



EARTHE

Activity 2

Digital toolkit for innovative curriculum and methodological development

Module - Problem solving

Method – Rapid prototyping

Class activities

Module 4 – Problem Solving

Class activity 1. - Paper Prototype Sprint

Related method: *Rapid Prototyping*

Target group

Age: Adults (20+)

Gender: All genders

Level of studies: Any practical background preferred (design, training, project management)

Status: Employed / unemployed / in transition

Fewer opportunities: This activity can be beneficial for groups with limited access to digital design tools. It might be useful for educators and trainers who want a fast way to convert ideas into tangible, testable forms.

Learning outcomes

After finalising the activity, learners will be able to:

Produce a low-fidelity prototype quickly to represent a service, tool or learning module.

Use simple user-feedback techniques to identify major usability/feasibility issues.

Prioritise improvements for the next iteration.

Duration

75 minutes

Materials and resources

Paper, cardboard, sticky notes, scissors, tape, markers, Simple user scenario sheets (one per prototype), Observation checklist for testers, Tables/workspaces for small teams

Activity description



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Within this activity teams are expected to build a quick paper prototype (e.g., a printed flow of an online course, a paper mock-up of a learner checklist), and then run short user-tests and record learnings for iteration.

Detailed Implementation Steps

Introduction

Explain prototyping purpose: fail fast, learn fast. Show two-minute example of a paper prototype. Provide a user scenario (e.g., a 55-year-old learner with limited digital skills needs a simple module).

Main activity

Each team focuses on developing an early, simplified version of a single feature or module of a product or system. The goal is to create a working example that can be tested and refined quickly, rather than building the entire solution at once. For example, a team might prototype one key function or interactive part of an application, such as a step in a learning activity or a specific tool within the platform.

Teams create paper mock-ups or clickable paper flows. Facilitator encourages rapid decisions, not polished outputs.

Teams test and improve their ideas quickly by exchanging prototypes with another group. Testers follow a specific scenario and are encouraged to speak aloud their thoughts as they interact with the prototype, giving insight into their decision-making and reactions. Meanwhile, observers take notes on points of confusion, difficulties, or unexpected behaviors. Each test lasts about 5–6 minutes, providing focused, actionable feedback.

Teams collect feedback, list top 3 issues, and propose immediate fixes.

Conclusion and reflection

Each team presents the prototype and top 3 fixes. Facilitator asks: *Which assumption did you test? What surprised you?*

Emphasise the value of quick iteration and low-cost learning.

Assessment / Evaluation Method

Testing checklist: Did testers complete the core task (Yes/No)? How many major confusion points were observed?



Quick quiz for teams (oral):

What was your primary assumption?

Which observation invalidated that assumption?

What is your next step??

Adaptation Tips

Use role-play as a “paper prototype” (people act as interface).

Use simple digital prototyping tools (Google Slides) and screen-share during testing.

Run multiple sprints in parallel and rotate testers.



Module 4 – Problem Solving

Class activity 2. - Usability Testing & Feedback Loop

Related method: Rapid Prototyping

Target group

Age: Adults (25+)

Gender: All genders

Level of studies: Suitable for learners at any educational level—from beginners to advanced students. It is especially helpful for people who are designing or creating materials, tools, or resources that will be used directly by learners.

Status: Employed / unemployed / in transition

Fewer opportunities: It is beneficial for low-digital groups, as it provides paper or oral testing alternatives. On the other hand, trainers have the opportunity to learn how to design short, focused usability tests for prototypes (paper or digital) and convert feedback into prioritised improvements.

Learning outcomes

After finalising the activity, learners will be able to:

- Design a 5–8 minute usability test that yields actionable insights.
- Conduct and record tests using observation and simple metrics.
- Translate feedback into a prioritised improvement backlog.

Duration

90 minutes

Materials and resources

Prototypes from previous activity or simple scenarios, Test script template (task, success criteria, metrics), Observation forms and timers, Recording device (optional)

Activity description



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During this activity, participants have the opportunity to design and conduct short usability tests, learn to interpret signals, and convert findings into a prioritised backlog to guide iteration.

Detailed Implementation Steps

Introduction

Present the anatomy of a usability test: task, participant persona, success criteria, and observation metrics (time to complete, errors, confusion). Show a short example.

Main activity

Teams start by creating a concise, one-page test script that outlines the scenario they want to explore. The script includes a brief description, two to three specific tasks for users to perform, and clear success criteria for each task, defining what counts as a successful outcome. This structured approach allows teams to quickly test ideas, identify potential issues, and gather feedback before investing significant time or resources. Swap teams for cross-testing. Each test lasts 6–8 minutes, during which 2 to 3 observers closely watch the team's performance, noting key metrics and recording direct quotes to capture feedback and reactions. After each round, teams rotate, ensuring that every team is tested twice. Teams synthesise observations into 5 to 7 bullet points and identify 3 highest-priority fixes.

Conclusion and reflection

Participants start by reviewing a prioritised backlog, typically consisting of three key items, each with a proposed fix, the reason it's needed, and an estimate of the effort required. Small groups then discuss and justify their priorities, explaining why they would tackle certain issues before others. To deepen critical thinking, the facilitator poses challenging questions, such as, 'If you had only one hour next week, which issue would you fix first?'

Assessment / Evaluation Method

Reflection question: *Which test result surprised you, and how will it change your prototype?*

Adaptation Tips



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Use internal role-play with a “naïve” observer to simulate a new user.

Use video calls and ask participants to share screens while completing tasks.

Module 4 – Problem Solving

Class activity 3. - Iterate & Pitch (Rapid MVP Cycle)

Related method: Rapid Prototyping

Target group

Age: Adults (25+)

Gender: All genders

Level of studies: Any; useful when pitching to stakeholders

Status: Employed / unemployed / in transition

Fewer opportunities: Allow non-digital pitches (poster-based) for those with limited tech access. Teams improve a prototype rapidly based on test feedback and pitch the revised Minimal Viable Product (MVP) to peers acting as stakeholders.

Learning outcomes

After finalising the activity, learners will be able to:

- Convert user feedback into prioritized design changes within time limits.
- Communicate improvements persuasively to stakeholders.
- Demonstrate a simple MVP mindset: test assumption, build, measure.

Duration

90 minutes

Materials and resources

Prototype, user feedback notes (from earlier activities), Flip charts for pitch, 3-slide maximum pitch template (Problem, Solution, Ask), Timers and simple scoring rubric for judges

Activity description

Teams perform one rapid iteration based on real feedback and prepare a two-minute pitch to sell the updated MVP to a panel of peers.



Detailed Implementation Steps

Introduction

Explain MVP concept and pitch format. Share scoring rubric: Clarity of problem (30%), strength of change (40%), feasibility/next steps (30%).

Main activity

Each team picks up to 3 changes (based on feedback) and assigns roles (builder, documenter, presenter).

Rapidly implement changes (paper mock, revised slides, or digital tweak). Keep it minimal — focus on validating the change.

Prepare a 2-minute pitch showing the problem, the change made, quick test evidence, and the concrete ask (resources/time) for next steps.

Pitch session & feedback (25 min)

Teams pitch (2 min each) followed by 3 min Q&A from peers/judges. Judges use rubric to score and give one concrete improvement suggestion.

Conclusion and reflection

Facilitator aggregates scores and asks teams: *What did the test show? What will you do next?*

Assessment / Evaluation Method

Pitch rubric with numerical scores plus qualitative feedback.

Post-pitch self-check: *Did you validate or invalidate your key assumption?* (Yes/No + evidence)

Peer feedback form: One thing to keep, one to change, one to test next.

Adaptation Tips

Reduce to one core change and 10–15 minute build time.

Use posters and role-play to show the change.

Record screen demo and submit a short video pitch.