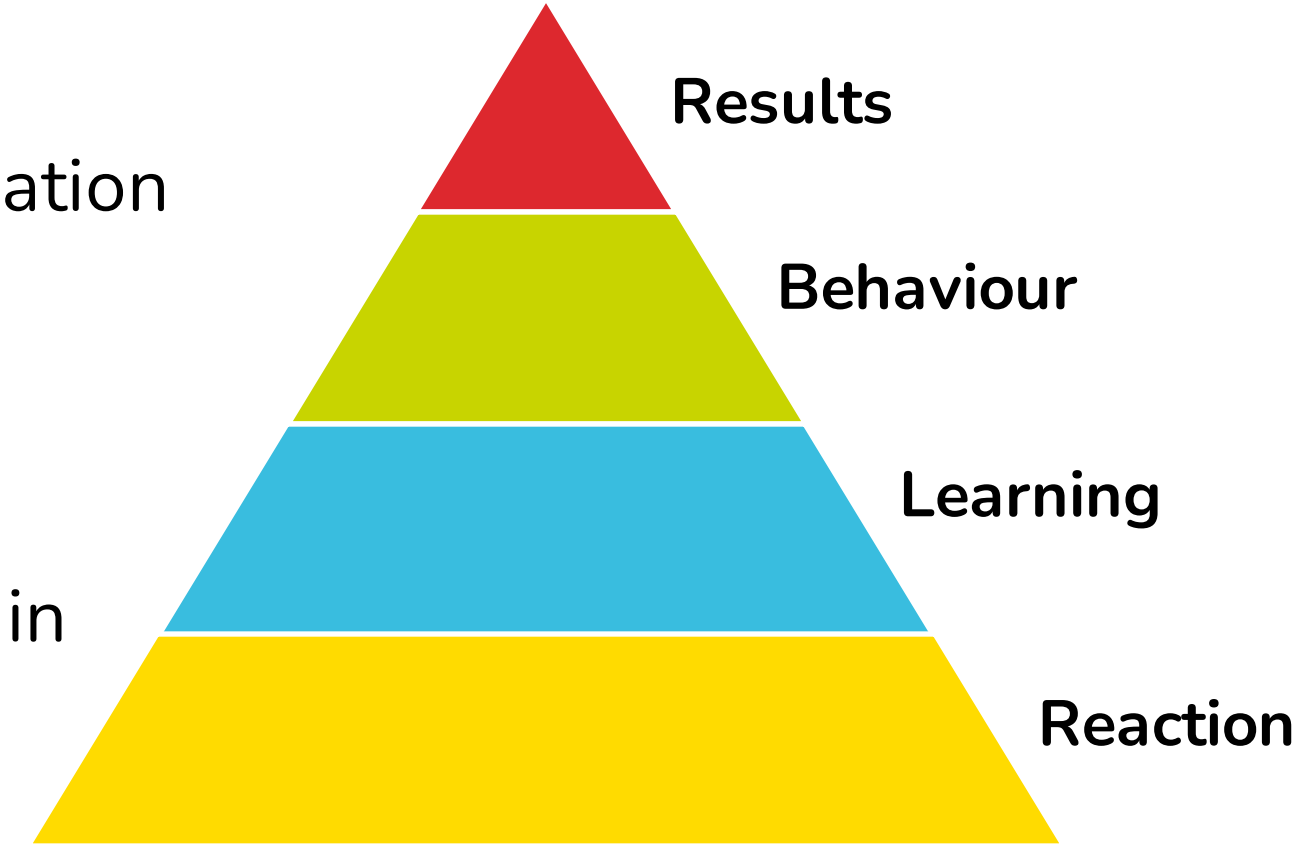
In reality

- It’s iterative
- It’s not always linear
- Evaluation at the core



Evaluation

- Different levels of evaluation
- Linked to assessment
- Needs to be considered in design, not at the end



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

Two points to remember

1. Activities should match the intended outcomes

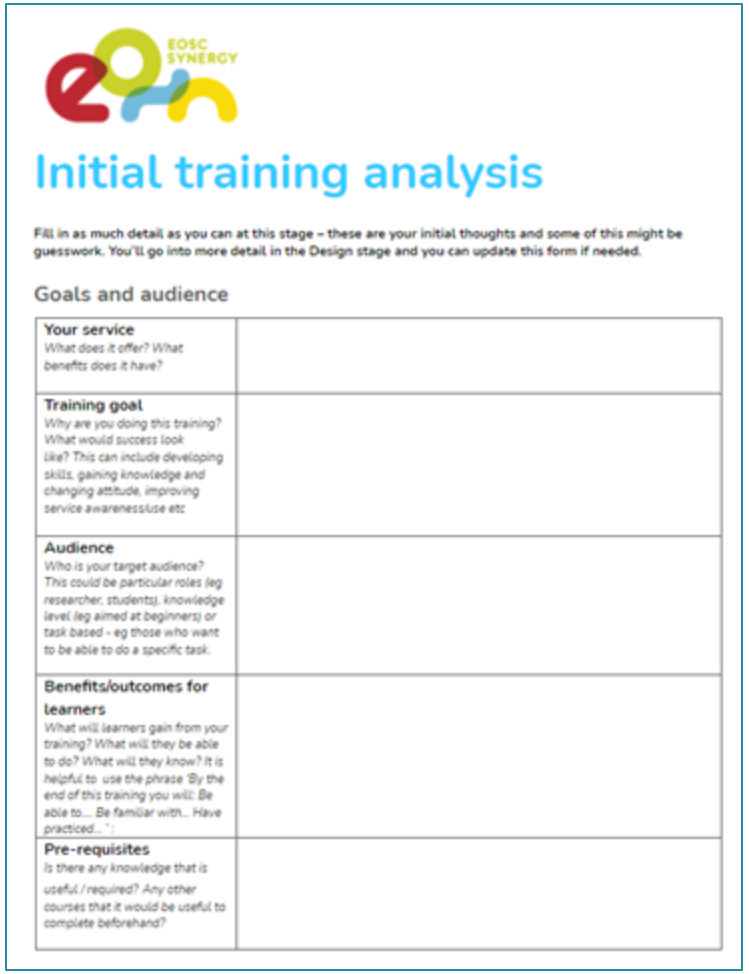
2. And be engaging and appropriate for learners

Image: Ron Carranza, https://teachonline.asu.edu/2016/05/integrating-technology-blooms-taxonomy/

Technology won’t fix poor training design

Your initial training analysis

- The goals of your training
- Topics to cover
- Your audience / learners
- Learning outcomes
- Delivery method
- Practical issues



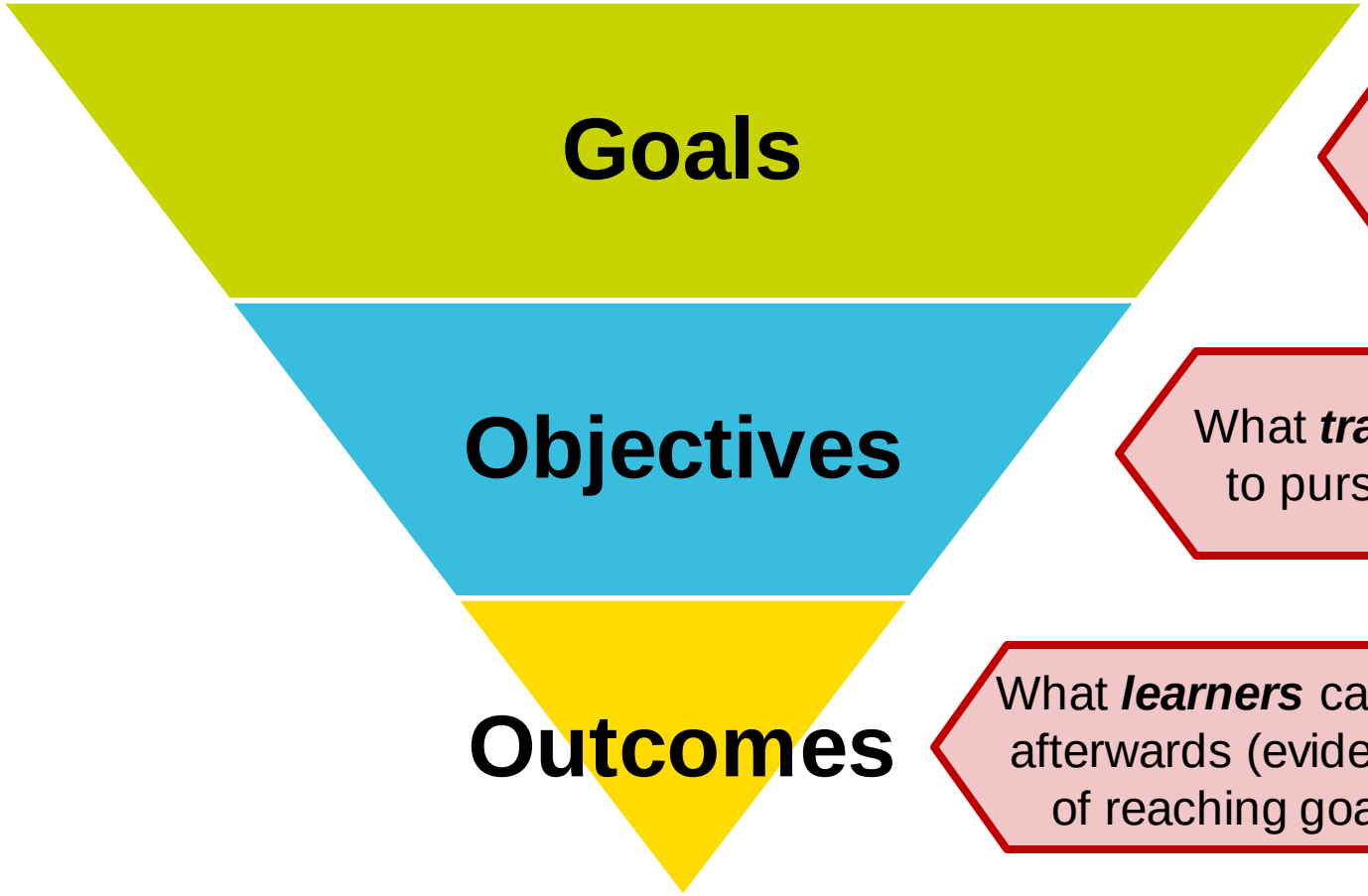
Initial training analysis

Fill in as much detail as you can at this stage – these are your initial thoughts and some of this might be guesswork. You'll go into more detail in the Design stage and you can update this form if needed.

Goals and audience

Your service *What does it offer? What benefits does it have?*	
Training goal *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*	
Audience *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.*	
Benefits/outcomes for learners *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...':*	
Pre-requisites *Is there any knowledge that is useful / required? Any other courses that it would be useful to complete beforehand?*	

Goals, objectives and outcomes



The ***big picture***

Improve data management at your university

What ***trainers*** will do to pursue the goal

- Run a series of workshops
- Raise awareness of available support services

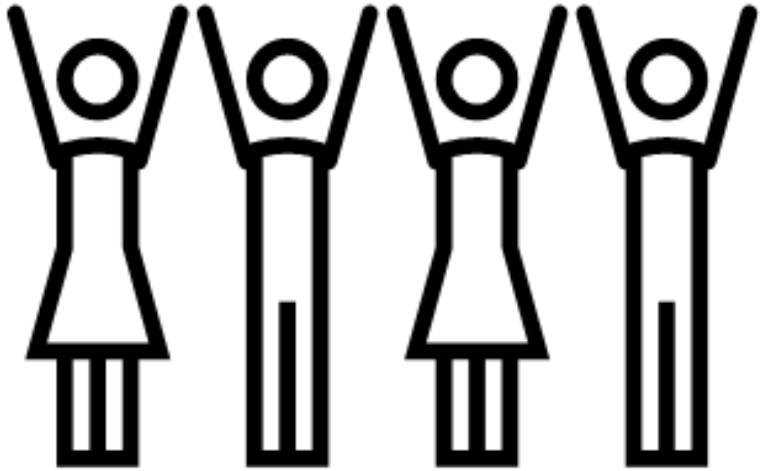
What ***learners*** can do afterwards (evidence of reaching goal)

- List the features of a data management plan
- Explain why data management is important
- Be able to create a DMP
- Know where to get support

Adapted from: http://www.drew.edu/sla/outcomes/

Your audience

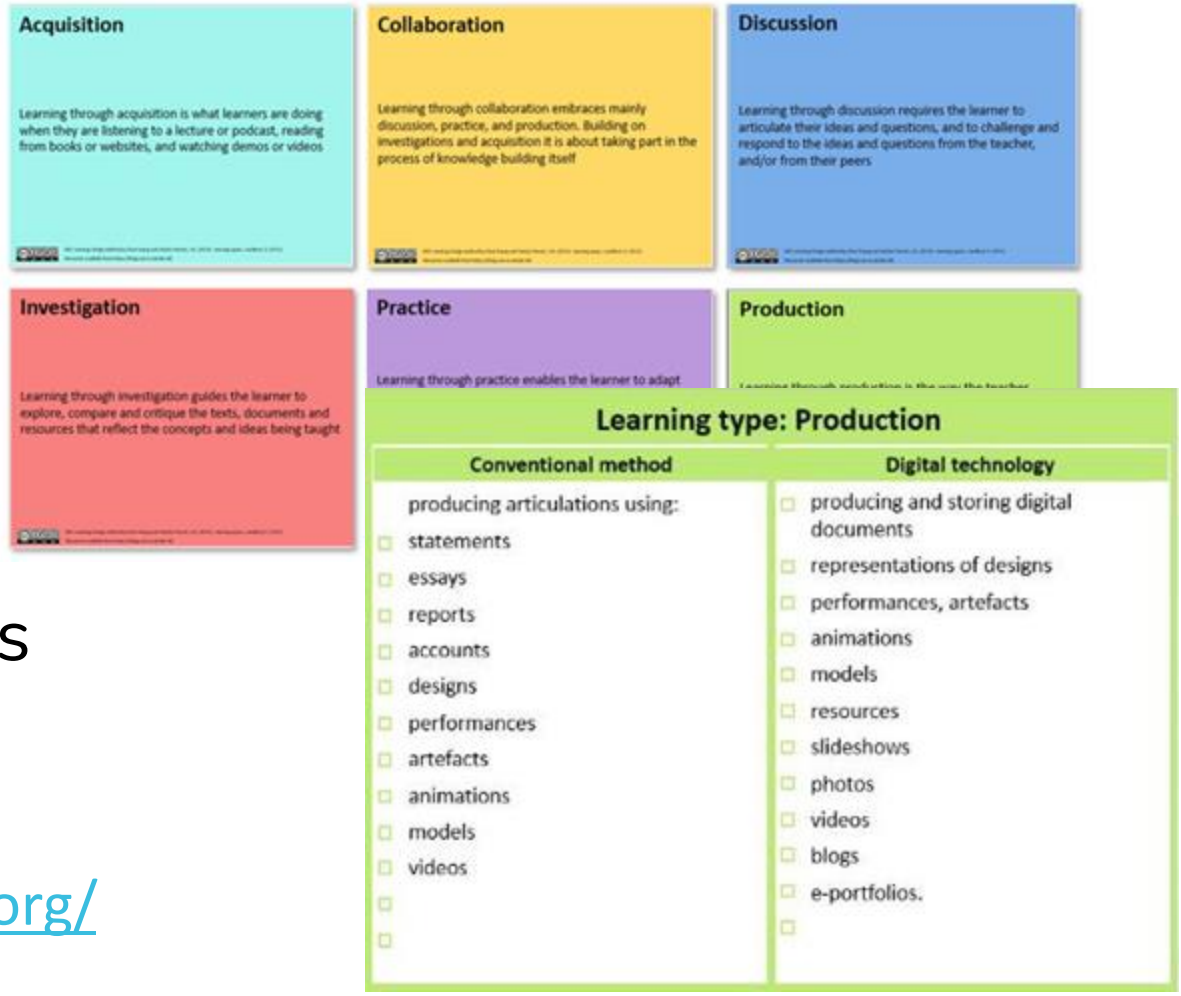
- Role, background and context
- Prior knowledge, skills and experiences
- Motivation
- Barriers / fears



The ABC learning design method

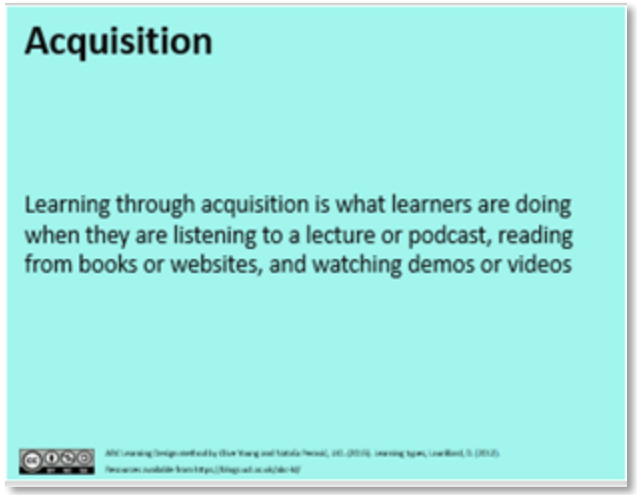
- Well established
- Quick and simple (1.5 hours)
- Can be done online

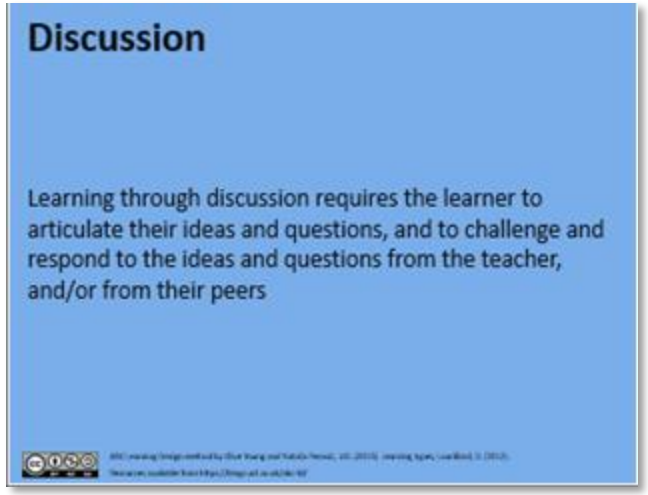
- Map learner journey
- Identify learning type activities
- Select specific activities

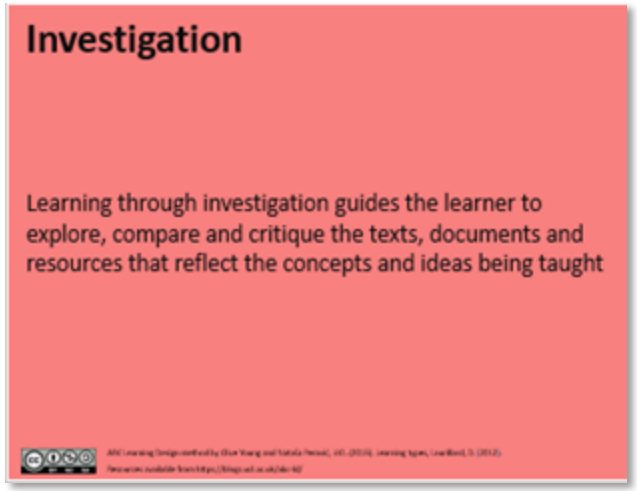


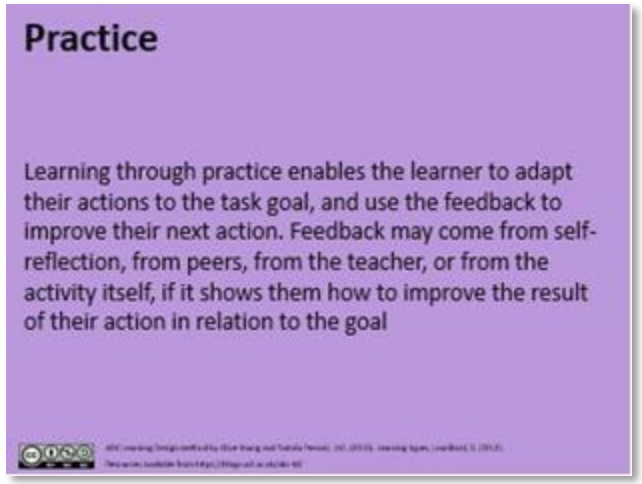
https://abc-ld.org/

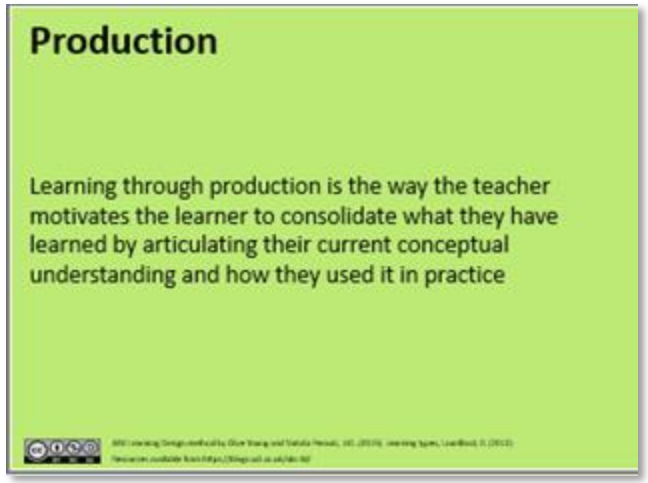
ABC Learning types cards

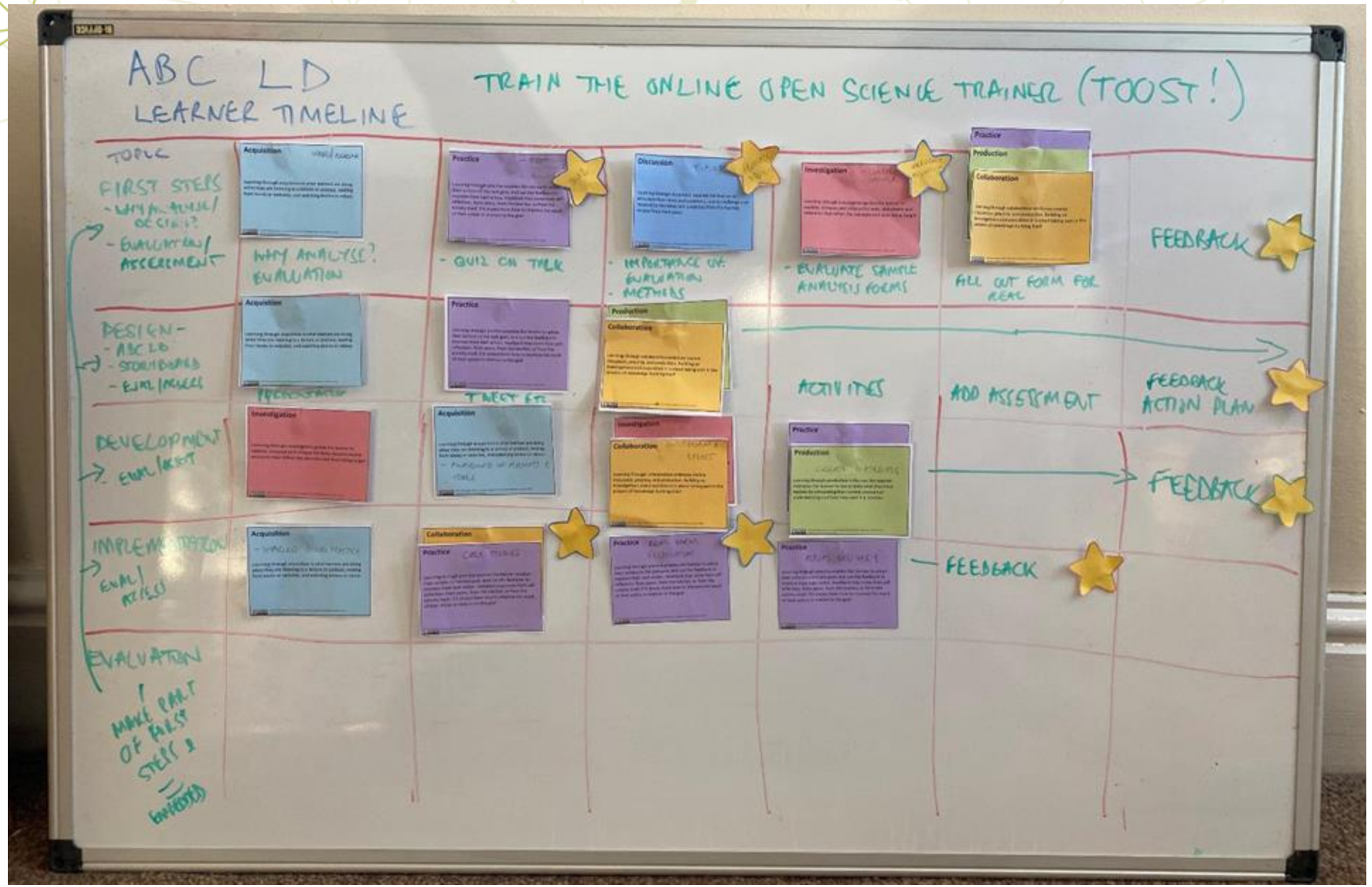











ABC LD
LEARNER TIMELINE
TRAIN THE ONLINE OPEN SCIENCE TRAINER (TOOST!)
TOPIC
FIRST STEPS
- EVALUATION/ ASSESSMENT
WHY ANALYSE? EVALUATION
- QUIZ CH TALK
- IMPORTANCE OF EVALUATION
- METHODS
- EVALUATE SAMPLE ANALYSIS FORMS
FILL OUT FORM FOR REAL
FEEDBACK
DESIGN -
- ABC LD
- STORYBOARD
- EVAL/ASSESS
ACTIVITIES
ADD ASSESSMENT
FEEDBACK ACTION PLAN
DEVELOPMENT
EVAL/ASSESS
FEEDBACK
IMPLEMENTATION
EVAL/ ASSESS
FEEDBACK
EVALUATION
MAKE PART OF FIRST STEPS &
ENFORCED

Design your training in easy steps

- **Why?** To understand the basics of developing a training course (face-to-face/online) and practise designing it.
- **What?** 2 worksheets with practical questions from the initial training analysis and the ABC learning design model.
- **How?** Individually or with colleagues.
- **Duration**: 40-60 minutes

Let’s start: an initial training analysis

Worksheet A - Initial training analysis (20 min):

- Work through the worksheet by writing max. 2-3 sentences for each question.
- Focus on **title/topics**, **goals**, **audience**, **content** and **benefits/outcomes for your learners**.

Let’s continue with a design

Worksheet B - A learner’s journey (20 min)

- Think of the **content** and **learning activities** you would like to include in your training (topics/sessions, learning activities, duration).
- Indicate, the **duration** and moments of **assessment**, if possible.
- Write down your choices in **short sentences/key words.**
- If needed, go back to Worksheet A for the **content section** of your future course.

For further information:

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