

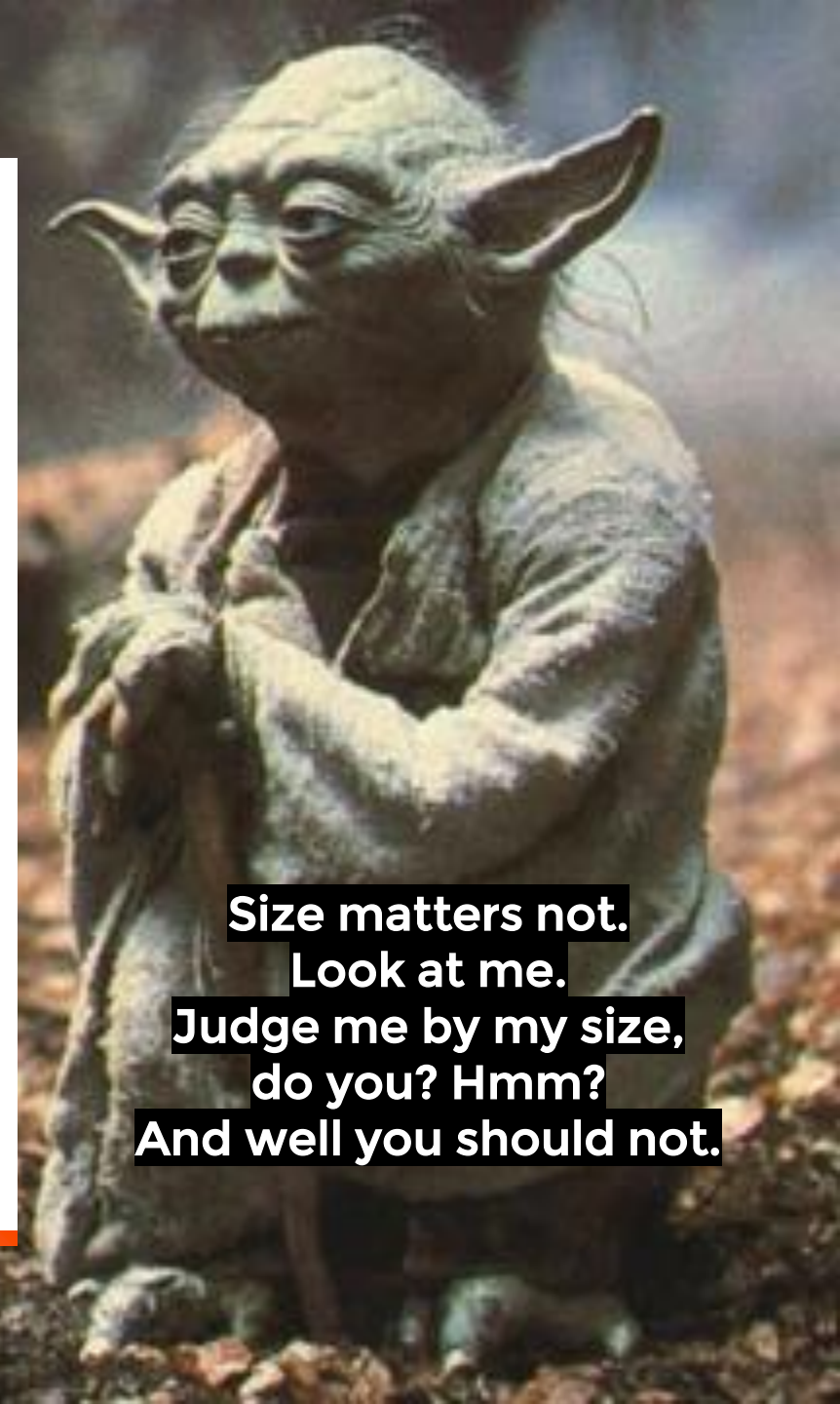


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MICRO-credentials for life-long learning and employability:

**MICRO-CASA**

[www.microcasa.eu](http://www.microcasa.eu)



**Size matters not.  
Look at me.  
Judge me by my size,  
do you? Hmm?  
And well you should not.**

[www.microcasa.eu](http://www.microcasa.eu)





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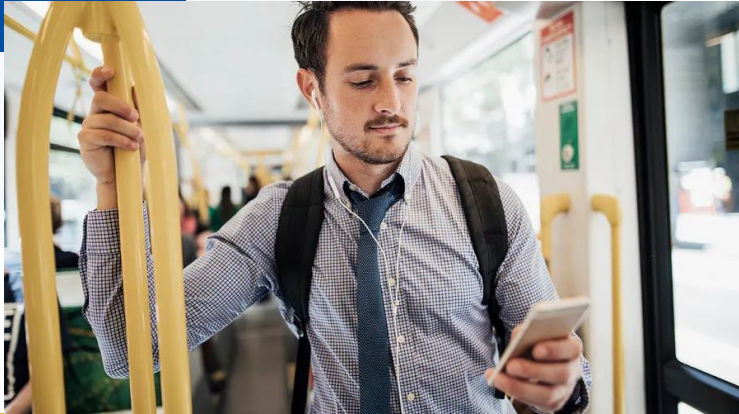
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# Micro-learning - A new hope



## Characteristics of Micro-courses

- On demand, learner-driven and self-paced: Micro = 5 - 10 mins learning nuggets
- Highly-contextualized (e.g., flash-cards)
- A multitude of micro-moments of learning
- Learning by Modeling: Demonstration Videos
- Testing and Feedback for Learning: The central role of assessment (e.g., tools like Quizzer, Quizlet)
  - Learner activation
  - Immediate and personalized feedback
  - Personalization of the learning experience
- What you test is what you get: Micro-Certificates

## References

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- Liu, H. (2020). Design and Application of Micro course in Fundamentals of Computers. *International Journal of Emerging Technologies in Learning (Ijet)*. <https://doi.org/10.3991/ijet.v15i11.14523>
- Shail, M. S. (2019). Using micro-learning on mobile applications to increase knowledge retention and work performance: A review of literature. *Cureus*. <https://doi.org/10.7759/cureus.5307>
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# Macro-learning

## The University strikes back



### The Ideal

- Serving a common, public good, promoting social justice
- Building knowledge, wisdom, and personality



### The Challenge

- Often self-serving and self-centered
- Often disconnected from learners' and society's needs

# Micro & Macro

## The return of the constructivists

- 01 “There is nothing more practical than a good theory” – rediscovering the relationship between knowledge and practice
- 02 Even big educational goals start with small first steps
- 03 Microcredentials require trustworthy institutions



### Personal Development

Developing one's potential through reaching Micro & Macro Learning Goals



### University Development

Reaching out to new competencies, audiences, and markets



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# Co-Design for Micro-learning

With MC CoDe-Graph – a graphical language





# Design Principles for Micro Learning

## 01 Shift focus

away from content, course structure, and extrinsic awards  
to questions, moments of learning, and intrinsic motivation

## 02 Agile and Mobile

Prepare for data-driven expansion of features that work rather than including any feature that is available



# Why Co-Design?

Involving stake holders (teachers, learners, ...) in the design process



## The Goal

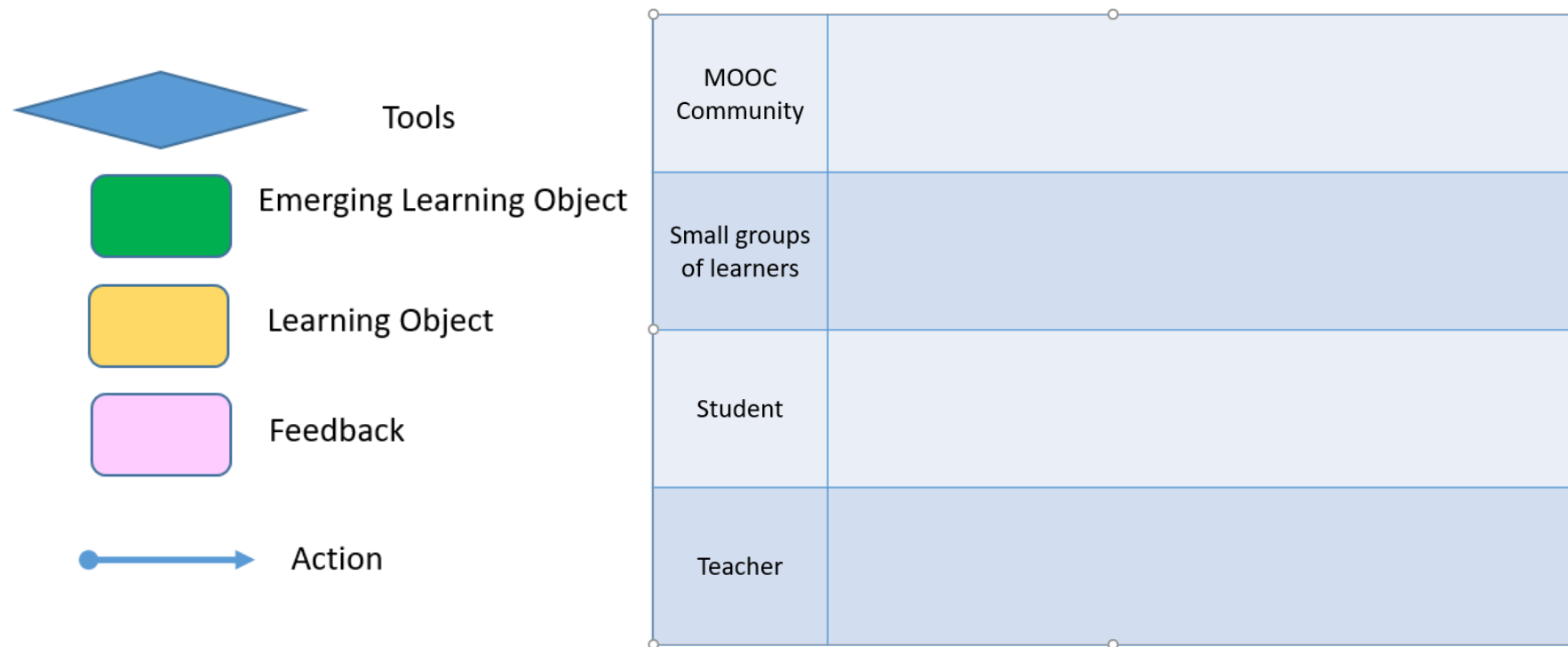
- Increasing acceptance and engagement
- Combining practical and evidence-based knowledge



## The Misunderstanding

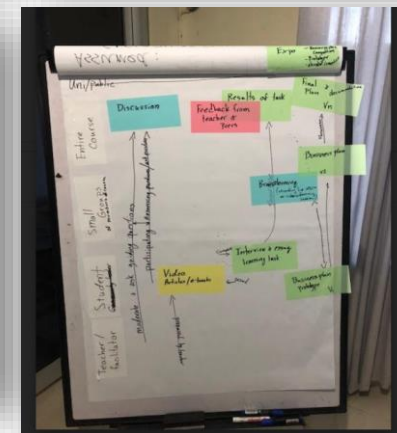
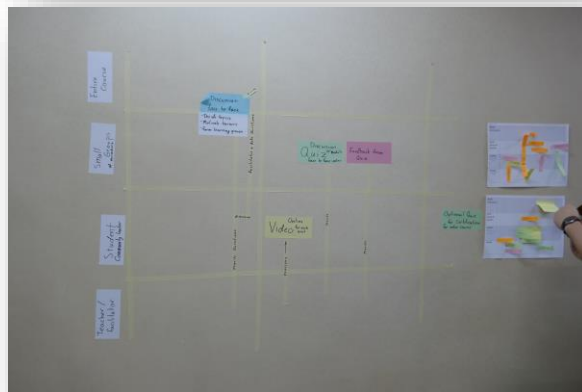
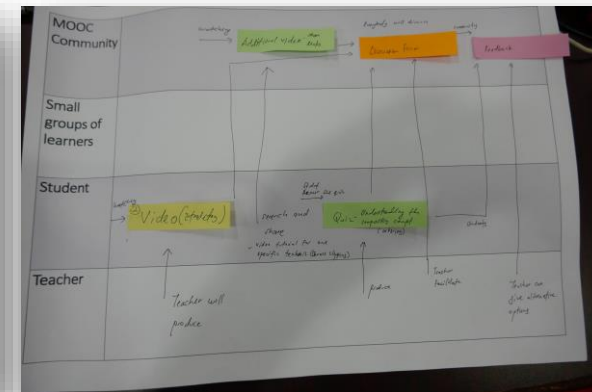
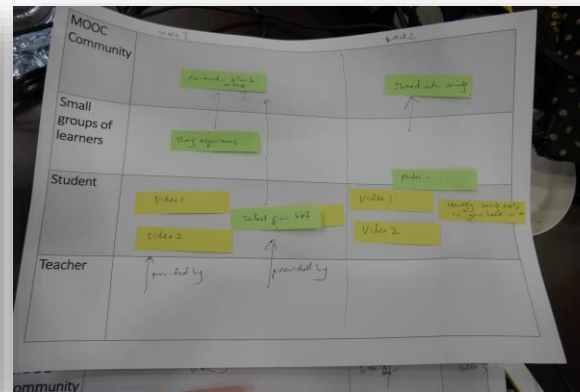
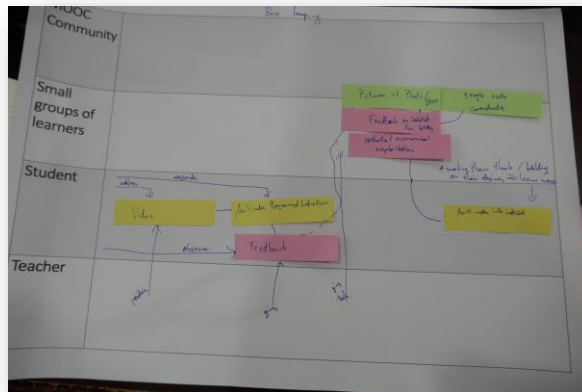
- Co-Design = basic democracy?
- Co-Design is a highly facilitated process with unequal expertise and roles

# CoDe-Graph: Facilitating MOOC co-design with a graphical language

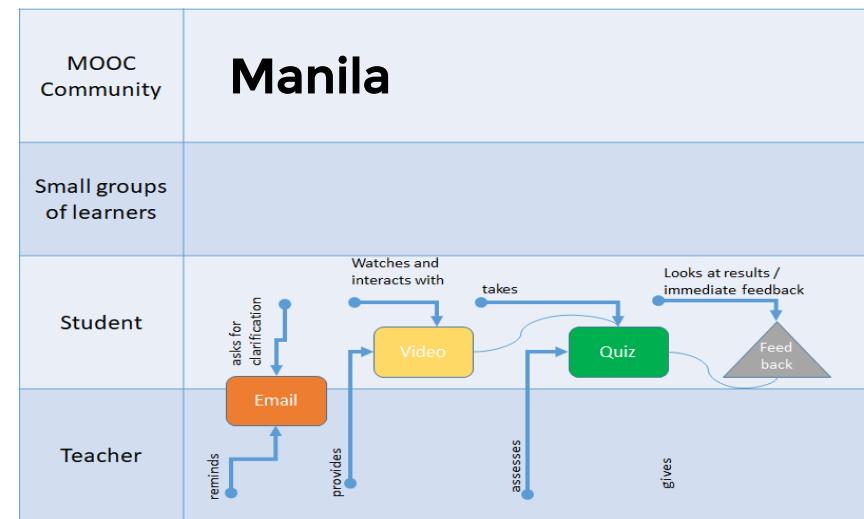
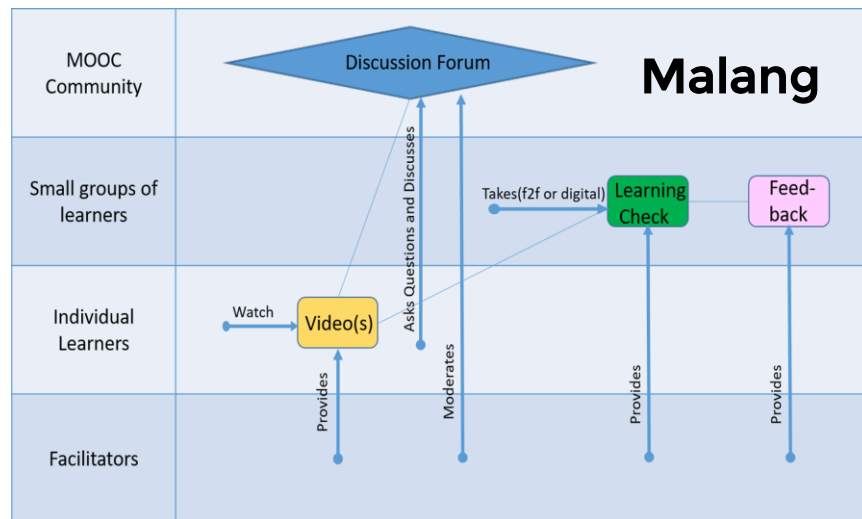
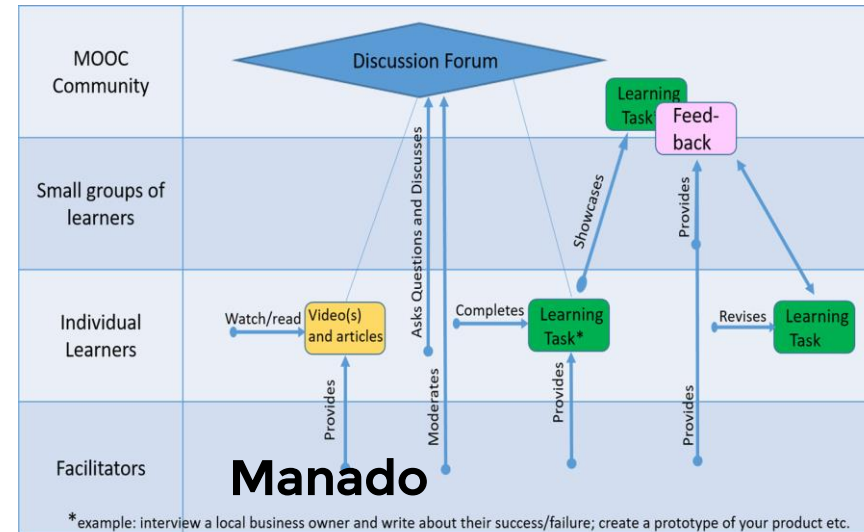
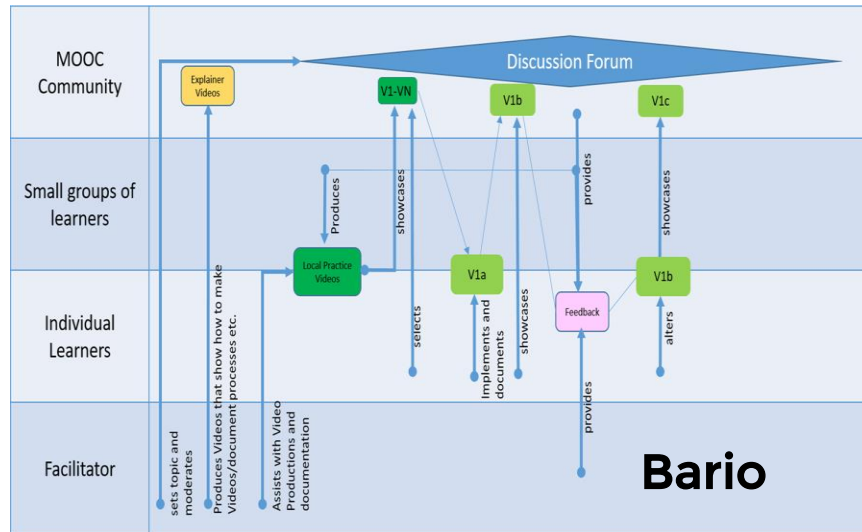


(Dillenbourg, 2015; Weinberger et al., 2007; 2010; Weinberger & Kolling, 2018)

# CoDe-Graph in different contexts in the precursor project Competen-SEA



# Outcomes of Co-Design





# Towards MC CoDe-Graph

## CoDe-Graph for Micro-courses






- Shifting focus from a Co-Design Language for MOOCs to a Co-Design Language for Microcourses
- De-emphasizing social levels of learning
- Centering on assessment and feedback (rather than ELOs)
- Branching and personalization of learning paths
- System-supported - automatized



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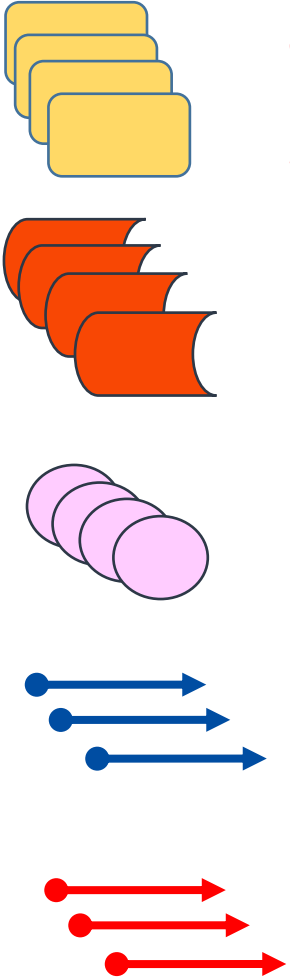


# MC CoDe-Graph: A graphical Co-Design Language

-  Learning object (provided learning materials)
-  Assessment (graded tests & ungraded tests)
-  Feedback (teachers, peers, learning environment)
-  Activity from learner
-  Activity from learning system

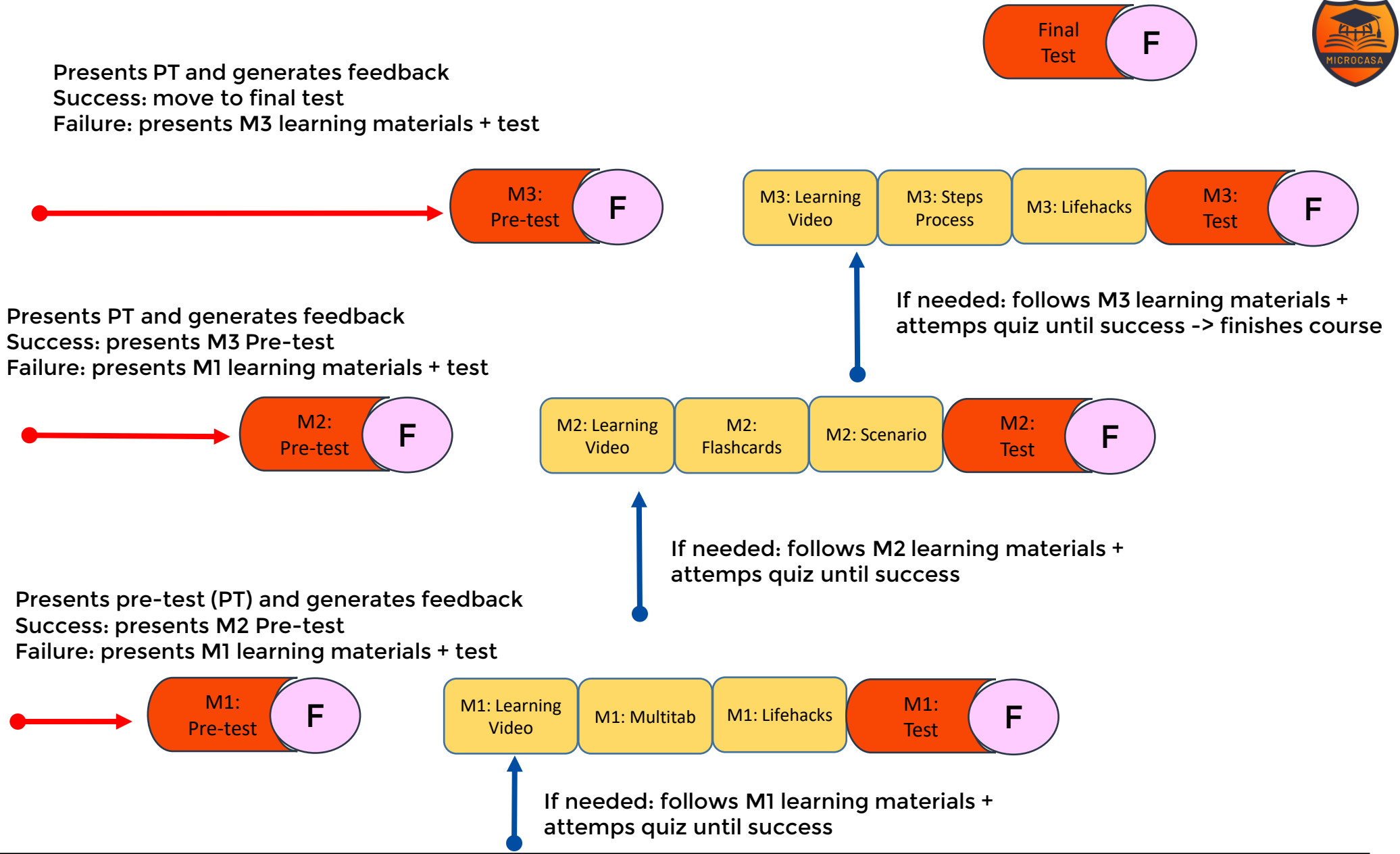
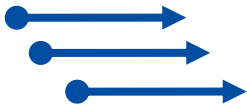
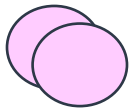
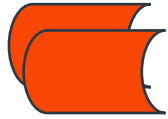
Micro-course

Micro-Course



Learner

Micro-Course





# Let's try MC CoDe-Graph



## Think of a topic of your choosing

- Make maximum use of branching through assessment
- Consider and spell out different formats
  - flash cards
  - tips sent to the learner through push notifications
  - special content curation tools
  - various learning resources including documents or media such as videos
  - provisions for learning competitions
  - or even coaching features

3 min  
**1. Download the template**

15 min  
**2. Develop a Micro-Course**

3 min  
**3. Save & Upload design**

5 min  
**4. Fill out usability survey**



## Template

<https://tinyurl.com/sdzmu9rk>

## Design

Use your laptop and save the file (give it a name)

## Share

<https://tinyurl.com/yx5j4x zr>

Or E-Mail to:  
[arminweinberger@gmail.com](mailto:arminweinberger@gmail.com)

## Help us

<https://tinyurl.com/mpd7n5tv>

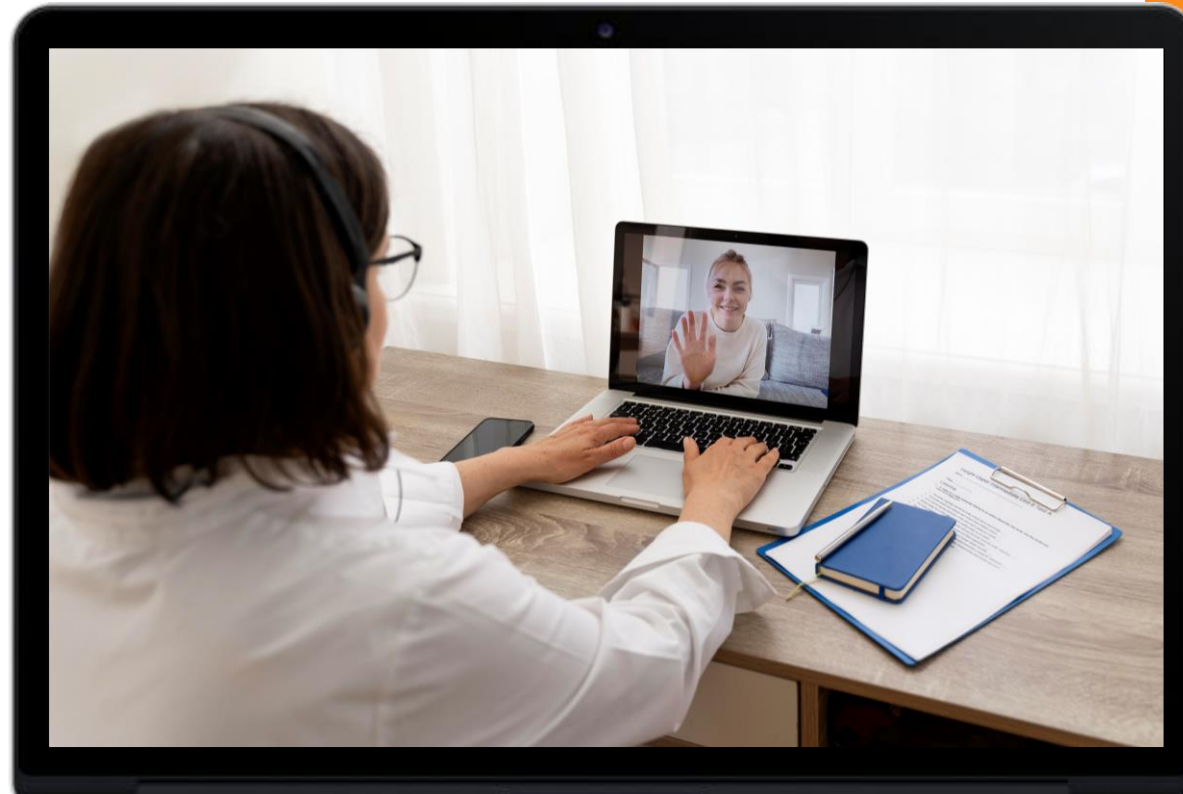
# Example Microcourse on Study Coordination

## Designing and Using

Design of presentation of material completed using **Articulate Rise 360** (any presentation design software that meets the requirements of the learning management system will work)

Learning host site is **Moodle**

(any off the shelf learning management system can be used)



## Why two systems?

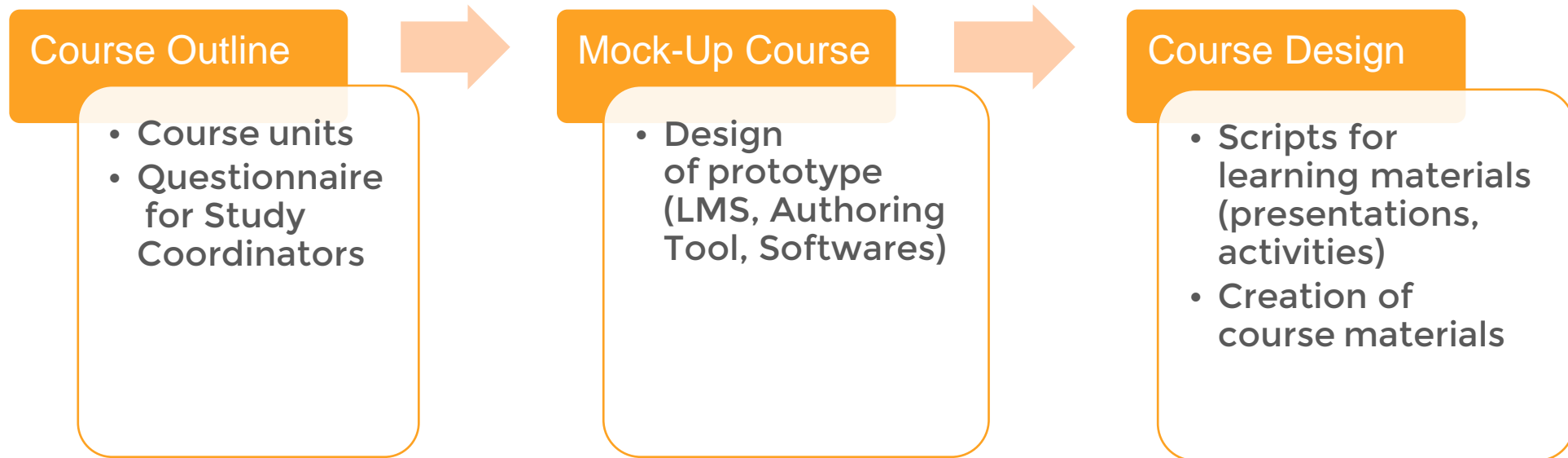
**Learning Management System (LMS)**

Hosts learning materials, provides student-instructor interface, and manages users.

**Authoring tool**

Enables the copyright-conform creation of responsive learning units with design templates and libraries of usable images, sounds, and video.

# Study Coordination Microcourse – Design Process



# What is Moodle?

Moodle, is a free online learning management system (LMS) that allows educators to create and share dynamic digital learning opportunities. Moodle comes with many standardized features but can be customized to fit educators' needs. For more information you can go to [moodle.org](https://moodle.org).

- ◇ [Teacher quick start guide](#)
- ◇ [Admin quick start guide](#)
- ◇ [Installation quick start guide](#)

# Moodle Features

- ❖ Easy to use interface for desktop and mobile devices (Apps available for IOS and Android).
- ❖ High degree of compatibility including support of a many external resources (H5P, SCORM, and other formats)
- ❖ Features include capacity to create and grade
- ❖ In-depth and well-curated help pages



**Customise** your site design


<https://docs.moodle.org/39/en/index.php?curid=21308>

# Articulate Rise 360

- Web-based authoring tool to create fully responsive courses working on all devices
- **Features**
  - Intuitive User Interface requires minimal learning curve
  - Multimedia learning content: Videos, Activities (Flashcards), Quizzes
  - Various customizable templates to choose from (1.000+)
  - **Downside:** Less customizable than other e-learning authoring tools (Alternative: Articulate 360 Storyline)

# Example: Articulate Rise 360

RDER + Add Scene

Scene 1 

Communication Tasks

here! I need you to reply to applicants that have ...


There are couple of applicants that have been rejected...

Scenario End

**ADD CONTENT**

### Responses


**01** I understand your disappointment. While I can't share all the specifics, our decision is based on a thorough evaluation of applicants' qualifications.

 Happy ▼

**Feedback:**  
That's correct. The response is empathetic towards the applicant.

Go to: Next in Scene ▼  Try Again


**02** Our decision is final. There's no need for further discussion.

 Angry ▼

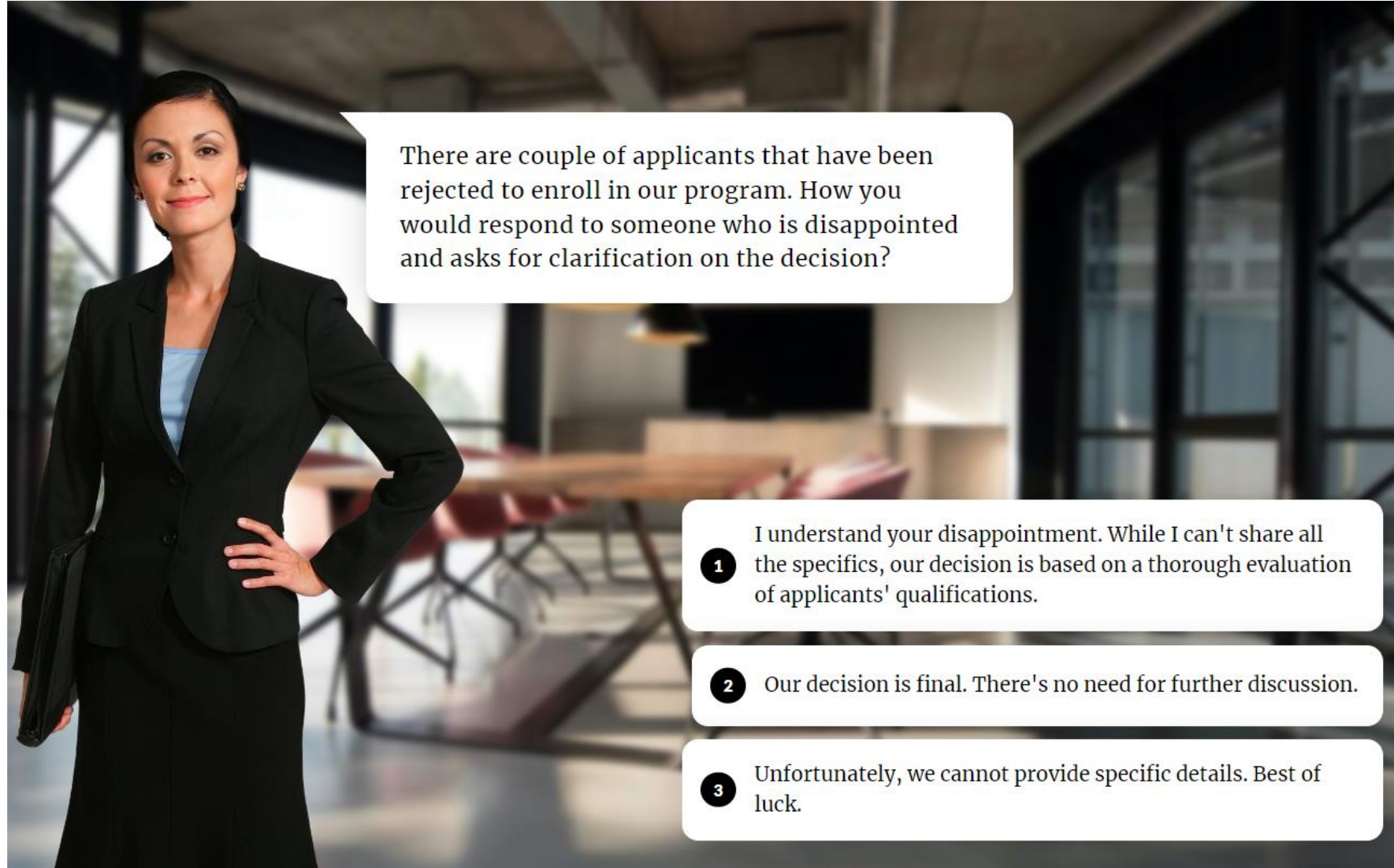
**Feedback:**  
A harsh tone is not appropriate for a study coordinator.

Go to: 1.1 ▼  Try Again

**03** Unfortunately, we cannot provide specific details. Best of luck.

 Disappointed ▼

# Example: Articulate Rise 360

A woman in a black business suit stands in a modern office setting, holding a black folder. She is looking towards the camera with a slight smile. The background shows a blurred office interior with tables and chairs.

There are couple of applicants that have been rejected to enroll in our program. How you would respond to someone who is disappointed and asks for clarification on the decision?

- 1 I understand your disappointment. While I can't share all the specifics, our decision is based on a thorough evaluation of applicants' qualifications.
- 2 Our decision is final. There's no need for further discussion.
- 3 Unfortunately, we cannot provide specific details. Best of luck.



# Export Articulate Rise 360 Course

## Sharing course with students

- ◇ Upload on Moodle or another LMS
- ◇ Enables the tracking of student's data (quiz responses)
- ◇ Course exported as SCORM 1.2

## Sharing course as a portfolio

- ◇ Upload on a cloud-service (Google Cloud or Amazon Web Services)
- ◇ Promotes the course as a portfolio
- ◇ Course exported as a Web-Folder

# Let's get an impression of the example micro-course

## How does microlearning feel?

- Think Pros and Cons
- What would you think are design principles of micro courses?

3 min  
**1. Start the course**

15 min  
**2. Engage in the course**

5 min  
**3. Fill out survey**

15 min  
**4. Let's discuss**

### Address

<https://tinyurl.com/3ddakbr6>

### Learning time

Use your laptop

### Help us

<https://tinyurl.com/29mavt84>

### Share

<https://tinyurl.com/bdh4zrf6>

# Let's collect Design Principles for Micro courses

## Challenges

- Add a challenge
- Another one
- Challenge 3
- 4
- 5

## Potentials

- Add a potential
- Another one
- Potential 3
- 4
- 5

## Title Here

- Example 1
- Example 2



## Title Here

- Example 1
- Example 2



## Title Here

- Example 1
- Example 2



## Title Here

- Example 1
- Example 2



## Title Here

- Example 1
- Example 2



## Title Here

- Example 1
- Example 2





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# Thank You

For Your Participation