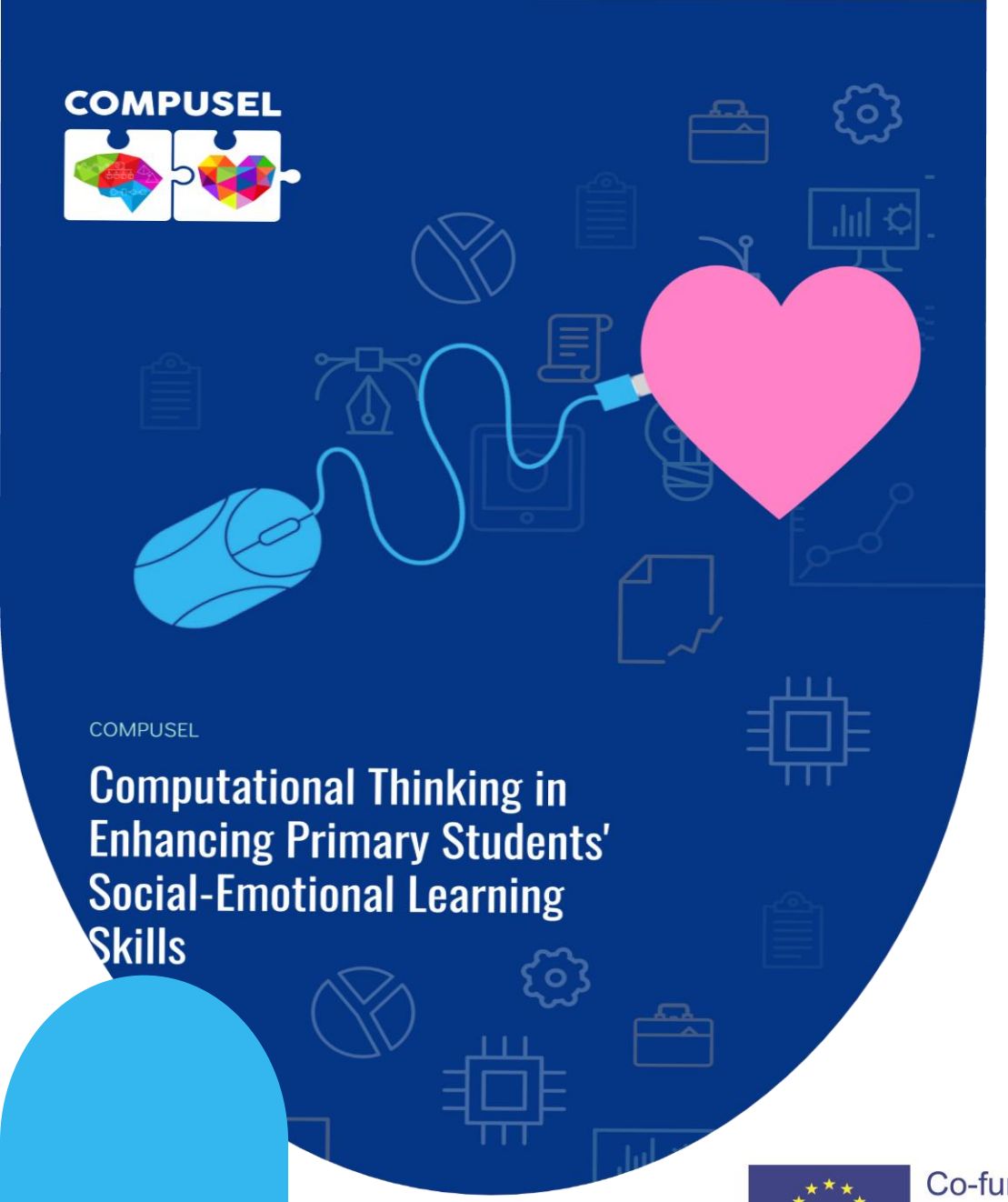


COMPUSEL

An ERASMUS+ KA2 PROJECT

Co-funded by the Erasmus+ Programme of the European Union

TÜRKİYE ULUSAL AJANSI
TURKISH NATIONAL AGENCY

How to Integrate CT with SEL

STEP 1 – ENCOUNTERING THE PROBLEM

Existence and identification of a problem developing in the social and emotional field.

- Watch the digital story

- Identify what problem students recognised in the story by eliciting their answers.

- You can start the discussion with the question below.

  - ❑ What happened in the story?
  - ❑ What is the main problem?

Define the SEL skill that the problem addresses.

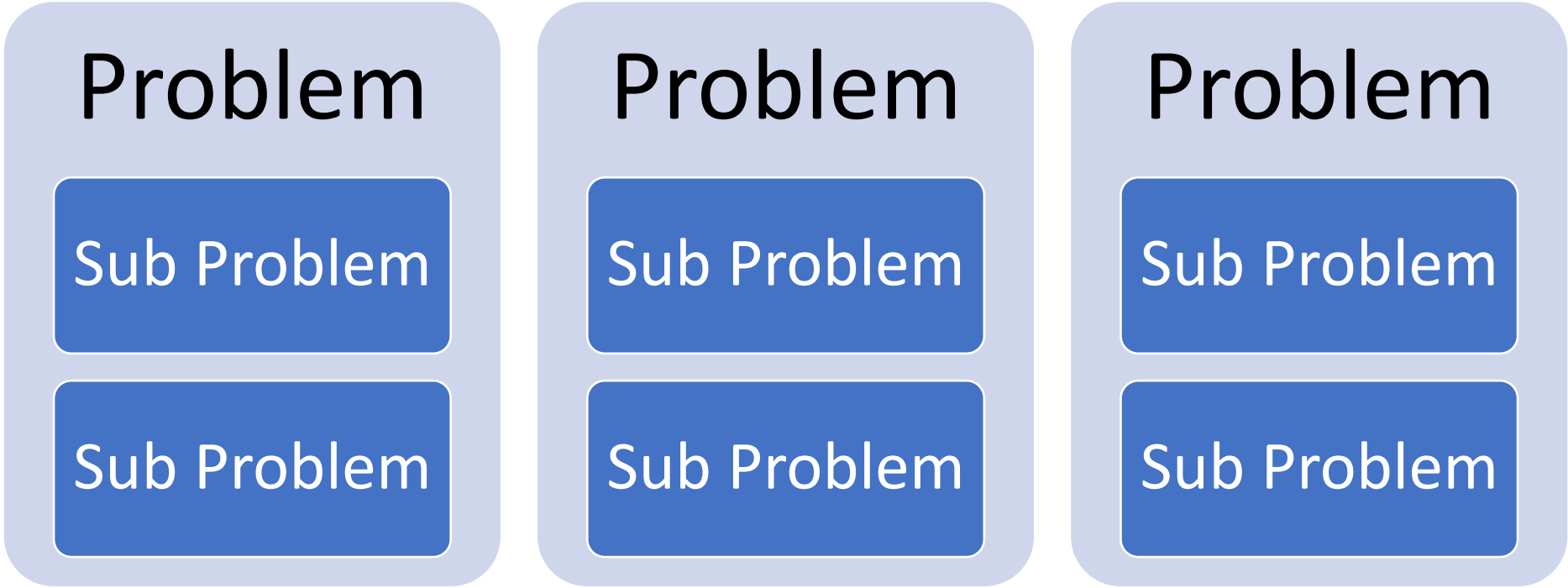
Main Problem & Addressed SEL Skill

STEP 2 – INTEGRATION OF CT DIMENSIONS

DECOMPOSITION

- What are the elements of the problem?
- What are the development processes of the problem?
- Is it possible to decompose the problem into smaller parts that are easier to solve?
- For example, students can focus a part of the problem and then focus on the other part of the problem and solve it step by step.

You can create a chart including problem/s and its/their sub problems according to the students' answers as follows. In this way, you can see the differences between perceived problems and real/ocurring problems. Pay attention to what problems students focus on in the story? Can they realise and emphasize the real/actual problems in the story? This is important to be able to solve the problem/s.

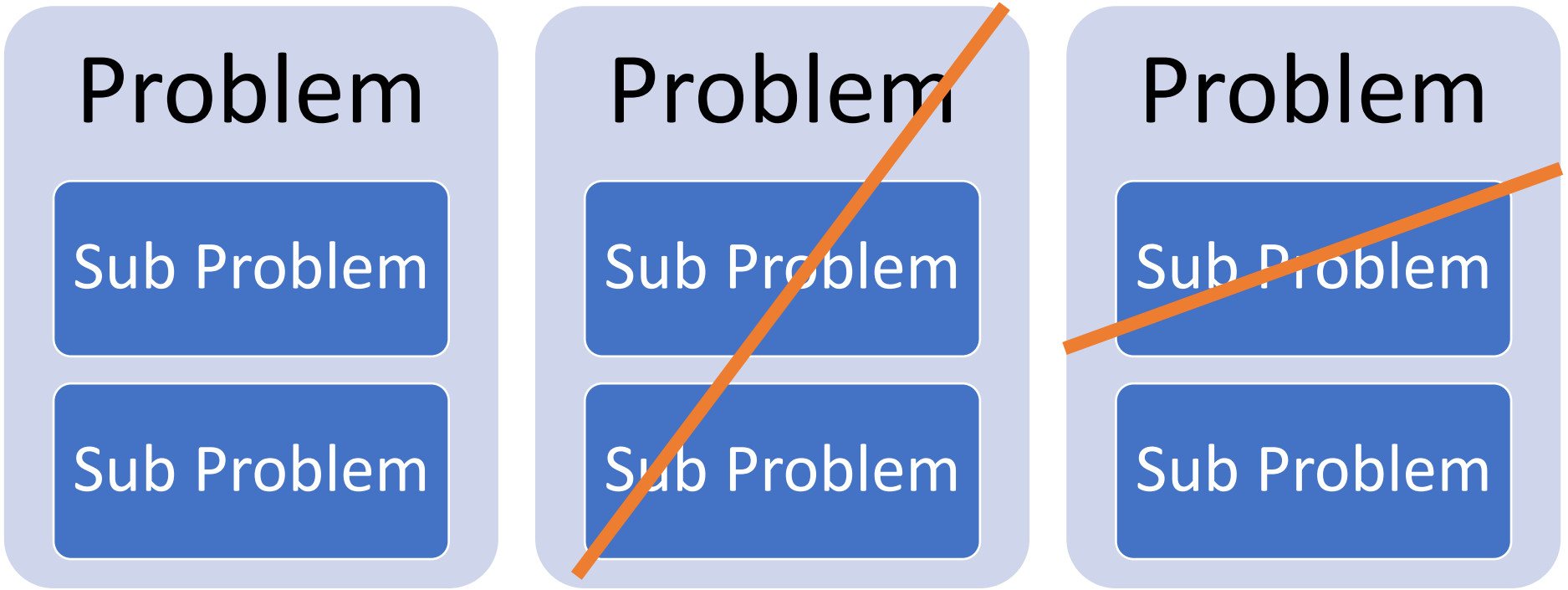


STEP 2 – INTEGRATION OF CT DIMENSIONS

ABSTRACTION

- What is the main problem to be focused on within the problem and the events it contains?
- What is/are the solution suggestion(s) that differ according to the perspective brought to the problem?
- Are there any elements that should be neglected in the problem?

In the chart, you can decide which problems can be neglected to solve the focused problem/s.



STEP 2 – INTEGRATION OF CT DIMENSIONS

PATTERN RECOGNITION

- Does the problem experienced involve similar processes with the problems in the same subject experienced before?
- Are the emotions felt during the experience/definition of the problem similar?
- What are the patterns in feelings, ways of thinking or behaviour?
- Are there other problems with a similar pattern?
- What changes in the pattern could solve the problem?
- Can the pattern be rearranged?

STEP 2 – INTEGRATION OF CT DIMENSIONS

ALGORITHMIC THINKING

- What are the measures to be taken in the light of the data obtained?
- In which order should these be done?
- Are there any steps that need to be repeated (Loops)?
- Could some steps differ according to the conditions? What would those be? (If, then)

Module 1 – Story 1

- Watch the video with students and define the main problem together.

Module 1 – Story 1

The main problem in the story is:

Module 1 – Story 1

Decomposition

Then define the other sub problems causing that main problem occur.

Module 1 – Story 1

Which sub/side-problems we defined:

Module 1 – Story 1

Abstraction

Ask students to focus on essential details, ignoring unncessary ones that are not important in the solving of the main problem.

Module 1 – Story 1

Which points we should focus on:

Module 1 – Story 1

Let students discuss if they encounter similar problems.
What are the patterns in the problems, let them compare.

Pattern Recognition

Module 1 – Story 1

Which similar situations we experienced before:

Module 1 – Story 1

Which similar situations we experienced before:

Module 1 – Story 1

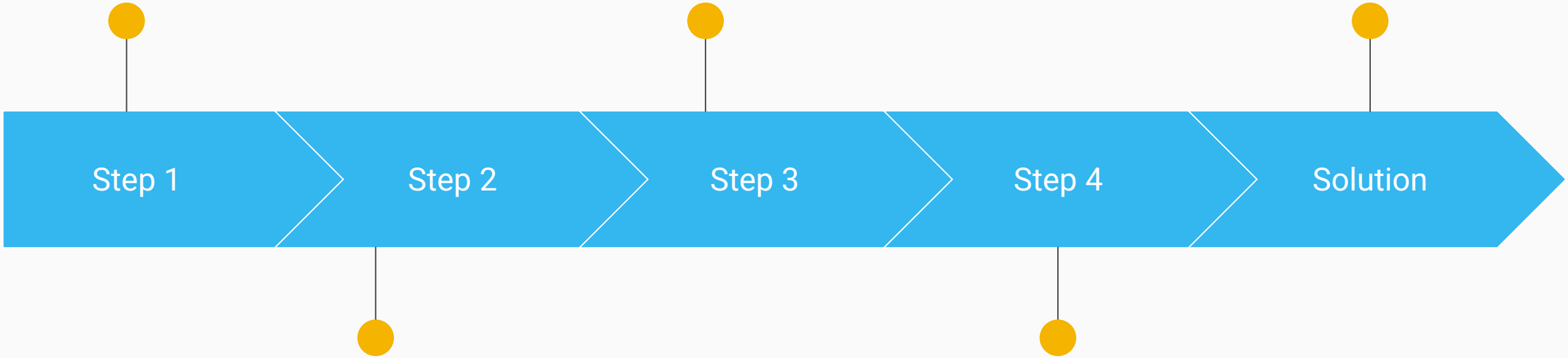
Ask students to plan a «sequence of steps» to «solve the problem» in «a clear and organized way»
«Students can define the solution steps for sub-problems as a part of the main problem solution process.»

Algorithmic Thinking

Action 1:

Action 3

We achieved:



Action 2:

Action 4:


Step 1
Step 2
Step 3
Step 4
Solution of sub-problem 1
Solution of main problem
Step 1
Step 2
Step 3
Step 4
Solution of sub-problem 2

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THANK YOU