TEACHING RESOURCES

Designing a Lesson from the Learning Outcomes

A practical handbook for instructors

A workbook for designing lessons built around student learning outcomes. Includes practical templates, checklists, and three proven pedagogical models.

ABOUT THIS HANDBOOK

About This Handbook

This handbook helps you design a lesson starting not from the content you need to "get through," but from the learning outcome your students should achieve.

By working through the templates and checklists in order, you will rethink the structure of one of your lessons, formulate a measurable learning outcome, and select learning activities that help students achieve it.

How to Use This Material

- Choose an actual lesson you will be teaching in the near future.
- Complete the sections in order — each part builds on the previous one.
- Use the checklists as a reflection tool, not as an evaluation.
- Total time to work through the handbook: 45 to 60 minutes.

> **Core idea.** Students learn not by listening, but by doing something with the content — explaining, applying, comparing, interpreting. The instructor's task is to design these actions.

PART 1

The Structure of Your Current Lesson

Time required: ≈ 10 minutes

> Choose one real lesson you will be teaching soon. You will complete all the templates in this handbook for that specific lesson.

1.1. Lesson Timing

Describe how your lesson is organised in time. Note what students do and what the instructor does at each stage.

Time	What happens in the lesson	What students do	What the instructor does

1.2. Questions for Analysis

- Where do students actively think?
- Where do students mostly listen?
- Where does understanding get checked?

1.3. Distribution of Activity in the Lesson

Estimate the approximate share of time each type of activity takes. Each column should add up to 100%.

Activity type	%	Total
Students listen		
Students think		_____ %
Students discuss or apply		
Instructor explains		
Instructor asks questions		_____ %
Instructor checks understanding		

Conclusion

1.4. What Exactly Do Students Do with the Lesson Content?

Tick the actions that actually happen in your lesson.

- ☐ listen to the explanation
- ☐ take notes
- ☐ answer the instructor's questions
- ☐ discuss ideas individually or in groups
- ☐ apply new material to a task or example
- ☐ explain ideas in their own words
- ☐ compare approaches or solutions
- ☐ interpret data, text, or an example
- ☐ draw conclusions
- ☐ evaluate solutions or arguments
- ☐ other: _____

☐ other: _____

Which actions should be added to strengthen student learning?

PART 2

Designing a Lesson from the Learning Outcomes

Time required: ≈ 20 minutes

> **Plan backwards — start with the learning outcome, not the content.** First answer the question "What should students be able to do by the end of the lesson?", and only then choose the content and activities.

2.1. Formulating Learning Outcomes

Choose the level that matches your lesson. The levels move from simple recall to independent creation of something new.

REMEMBER

Students will be able to:

- name key terms
- reproduce a definition
- list the stages of a process
- recognise core concepts
- match a term to its meaning

ANALYSE

Students will be able to:

- compare approaches
- identify differences
- determine the structure of an argument
- analyse a case
- identify the key elements of a model

UNDERSTAND

Students will be able to:

- explain a concept
- describe a process

EVALUATE

Students will be able to:

- justify the choice of solution
- assess the quality of an argument

- interpret data
- give an example
- formulate a definition in their own words

APPLY

Students will be able to:

- apply a method to a problem
- use a model to analyse a situation
- solve a standard problem
- perform a calculation
- use theory to explain an example

- identify the limits of a method
- choose the best approach and explain why

CREATE

Students will be able to:

- propose a solution
- develop a model
- formulate a hypothesis
- design a strategy

Three Design Steps

STEP 1 · **The Learning Outcome for This Lesson**

State exactly what students will be able to do by the end of the lesson. Start the phrase with an action verb.

By the end of the lesson, students will be able to:

STEP 2 · **Evidence That the Outcome Has Been Achieved**

How will you know that students have actually achieved the outcome? What observable actions will show it?

solve a problem	**explain a concept**	**compare approaches**
apply a method	**interpret data**	**evaluate a case**

How will you know that students have achieved the learning outcome?

STEP 3 · **Strategies Aligned with the Learning Outcome**

Alignment: learning outcome → check for understanding → strategy

Type of learning outcome	Check for understanding	Strategy

Explain a concept	quick quiz, oral answer	discussion in pairs, brief explanation by students
Apply a method	completed task, solution demonstration	problem-solving, worked example, exercise
Analyse a case	group decision, analysis presentation	case analysis in groups, comparison of approaches, situation review
Compare approaches	short written argument, discussion	comparison table, discussion of differences, justification of choice
Evaluate a solution	oral defence of choice, short essay	expert case review, selection of the best option with rationale
Propose a solution	solution presentation, project outline	developing an idea, designing an approach, formulating a hypothesis

Working with Common Problems

From diagnosis to changing the lesson structure

Which 2 problems do you most often observe in your students?

Examples:

- not sure whether they have understood
- not motivated and participate little
- do not apply the material
- lose attention quickly
- do not draw conclusions

Your version

Which of these problems may be linked not to the students but to the lesson structure?

What changes can you make to the lesson structure to address this problem?

PART 3

Lesson Effectiveness Checklist

Instructions. For each item, mark one of the options: YES, PARTIALLY, or NO. The checklist is a reflection tool, not an evaluation.

1 Is the lesson's goal clear to students?

Criterion	YES	PARTIALLY	NO
Students understand what they are learning today	☐	☐	☐
The learning outcome is stated as student actions	☐	☐	☐

2 Is there an opportunity to think, not only to listen?

Criterion	YES	PARTIALLY	NO
The lesson includes moments of independent thinking	☐	☐	☐
Students explain ideas in their own words	☐	☐	☐
Students apply new material during the lesson	☐	☐	☐

3 Is the achievement of the learning outcome checked?

Criterion	YES	PARTIALLY	NO
In the lesson, students can tell whether they have understood	☐	☐	☐
The instructor checks the achievement of the learning outcome	☐	☐	☐

4 Are there signs of deep learning?

Criterion	YES	PARTIALLY	NO
Students compare ideas or approaches	☐	☐	☐
Students explain causes, not just facts	☐	☐	☐
Students apply knowledge to a new situation	☐	☐	☐
Students interpret data, text, or an example	☐	☐	☐
Students draw conclusions	☐	☐	☐

5 Do students receive feedback during the lesson?

Criterion	YES	PARTIALLY	NO
Students receive feedback before the lesson ends	☐	☐	☐
Students understand what was right and what was not	☐	☐	☐

6 Is the lesson structured logically?

Criterion	YES	PARTIALLY	NO
The lesson has a clear beginning	☐	☐	☐
There is a progression from simple to complex	☐	☐	☐
There is consolidation of the outcome	☐	☐	☐
There is a final summary of the lesson	☐	☐	☐

KEY QUESTION

By the end of the lesson, can a student prove to themselves that they have achieved the learning outcome?

☐ **YES** ☐ **PARTIALLY** ☐ **NO**

Where exactly do students think during the lesson?

Mark at least 3 moments.

predict	**compare**	**interpret**	**justify**
solve	**discuss**	**apply**	**critique**

Moments of student thinking in my lesson

What is already working well in my lesson

What I want to improve in my next lesson

Benchmark. If you marked 3 or more items as "partially" or "no", your lesson can be significantly strengthened.

Select 1–2 items you will change in your lesson

PART 4

5 Ways to Introduce New Material Without Lecturing

Core idea. Replace one segment of explanation with a student activity. Students arrive at the content through their own actions rather than through passive listening.

Instead of the instructor explaining	You can use a student activity
Explain a term	Ask students to formulate a definition from an example
Explain a model	Give an example and ask them to find the pattern
Explain a distinction	Ask them to compare two cases
Explain a process	Ask them to reconstruct the sequence of steps
Explain an argument	Ask them to evaluate arguments and choose the best one
Explain a theory	Start with a prediction question
Explain an application	Give a short case study

Task

Which part of your lecture will you replace with a student activity?

F I N A L R E F L E C T I O N

One change I will introduce in my next lesson:

APPENDIX

Three Lesson Structure Models

Ready-to-use pedagogical models that you can adopt as a lesson framework. Each model rests on a particular logic of learning and suits different instructional goals.

MODEL 1

BOPPPS

A general-purpose model for designing a lesson with an emphasis on active student participation.

Stage	What happens in the lesson
B — Bridge-in	A question, case, situation, example, or problem that introduces the topic
O — Outcome	What students should learn by the end of the lesson
P — Pre-assessment	Finding out what students already know about the topic
P — Participatory learning	The main learning activity of the students
P — Post-assessment	Checking whether the lesson outcome has been achieved
S — Summary	Wrapping up and recording the key ideas

Key feature. The central stage of the model is Participatory learning. This is where students actually work with the content.

MODEL 2

5E · A Structure for Inquiry-Based Learning

A model in which explanation comes after exploration — students first work with an example, then formulate the theory.

Stage	What happens
Engage	Posing a question, problem, or situation
Explore	Students analyse an example, data, or case
Explain	The concept or theory is articulated
Elaborate	Students apply the new idea in a new situation
Evaluate	Understanding and achievement of the outcome are checked

Key feature. Explain comes after exploration, not before. Students build understanding independently, drawing on their own analytical experience.

MODEL 3

CARD · Focus on Process Reflection

A model in which not only the result matters, but also understanding the learning process itself.

Stage	What happens
C — Context	Posing a task, situation, or question
A — Activity	Students analyse, solve, discuss, and apply
R — Reflection	Reflection on the process
D — Documentation	Key learning conclusions are discussed and recorded

Key feature. The model focuses on process and reflection. Students learn not only the content but also how they learn.