CogniQuest

Practical Guide

Integrating metacognition into the classroom

Co-funded by
the European Union

Introduction

Context

This guide is part of an innovative educational approach aimed at fully integrating metacognition into teaching practices. Metacognition, defined as the ability to reflect on one's own learning process, is an essential skill that enables pupils to better understand their strategies, regulate their efforts and develop their autonomy.

In an ever-changing world, where educational challenges are becoming more complex and expectations of learners are evolving, metacognition plays a key role in strengthening critical thinking, adaptability and self-confidence. This guide is designed to provide teachers with concrete tools and practical approaches, enabling them to create inclusive and stimulating learning environments.

Objectives

This practical guide is aimed primarily at teachers of pupils aged 8 to 12.

Its purpose is to:

- Explain what metacognition is and demonstrate its positive impact on learning.
- Provide practical teaching tools for integrating metacognition into the classroom.
- Offer solutions tailored to the varied needs of pupils, particularly those with specific profiles (special educational needs, allophone pupils, etc.).
- Help teachers to create a culture of reflection and autonomy that values the diversity of learning styles.

Structure of the guide

This guide is organised into four main modules, each exploring a key dimension of metacognition:

Module 1 - Creating a metacognitive culture in the classroom
This module covers the basics of metacognition and suggests strategies for introducing reflection on learning at the start of the school year, while creating an environment conducive to reflection.

Module 2 - Metacognition, collaboration and autonomy
It explores the links between individual reflection, collaborative work and independent management of learning. The worksheets in this module provide tools for organising peer assessment, structuring group discussions and helping pupils to manage their time.

Module 3 - Metacognition and emotion management
This module looks at the importance of emotions in learning. The worksheets provide activities to help pupils identify and manage their emotions, reduce stress and develop empathy so they can interact better with their peers.

Module 4: Metacognition and the diversity of learning profiles
This last module focuses on adapting metacognitive tools to a variety of needs: pupils with special needs, allophone pupils, or those whose families can play a key role in school support.

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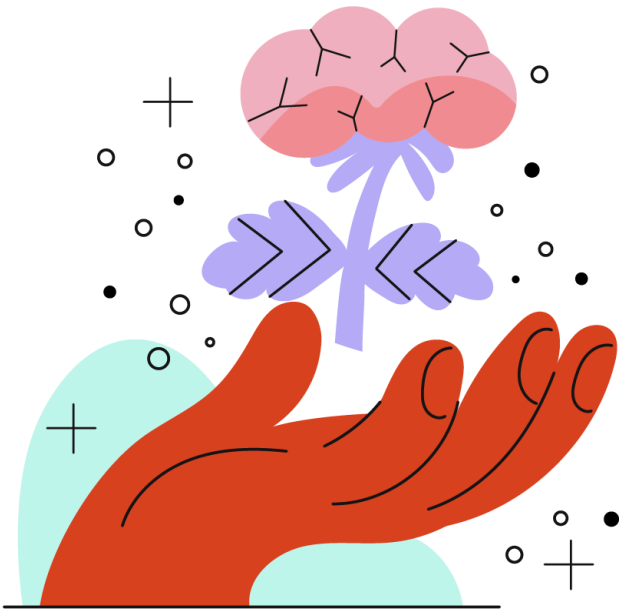
File structure

Each sheet is structured to maximise its effectiveness and ease of use:

- **Objective:** what the teacher and pupils can achieve by using the tool or strategy described.
- **Pedagogical reason:** An explanation of why, highlighting the importance of the tool or strategy in developing metacognitive skills.
- **Benefits:** Concrete benefits for pupils and the class, whether educational, organisational or emotional.
- **Practical tips and activities** for applying the strategy in the classroom.
- **Examples of implementation (or testimonials):** Concrete situations or testimonials illustrating how to apply the tools or activities in the classroom.
- **Associated resources for download:** Practical resources (posters, templates, exercises) available on the **CogniQuest.eu** website.



Tips for successful implementation of metacognitive teaching techniques

To get the most out of this guide, it's important to plan the introduction of the metacognitive tools and strategies in a progressive way that's adapted to your class. Here are some tips on how to incorporate these practical worksheets effectively:

- ➔ **Start small:** Introduce one worksheet or exercise at a time so that pupils have time to absorb and adapt to the new method.
- ➔ **Adapt to your class:** tailor activities to the specific needs, levels and dynamics of your pupils.
- ➔ **Encourage regularity:** Make metacognitive practices a routine, whether it's discussions after an activity, weekly reflections or daily rituals.
- ➔ **Involve pupils:** Involve them in the process by asking them what they find useful and adjusting the tools according to their feedback.
- ➔ **Value progress:** Highlight pupils' efforts and successes in their thinking, focusing on evolution rather than perfection.
- ➔ **Share with families:** Involve parents or guardians by explaining the tools used in class, so that they can support learning at home.

MODULE 1

ESTABLISHING A METACOGNITIVE CULTURE IN THE CLASSROOM

Metacognition, or the ability to reflect on one's own learning process, is an essential skill that helps pupils better understand how they learn, why they succeed or fail, and how they can progress. However, for this to become a habit, it is essential to establish a classroom culture from the outset that values and encourages metacognitive reflection.

Establishing a metacognitive culture is not just about imparting knowledge or a method; it is about creating a framework in which pupils feel confident to explore, experiment and reflect on their learning.

AVAILABLE SHEETS:

Sheet 1

HOW CAN METACOGNITION BE INTRODUCED INTO THE CLASSROOM?

Objective: to be able to explain in simple terms what metacognition is and why it is important.

Pedagogical rationale:
Introducing metacognition from the outset enables pupils to become aware of their learning, to understand how they learn, and to consider strategies for improving their performance.

Advantages:

- Encourages autonomy by giving pupils a say in their own learning.
- Enables pupils to overcome their difficulties more effectively by analysing their methods.
- Encourages a classroom climate where effort and reflection are valued.

How should metacognition be presented to pupils?

Introducing metacognition into the classroom requires simple, practical approaches. Show pupils that they are already using this skill on a daily basis and encourage them to integrate it naturally into their learning.

Demystify metacognition: explain to pupils that reflecting on how they learn helps them to progress. Use concrete examples from their everyday lives to make the concept accessible:

- "When you play a game and come up with a new technique to win, you think about what works."
- "When you're looking for a quicker way home, you're using metacognition."

Show that it's simple and natural: reassure pupils by explaining that metacognition is a skill they already use without realising it.

Involve pupils from the outset: ask them questions that encourage immediate reflection:

- "What do you do when you don't understand something?"
- "How do you know you're ready for a test?"

Practical examples in the classroom

Solving a puzzle/learning game:

Before you start:

- *What's your first idea for solving this puzzle? Why do you think it might work?*

After playing:

- *Which strategy worked best?*
- *Which stage did you find the most difficult? Why or why not?*

Carrying out a group project:

Before the project:

- How are you going to organise the work between the members of the group?
- What tools or methods could you use to coordinate?

After the project:

- Which part of the project was the most effective? Why or why not?
- How could you improve your collaboration next time?

Downloads

- → Tool 1 - Educational poster
- → Tool 2 - Brainstorming
- → Activity 1 – Semantic web
- → Activity 2 – Exit ticket

Sheet 2

ENCOURAGE STUDENTS TO REFLECT ABOUT THEIR LEARNING

Objective: to incorporate simple questions to stimulate pupils' metacognitive thinking.

Pedagogical reason:
Reflecting on learning allows pupils to better understand their strategies, identify their strengths and weaknesses, and adjust their approach to become more independent.

Advantages:

- Increased motivation and confidence.
- Improved school results thanks to better management of learning.

Questions to stimulate metacognitive thinking

Here is a list of questions that teachers can use before, during or after an activity:

Before the activity:

- *What do you already know about it?*
- *How are you going to get the job done?*
- *What tools or strategies do you plan to use?*

During the activity:

- *Is your strategy working? Why or why not?*
- *What do you find easy or difficult at the moment?*

- *Do you need to change anything to progress?*

After the activity:

- *What did you do right?*
- *What could you do differently next time?*
- *What have you learnt today that you can use again tomorrow?*

Practical examples in the classroom

Solving a mathematical problem

- Question asked before: *How are you going to tackle this problem?*
- Next question: *Why did this method work so well?*

Writing a text

- Question asked during the interview: *Is your introduction clear?*
- Next question: *How could you make your text even more interesting?*

Resources to download

→ **Tool 1 – Reflection cards - 1**
→ **Tool 2 – The KWL tool**
→ **Activity 1 – The Plan and Write Strategy**
→ **Activity 2 – The Muddiest Point**

Sheet 3

BUILD AN ENVIRONMENT CONDUCIVE FOR METACOGNITIVE REFLECTION

Objective: to create physical and symbolic spaces that encourage pupils to reflect on their learning process and value their progress.

Pedagogical reason:
An environment that encourages reflection encourages pupils to take ownership of their learning, feel confident and share their ideas.

Advantages:

- Encourages a culture of collaborative learning.
- Makes reflection a natural and systematic part of classroom practice.
- Boost motivation by rewarding individual and collective progress.

Characteristics of an environment conducive to metacognition

A well-designed environment can encourage pupils to reflect on their learning, collaborate and value their progress in a natural and stimulating way. Here are some ideas:

- **Posters** reminding us of the importance of reflecting on our learning (key questions, inspirational phrases).
- **Spaces** where pupils can **share their ideas** and learn from each other.
- **Dedicated corners** where pupils can isolate themselves to think or ask questions.
- **Tools** that **highlight pupils' progress and successes** (self-assessment tools for a specific task).

Resources to download

- → Tool 1 – My emotions tracker
- → Tool 2 – The attention barometer
- → Activity 1 – The SCAN strategy
- → Activity 2 – Traffic Light Thinking: Pause/ Think/ Answer exercise

Sheet 4

DEALING WITH STUDENTS' RESISTANCE TO REFLECTING ON THEIR LEARNING

Objective: to understand the possible reasons for pupils' resistance to metacognitive thinking and to discover strategies for motivating them to adopt this approach.

Pedagogical reason:
Resistance to metacognitive reflection can limit opportunities for pupils to understand their strategies and improve their autonomy. By tackling this resistance, the teacher helps pupils to overcome their blocks and see reflection as a tool for overcoming challenges, rather than an additional obstacle.

Advantages:

- Helps pupils to develop their self-confidence, even in the face of mistakes and failures.
- Encourages a positive attitude towards learning, focusing on progress and not just results.
- Turn moments of blockage or frustration into learning opportunities.
- Encourages pupils to get involved by showing them the practical value of reflecting on their methods and strategies.

Why do some pupils resist metacognitive reflection?

Student resistance can be linked to a number of factors:

- **Lack of self-confidence:** Pupils are afraid to expose their weaknesses or admit their mistakes.

- **Work habits:** They are not used to reflecting on their learning and prefer to carry out tasks mechanically.
- **Fear of failure:** Reflecting on their methods may remind them of past difficulties or failures.
- **Misunderstanding:** They don't see the point of metacognition or see it as an unnecessary extra task.

Practical examples in the classroom

Blocked on a maths exercise

- Pupil: *"I don't like thinking; it doesn't help me move forward."*
- Teacher: *"What if you asked yourself what went well in your last exercise? That might give you an idea of how to solve this task."*
- Result: The pupil identifies that he had used a diagram and decides to apply it again.

Resilience after failure

- Student: *"I'm rubbish, thinking won't change anything".*
- Teacher: *"A small step is enough, for example: what would you do again in the same way?"*
- Result: The pupil identifies a positive aspect and begins to envisage a gradual improvement.

Resources to download

→ **Tool 1 – Metacognition wheel**
→ **Tool 2 – My new thinking habit plan**
→ **Activity 1 – Quiz to know myself a bit more**
→ **Activity 2 – The Feynman Technique**

Sheet 5

INTEGRATING METACOGNITIVE RITUALS IN DAILY LIFE

Objective: to set up simple, regular routines that encourage pupils to reflect on their learning after each activity or session.

Pedagogical reason:
Metacognitive rituals make it possible to transform reflection on learning into a habit anchored in the pupils' daily lives. By repeating these moments of reflection, they gradually develop their autonomy and their ability to adjust their strategies.

Advantages:

- Encourages the systematic practice of metacognitive reflection.
- Builds self-confidence by rewarding steady progress.
- Creates a structured framework that helps pupils take a step back from their learning.
- Fosters a classroom climate where effort and reflection are valued.

Ideas for metacognitive rituals in the classroom

Point 3-2-1: At the end of each day or activity, ask pupils to write down:

- 3 things they've learned.
- 2 things they would like to know more about.
- 1 question they're still asking themselves.

The learning thermometer: each pupil assesses his or her level of understanding or confidence after an activity by placing a marker on a thermometer displayed in class (for example: *I have mastered well / I still have doubts*).

- **Objective:** To quickly identify pupils' needs and encourage them to reflect on their level of understanding.

The metacognitive diary: Provide a diary in which each pupil answers guided questions, such as:

- What helped me to succeed in this task?
- What was difficult? Why or why not?
- What would I do differently next time?

  The aim is to create a personal space where pupils can monitor their progress and adjust their strategies.

Teacher's words

"In science lessons, and more specifically in geography and physics, it is worth noting that brainstorming and concept maps are particularly helpful in enhancing metacognition. More specifically, with these tools we have observed that creative thinking is promoted, visual representation of ideas is facilitated, enhancing understanding and connection between them, and at the same time pupils are able to connect new knowledge with existing knowledge."

Practical examples in the classroom

After a history lesson:

- **Activity:** Pupils complete point 3-2-1 in their notebooks.
- **Result:** They identify the historical facts they have chosen, what they would like to know more about, and formulate a question on the subject.

After a maths exercise:

- **Activity:** Pupils use the learning thermometer to indicate their level of understanding.
- **Result:** The teacher quickly identifies pupils who need extra support.

Resources to download

- → Tool 1 - Children's goal setting sheet
- → Tool 2 – Spelling revision rubrics
- → Activity 1 – Local & global revision on a written text
- → Activity 2 – ASCQ strategy

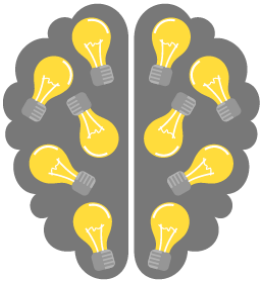
MODULE 2

METACOGNITION, COLLABORATION, AUTONOMY

To succeed in their learning and beyond, pupils need to develop skills that go beyond the simple acquisition of knowledge: the ability to reflect on their methods, to collaborate effectively, and to manage their work independently. This module explores how metacognition can strengthen peer collaboration and individual autonomy.

By guiding pupils to reflect on their interactions, strategies and time management, you give them the tools to become active and responsible learners. Using practical techniques such as peer assessment, self-assessment and task planning, this module helps you to cultivate a classroom where each pupil progresses at their own pace while learning from others.

AVAILABLE SHEETS:



Sheet 6

PEER REVIEW:
ENCOURAGING CONSTRUCTIVE CRITICISM

Objective: to teach pupils to assess their peers' work constructively, helping them to develop their critical thinking skills while reinforcing their own learning.

Pedagogical reason:
Peer assessment allows pupils to become active in the learning process. By giving feedback to their peers, they develop their analytical and communication skills while consolidating their own knowledge.

Advantages:

- Encourages collaboration and mutual support between pupils.
- Reinforces critical analysis and communication skills.
- Gives pupils a better understanding of assessment criteria and expectations.
- Develop their ability to receive and integrate constructive feedback.

Teacher's words

"We use peer assessment, as we have observed that it works constructively, as pupils tend to be more attentive and consistent in their studies."

Steps for organising a peer review

Present the objectives and rules of assessment

- Activity: Explain to the pupils that the aim is to help their classmates progress, not to judge. Emphasise the importance of kindness and precision.
- Example: "*When you give your opinion, remember to say what went well and suggest an idea for improving the work*".

Define clear assessment criteria

- Activity: Work with the pupils to create a simple grid with specific criteria (e.g. Clarity of ideas, Organisation, Compliance with instructions).
- Example of a grid:
    - What's good: The ideas are clear.
    - What could be improved: Add more details to support your argument.

Structuring the exchange

- Activity: Propose a three-stage feedback format:
    1. One thing I liked about your work.
    2. Something you could do better.
    3. A suggestion for future improvements (what and how).

Organise pairs or small groups

- Tip: Make sure pupils work with peers they feel comfortable with, especially at the beginning. Alternate pairs to vary perspectives.

Reflecting on experience

- Activity: At the end, ask the pupils what they have learnt from receiving and giving feedback.
- Sample questions:
    - What did you find useful in the comments you received?
    - What did you learn about your own work by observing that of your classmate?

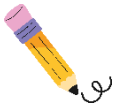
Practical examples in the classroom

Writing an argumentative text:

- Stage 1: Pupils exchange their texts with a classmate.
- Stage 2: Each pupil uses a grid to give structured feedback:
  - What I liked: The introduction is clear and engaging.
  - What you could do better: Add more examples to support your argument.
- Result: Pupils receive practical advice and reflect on their own writing methods.

Oral presentation in science:

- Stage 1: After each presentation, the classmates give oral feedback in the following format: something positive, something to improve, a suggestion.
- Step 2: The teacher guides the discussion to ensure that the feedback remains constructive.
- Result: Pupils hone their presentation skills through peer observation.



Resources to download

- → **Tool 1 – Paired marking**
- → **Tool 2 – Investigation with interactive checkpoints**
- → **Activity 1 – Peer-revision in combination with pair correction**
- → **Activity 2 – Teamwork reflection / feedback sessions**

Sheet 7

IMPROVING GROUP DISCUSSIONS THROUGH METACOGNITION

Objective: to help pupils reflect on their group interactions to make their discussions more constructive, balanced and effective.

Pedagogical reason:
Group discussions are valuable opportunities to learn to collaborate, exchange ideas and solve problems together. By introducing metacognition, pupils can analyse their behaviour and adjust their strategies to better interact and work as a team.

Advantages:

- Promotes better listening and a balanced distribution of speech.
- Encourages pupils to become aware of their role in the group.
- Helps resolve conflicts or misunderstandings by discussing communication strategies.
- Develops collaborative skills and collective thinking.

Practical example in the classroom

The three keys of communication

Introduce the communication keys that can help pupils communicate. They represent the implicit communication rules that we use when discussing with others.

- The speech key: it symbolises the speech flow between the two people who communicate. It indicates that pupils need to regulate their attention and contribution in the exchange: be present in the conversation, respect when the other is talking, monitor the talking time.
- The listening key: it symbolises the cognitive effort done in the conversation. The focus is on the person talking and on what they are saying.

- The words key: it symbolises the message we send when talking with someone. Pupils pay attention to the words they chose, in particular during a debate when we can use words that come quickly to mind but can be painful.

Resources to download

- ➔ **Tool 1 – Mind map - 1**
- ➔ **Tool 2 – Debate**
- ➔ **Activity 1 – Ball pass**
- ➔ **Activity 2 – Debate: "Would you rather?"**

Sheet 8

ENCOURAGE SELF-ASSESSMENT AMONG STUDENTS

Objective: to help pupils analyse their own learning, identify their successes and difficulties, and reflect on strategies for improvement.

Pedagogical reason:
Self-assessment enables pupils to become autonomous and responsible players in their own learning. By reflecting on their strengths, weaknesses and progress, they develop essential skills for adjusting their strategies and achieving their goals.

Advantages:

- Reinforces pupils' autonomy and responsibility.
- Improves their understanding of success criteria.
- Encourages reflection on their learning methods and strategies.
- Increases self-confidence by rewarding progress.

Steps to encourage self-assessment

Self-evaluating a text

- Stage 1: Pupils proofread their text and focus on local issues
  - For instance: spelling, punctuation, grammar…
- Stage 2: Pupils proofread again their text and focus on global issues:
  - Division of paragraphs, using arguments, examples, conclusion, description, adjectives…
- To help the pupils, the teachers can provide a checklist (cf. tools).

Practical examples in the classroom

After a dictation

Once pupils finish to write and spell the words/ text said aloud by the teacher:

- **Activity:** Pupils use a grid to assess their work:
  - *Have I reread my text? Have I followed the instructions?*
- **Result:** They identify areas for improvement for the next dictation.

Teacher's words

"We use the goal diary which acts as a tool for self-awareness and self-improvement, facilitating metacognition and effective learning. We have observed that the goal calendar we set monthly helps pupils to reflect on their goals and progress and at the same time remain consistent and reduce procrastination."

Resources to download

- → Tool 1 – Learning log
- → Tool 2 – Metacognition signs
- → Activity 1 – Reflexion cards - 2
- → Activity 2 – Self-assessment checklists

Sheet 9

TIME MANAGEMENT AND LEARNING PLANNING

Objective: to help pupils plan, manage their time and monitor their learning so that they complete their tasks, achieve their goals and develop their independence.

Pedagogical reason:
Effective time management and clear planning enable pupils to prioritise their activities, optimise their learning and maintain their motivation. These skills are essential for developing their independence and preparing them for future challenges.

Advantages:

- Reduces procrastination and stress by clarifying priorities and deadlines.
- Encourages autonomy and individual responsibility.
- Improves efficiency and progress in school tasks.
- Encourages regular review of progress made and any necessary adjustments.

Practical examples in the classroom

Preparing for an inspection

- Activity: Pupils create a revision schedule over several days (Day 1: Review the chapter; Day 2: Do exercises; Day 3: Revise mistakes).
- Result: They approach the test in an organised way and with greater peace of mind.

Group project management

- Activity: The pupils use a group tracking table to allocate tasks and record the steps they have completed.

- Result: The group met its deadlines while working in a collaborative and structured way.

Weekly progress monitoring

- Activity: Each week, pupils complete a report card:
  - Objectives achieved: Yes/No; Obstacles encountered: ...; Next objectives: ...
- Result: They adjust their strategies to better plan for the following week.

Resources to download

→ **Tool 1 – Classroom reflective logs**
→ **Tool 2 – Planning and regulatory checklist**
→ **Activity 1 – Mini-projects technique**
→ **Activity 2 – Metacognitive "Time-outs"**

MODULE 3

METACOGNITION AND MANAGING OF EMOTIONS

Managing emotions plays a key role in learning. Fear of failure, frustration in the face of difficulties or joy at having succeeded: all these emotions influence the way in which pupils learn and interact. By integrating metacognition with emotion management, pupils learn to recognise their feelings, understand their impact on their learning and develop strategies to manage them effectively.

As a teacher, you can help pupils explore their emotions, learn from them and turn emotional obstacles into levers for success. This module offers practical tools for identifying and naming emotions, reducing the stress and anxiety associated with learning, and developing empathy to improve classroom interactions.

AVAILABLE SHEETS:

Sheet 10

IDENTIFYING AND NAMING EMOTIONS IN LEARNING

Objective: to help pupils recognise and name their emotions linked to learning in order to better understand their impact on their successes and difficulties.

Pedagogical reason:
Emotions have a direct influence on pupils' motivation, attention and perseverance. By learning to identify and name their feelings, pupils develop a better understanding of their reactions and strategies for managing them.

Advantages:

- Helps to put into words feelings that are sometimes confused or unexpressed.
- Helps to establish a link between emotions and learning, so you can manage them better.
- Encourages more open and caring communication in the classroom.
- Promotes self-confidence by transforming negative emotions into opportunities for improvement.

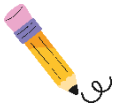
Practical examples in the classroom

Before a written test

- **Activity:** Each pupil places a marker on the emotion thermometer on the board (e.g. *I'm 4/5 in stress, but also 3/5 in confidence*).
- **Result:** The teacher observes the general trends and adapts his speech to reassure the pupils.

At the end of the week

- **Activity:** Pupils complete their emotion tree with a reflection (e.g. *This week, I felt proud when I finished my project, but also stressed before the presentation*).
- **Result:** The pupils learn to link their emotions to their learning and identify strategies to better manage these situations in the future.



Resources to download

- → **Tool 1 – Creative writing**
- → **Tool 2 – Emotion thermometer**
- → **Activity 1 – Emotions detective exercise**
- → **Activity 2 – Relaxation cards – 1**

Sheet 11

MANAGING STRESS AND ANXIETY LEARNING

Objective: to help pupils identify and manage their stress and anxiety so that they can concentrate better and invest themselves in their learning.

Pedagogical reason:
Stress and anxiety can inhibit pupils' motivation, memory and performance. By teaching them strategies for recognising and managing these emotions, they can transform these obstacles into opportunities for growth and success.

Advantages:

- Helps pupils regain their composure and concentration in stressful situations.
- Boosts their confidence in their ability to overcome challenges.
- Encourages a calm classroom climate conducive to learning.
- Develops emotional skills that are useful beyond the classroom.

Practical examples in the classroom

Before a major assessment

- Activity: Pupils perform a short mindful breathing exercise to calm their thoughts and use this method to better prepare for a test. You can suggest, for example, abdominal breathing: inhale for 4 counts, hold for 2, exhale for 6.
- Result: They feel more relaxed and concentrated when it comes to the assessment.

During a collaborative project

- Activity: In case of misunderstandings or tensions within the group, pupils learn to recognise signs of stress (e.g., accelerated heartbeat, nervousness) and

use their "anti-stress toolkit" (e.g., a short break, expressing their feelings, changing perspective) to find solutions.

- Result: The pupils manage conflicts constructively and complete the project as a team.

Resources to download

- → **Tool 1 – Motivational map**
- → **Tool 2 – Role playing game**
- → **Activity 1 – Learning journals or reflection diaries**
- → **Activity 2 – Energy reservoir**

Sheet 12

DEVELOPING EMPATHY THROUGH METACOGNITION

Objective: to encourage pupils to understand other people's points of view, emotions and strategies in order to strengthen cooperation, mutual respect and collective learning.

Pedagogical reason:
Empathy is a key skill for building positive and collaborative relationships. By linking metacognition to empathy, pupils learn to reflect not only on their own learning, but also on that of their peers, fostering a caring and inclusive classroom climate.

Advantages:

- Improves communication and social interaction in the classroom.
- Reinforces collaboration in group activities.
- Encourages a better understanding of differences in learning methods.
- Helps pupils develop social skills that are useful beyond the classroom.

Practical examples in the classroom

After group work

- **Activity:** The pupils use the "learning strategies cards" to share their methods and discuss what has worked well or not in the group. These can be simple flashcards with strategies written on them, e.g., "I take notes", "I ask when I don't understand something", "I look for additional information online".
- **Result:** They identify new approaches that they can try out, while appreciating the efforts of their peers.

Resources to download

- → Tool 1 – Start with a dream
- → Tool 2 – Six thinking hats
- → Activity 1 – Generative knowledge interviewing
- → Activity 2 – Letters to future pupils

MODULE 4

METACOGNITION AND THE DIVERSITY OF LEARNING PROFILES

Every pupil is unique, with his or her own strengths, needs and challenges. Some learn best by visualising, others by listening or manipulating, for some it's the combination of those approaches. Some have specific needs, such as learning disabilities or language difficulties, while others thrive with the active support of their families. The diversity of learning profiles in the classroom is an asset, but it requires a differentiated and inclusive approach.

This module presents how to adapt metacognitive tools and strategies to meet the needs of each pupil, while valuing their individual characteristics. As a teacher, your role is to guide each pupil in discovering their own learning strategies, building on their strengths and overcoming their obstacles. You can also involve families in supporting pupils at home and at school.

AVAILABLE SHEETS:

Sheet 13: Adapting metacognition for pupils with special needs

Sheet 14: Adapting metacognitive tools for pupils speaking another language

Sheet 15: Involving families in the support of pupils with special needs

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Sheet 13

ADAPTING METACOGNITION FOR PUPILS WITH SPECIAL NEEDS

Objective: to help pupils with special needs (ADHD, learning disabilities, autism spectrum disorders, etc.) to develop their metacognitive skills using tools and strategies adapted to their needs.

Pedagogical reason:
Pupils with special needs often encounter obstacles that can limit their ability to reflect on their learning. Adapting metacognition to their needs helps them to understand their strategies and progress, while boosting their self-confidence.

Advantages:

- Encourages pupils' independence by offering them appropriate tools.
- Helps them better understand their own ways of learning and overcome their difficulties.
- Boost their self-esteem by recognising their strengths and giving them strategies for progress.
- Create an inclusive classroom environment.

Concrete examples in the classroom

Revision for an inspection

- Adaptation: Pupils use pictograms to organise their revision (e.g. a brain to memorise, a book to reread, a pencil to do exercises).
- Result: They can clearly visualise the stages and track their progress.

Group work

- Adaptation: The roles are simplified and represented visually (e.g. a microphone pictogram for the speaker, a pen for the note-taker). Each pupil

reflects on their role at the end: Did I do my job properly? What could I have done differently?

- Result: Pupils learn to collaborate while developing their thinking about their contribution.

Resources to download

- → Tool 1 – Flowcharts
- → Tool 2 – Mind map - 2
- → Activity 1 – Index cards takeaway
- → Activity 2 – Thinking out loud

Sheet 14

ADAPTING METACOGNITIVE TOOLS FOR PUPILS SPEAKING ANOTHER LANGUAGE

Objective: to provide pupils who speak another language than the one of teaching with appropriate tools and strategies to help them develop their metacognitive skills while overcoming the language barrier.

Pedagogical reason:
Allophone pupils have to juggle language learning and school content. By adapting metacognitive tools to their needs, we help them to reflect on their learning while reinforcing their mastery of the language and their integration into school.

Advantages:

- Promotes understanding and use of metacognitive tools despite the language barrier.
- Reinforces language learning through interactive, contextualised activities.
- Helps pupils better understand their learning strategies in their target language.
- Encourages independence and integration into the classroom.

Practical examples in the classroom

After a science lesson

- Activity: The pupils complete a mind map using pictograms and a few words to describe what they have understood (e.g. a drawing of the earth for geography).
- Result: They visualise their learning while associating simple English words.

Preparing for an inspection

- Activity: Pupils use a self-assessment grid with icons to indicate their level of understanding (e.g. a thumbs-up for "I understand well", a question mark for “I need to practice”).
- Result: They identify the concepts they need to revise while reinforcing their vocabulary.

Resources to download

- ➔ Tool 1 – Comic
- ➔ Tool 2 – Traffic lights
- ➔ Activity 1 – Life connections
- ➔ Activity 2 – Photo captions

Sheet 15

INVOLVE FAMILIES IN SUPPORTING PUPILS WITH SPECIAL NEEDS

Objective: to involve families in the development of the metacognitive skills of pupils with special needs in order to strengthen their support at home and in the classroom.

Pedagogical reason:
Families play a key role in the success of pupils with special needs. By including them in the educational process, a synergy can be created between school and home, offering pupils continuous and consistent support to overcome their difficulties and develop their independence.

Advantages:

- Reinforces continuity between school and family practices.
- Helps families better understand their child's specific needs.
- Enables pupils to benefit from tailored, consistent support at home.
- Creates a constructive partnership between the school and families.

Practical examples in the classroom and at home

Workshop at the beginning of the school year

- Activity: Parents take part in a workshop to find out about tools used in class, such as mind maps and self-assessment grids.
- The result: they leave with practical ideas for supporting their child at home.

Use of the communication booklet

- Activity: Teachers record a strategy tested in class (e.g. Create a diagram to organise your ideas) and ask parents to encourage it at home.
- Result: Families and teachers work together to reinforce learning.

Resources to download

- → Tool 1 – Grow goal setting model
- → Tool 2 – Reflexion cards 2 – Am I feeling well at school?
- → Activity 1 – Online quizzes
- → Activity 2 – Jumpstart journal

CogniQuest

CogniQuest is a project led by five European organisations aiming to support pupils in developing their metacognitive skills, learning-to-learn skills and lifelong learning competencies to adapt to the changing tendencies of the labour market.

Discover more ressources on metacognition on the website of the project:

www.cogniquest.eu

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