LEARNING ACTIVITY TOOLS FOR SKILLS DEVELOPMENT

COMPREHENSIVE TOOLBOX FOR TEACHERS

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1. INTRODUCTION

Dear Teacher!

This toolbox is the first volume of the three comprehensive tool-books of the Erasmus+ project "SPIRIT - Skills of tomorrow for children of present", which contains learning activities for transversal skills development from 5 project partner countries. The 50 learning activities presented in the this toolbook have been collected, adapted, tested and packaged in a **comprehensive collection** by the project partners with the specific aim to enrich the tools of primary school teachers with already tested and proven working learning activities and active learning techniques that all develop transversal skills that today's primary school children will need in 15 years to maintain emotional and social well-being.

The selection and testing of the learning activities was conducted by 40 primary school teachers from the 5 partner countries and nearly 1200 pupils from 40 classes they teach. The items in this handbook have been grouped by skills to be developed. Thus, for each SPIRIT skill, we offer 5-5 learning activities that develop that particular skill in a complex way together with the other spirit skills. We have included a brief description of each of them, together with an explanation of how the skill is developed and how the results of the development can manifest in the children's behaviour. Similarly, for each learning activities, you will also find some methodological tips and suggestions to help you in the lesson implementation.

This toolbook has been produced the result of a collaboration between some of Europe's leading organisations involved in education, initial and in-services teacher training, and research – Erasmushogeschool Brussel (Belgium), Magyar Digitális Oktatásért Egyesület (MDOE, Hungary), Patrizio Paoletti Foundation (Italy), , Sapientia Hungarian University of Transylvania (Romania), VitaComm Education (Cyprus) and Thinking Skills Development Research Group (ELTE Faculty of Primary and Pre-School Education) as the associate partner of MDOE

The book is also available online on the SPIRIT portal https://tomorrowskills4kids.eu/learning-activities/ .

We strongly believe that the proposed learning activities and active learning techniques will bring much pleasure both to students and their teachers. We wish everyone a good time and happy teaching and joyful learning.

The SPIRIT- Skills of tomorrow for children of today - project team

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2. LEARNING ACTIVITIES FOR SKILLS DEVELOPMENT

The SPIRIT "learning activity" approach (as the project partners interpret it) is an interactive, purposeful, curriculum-implementable short activity – meaning it can be used in any lesson – that involves student activities in individual, pair, small groups, or the entire class, which teaches through experience-based activities and joint discovery rather than passive knowledge transfer, thereby developing students' skills. For the 6–10 age group students, this method is highly recommended and extremely effective because active participation builds a bridge between concrete experience and the understanding of concepts that are still abstract to them, while successfully focusing their easily distracted attention on the given lesson topic.

Beyond subject-specific connections, this method also fundamentally develops transversal skills: during group activities, students unconsciously practice paying attention to one another, emotional communication, teamwork, critical thinking, and problem-solving. They can develop their creativity and flexibility while becoming more open and tolerant of others' thoughts and values. As a result, children not only understand academic material more easily, but their empathy and sense of belonging to the community also strengthen, shaping them into confident, open, cooperative, and mentally and emotionally healthier, happy people in the long run. In addition, well-designed activities provide an immediate sense of success, which in the long run motivates primary school children and makes them confident and open to further learning.

What Are Learning activities?

A lesson consists of different components, and one of these is a learning activity. A learning activity is a methodology – a general teaching strategy, method, or specific instructional approach – that actively involves students in the learning process. Instead of passively listening, students take an active role in their own learning. They are generally more motivated and engaged when they participate actively.

In educational literature, several terms are used to describe learning activities, including learning techniques, didactic methods, teaching methods, work forms, pedagogical approaches, etc. These terms may have subtle differences, but in this project, we have chosen to use the term "learning activity."

A learning activity can be:

- a specific teaching method that has been deliberately developed (for example emotional mirror).
- or a certain 'method' or 'work form' that can be applied to different learning contents while teaching subjects such as math, science, or history. For instance, anticipatory reading can be used in history, literature, etch.

These activities can include interactive group activities, role plays, individual assignments, paired tasks, quizzes, creative projects or even game-based activities that integrate learning content.

Games as a learning activity?

In the interpretation of the project's partners and experts, if an existing game is adapted to include learning/actual lesson content, it becomes a learning activity, as it is then used to teach specific subject matter. For example, if you replace all the faces in Guess Who? with animals that students have learned about in class, the game is no longer just for entertainment but actively supports learning.

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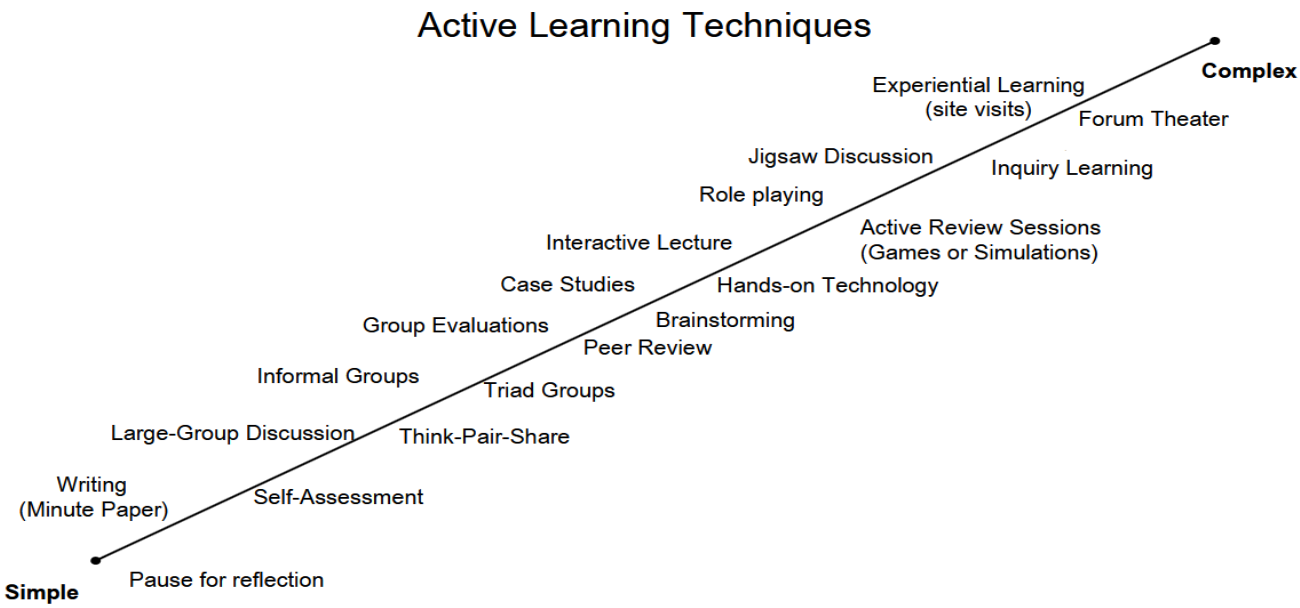
Flexible Use Across Subjects

The learning activities in this toolbox are described in a general way. In principle, they can be applied to multiple types of learning content. For example, a "Gallery walk" or Jigsaw activity could be used in any lesson. The 50 learning activities included in this toolbox have been carefully selected to ensure that, in addition to developing the specific skill, they support this Flexible Use Across Subjects. Each learning activity description includes several practical examples on how it can be used in different subjects. They are therefore applicable to the various contents of the partner countries' national curriculum.

Use and placement of learning activities in a lesson

Such a learning activity can be part of a larger lesson plan that includes other learning activities. It therefore usually forms part of a bigger whole. The duration and complexity of a learning activity can be highly variable, ranging from very simple 5- to 10-minute activities (such as the Think-Pair-Share activity, which typically takes between 5 to 10 minutes to complete) to much more complex techniques that may require significantly more time. (see below for a simple and, of course, far from complete illustration. This spectrum arranges active learning techniques by complexity and classroom time commitment.



Source: Chris O'Neal and Tershia Pinder-Grover, Center for Research on Learning and Teaching, University of Michigan

When Do You Use the learning activities?

Activating techniques can be used at any stage of a lesson to make teaching and learning more interactive:

- At the beginning of the lesson: to introduce a topic and assess prior knowledge (e.g., dilemma thinking).
- During the lesson: to engage students and help them process new information (e.g., writing an encyclopedia entry).
- At the end of the lesson: to assess learning outcomes or summarize key concepts (e.g., wonderful reinventions).

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How Do You Choose the Right activity?

When you wish to use learning activities in your lesson and want to select the ones that best suit the lesson's content and the age-specific characteristics of your students, consider the following:

1. Start with the Learning Objective:
   - What do you want students to learn, train, or achieve?
   - How will you test their understanding?
2. Match the activity to the Goal:
   - For example, if the goal is to improve teamwork, use collaboration forms, like group problem-solving or project-based learning.
   - If the goal is knowledge recall, consider quizzes or brainstorming.

Always let your learning objective guide your choice of technique. Begin with the outcome in mind and select methods that help students achieve that goal effectively and actively. This comprehensive toolbook offers a variety of practical learning activities to help you create engaging, interactive, and goal-oriented lessons to train transversal skills. By embracing activating learning activities, you can transform your teaching, empower your students, and prepare them for the challenges of the 21st century.

Why Flexibility Matters?

Activating learning activities can be adapted to different class sizes, subjects, and teaching moments. For example:

- In a **lecture setting**, interactive tools like quizzes or Q&A sessions can energize a large group.
- In a **smaller group**, role-plays, debates, or discussions allow for deeper interaction and personalized learning.

This approach makes teaching dynamic and ensures students are not just explicitly learning content but also the skills they need to thrive in the modern world.

Adjusting Activities to Different Levels

Each learning activity can be adapted in terms of difficulty (beginner – advanced – expert) by providing more or less support or by making specific adjustments.

Let's look at an example of the interpretation of this, which we quote from the Object Lesson Energiser learning activity, find in fully detailed in Chapter 3.10.5 of this book:

- **Beginners (6-7 years old):** Use a very concrete, obvious symbol. Teacher models the connection explicitly. Students get sentence stems or fixed prompts, work in pairs or small groups with assigned roles, and do a simple, single-step action/commitment. Reflection is guided ("I notice..., I will...") with yes/no or fill-in-the-blank support.
- **Advanced learners (8-9 years):** Use a symbol with a bit more nuance; students help generate the analogy. Small groups discuss guided open questions, compare ideas, and choose a related action. Teacher scaffolds but let us groups revise or extend their commitments. Reflection asks "what" and "why" and includes simple self-assessment.

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- **Experts (9–10 years):** Students select or adapt their own symbolic objects, frame the connection themselves, lead peer discussions, and design multi-part or sustained actions. Feedback (peer and teacher) informs iteration. Reflection is metacognitive - students articulate how their thinking is changing and set next-step goals.

Using Learning activities for developing transversal skills

Purposefully designed learning activities provide meaningful opportunities to foster transversal skills, such as empathy, critical thinking, and others. We have chosen to place one central skill at the core of each learning activity. However, other skills are naturally developed as well. For each learning activity, we also indicate two secondary skills that are addressed.

From Activity to Skill Development

Each learning activity should follow a structured process, consisting of a core phase and a conclusion or recapitulation phase. It is important that the teacher actively observes students during the activity and asks guiding questions as needed.

During the reflective phase, the central skill being addressed should be explicitly highlighted, accompanied by debriefing and reflection questions to consolidate understanding and encourage deeper thinking.

This question is really the key for developing the skills! They help make learning visible, prompt reflection, support skill development, and encourage students to articulate their thinking, strategies, emotions, and choices. To develop a particular skill effectively, multiple learning activities should be conducted over an extended period, with that skill serving as the central focus in each activity. It is only after performing a particular activity multiple times, with a specific progression and by practicing a certain skill, that it becomes a habit for the students.

Summary

Integrating short, interactive activities into the lessons helps 6-10 years old students understand and implement abstract ideas through hands-on experience. By shifting away from passive listening, the teachers allow children to enjoy and love to learn. These methods naturally weave the practice of essential life skills, like problem-solving, emotional control, creativity, connectedness, or resilience into everyday lessons. Guiding the process with targeted guiding and debrefing questions allows you to make their development visible and recognisable for the sudents and the teacher as well. Consistent use of these techniques builds lasting habits that prepare students to meaningfull happy life.

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3. THE TOOLBOX - ACTIVITIES FOR SKILLS DEVELOPMENT

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3.1 EMOTIONAL AWARENESS, REGULATION AND COMMUNICATION

3.1.1 Emotional Mirror (Think-Pair-Share)

Brief description, and rules of the implementation of the learning activity

This Think-Pair-Share adaptation focuses on children mimicking, identifying, and discussing emotions with partners, helping them both recognize feelings and connect them to personal experiences.

Skill focus

Primary Skill Focus

- Emotional awareness, regulation and communication

Complementary/Secondary Skill Focus

- Empathy
- Valuing people and nature

Age group	Student number	Duration
6-10 years old	10 to 25 children (pairs or small groups)	30 minutes

Proposed step by step implementation of the learning activity

1. Each child draws an emotion card (or the teacher assigns one). They silently act out the emotion in front of their partner, using only facial expressions and body language.
2. The partner guesses the emotion and asks, "When do you feel this way?" The acting child shares a personal example.
3. Each pair shares one example or discovery with the whole group, highlighting the variety of emotional experiences.

Indoor/Outdoor Classroom layout notes

Indoor: This activity works best in a quiet, well-lit room with space for students to work in pairs. Chairs can be arranged in two facing rows or scattered pairs around the room. A calm and focused atmosphere will support better observation and emotional recognition.

Outdoor: If done outside, choose a quiet area like a covered patio, shaded courtyard, or grassy space with little distraction. Pairs should sit or stand facing each other, slightly apart from other groups. Avoid windy or overly bright environments that may affect visibility or concentration.

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How does this learning activity develop this particular skill?

This simple but powerful partner activity develops emotional awareness and empathy. One child expresses an emotion (verbally or through facial/body cues), and their partner mirrors it back and describes what they think the other is feeling.

The process strengthens:

- Emotional expression and decoding,
- Non-verbal communication awareness,
- Empathetic feedback and verbal articulation.

What do we want to achieve regarding primary skill development (student understanding and/or behaviour)?

As a result of this activity, students will:

- Recognize and express emotions non-verbally
- Build emotional vocabulary
- Connect emotions to personal experience
- Be better at describing feelings to others.

Suggested use, and practical subject-related examples

This activity can be used in small groups or pairs to foster emotional recognition and communication. It is particularly effective at the start of the day or after emotionally intense activities (e.g., after recess or a conflict). Children take turns mimicking a feeling, while their partner guesses the emotion and asks a follow-up question like “When do you feel that way?” or “What helps you when you feel that emotion?”

Here are some concrete examples:

Example 1 – Step-by-step (Sadness)

- Child A slouches their shoulders, looks down, and sighs quietly.
- Child B observes and guesses: “Are you feeling sad?”
- Child A responds: “Yes.”
- Child B follows up: “When do you feel sad?”
- Child A answers: “When my best friend is absent from school.”

Example 2 – Joy:

A child jumps lightly, smiles wide, and claps. Their partner says, “You’re happy!” The child says, “Yes, I feel that way when we have art class.”

Example 3 – Frustration:

A child crosses their arms, furrows their brow, and lets out a short “Ugh!” sound. Their partner guesses: “Frustrated?” and asks, “What makes you feel that way?” The child replies, “When I can’t finish a puzzle.”

Example 4 – Shyness:

A child hides their face slightly and shrinks their posture. The partner says, “Are you feeling shy?” and the child replies, “Yes, when I meet someone new.

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Materials and tools needed for implementation

- Emotion cards
- Optional mirrors for practice

Guiding questions

- Is it easy or hard to show emotions with your face?
- How do emotions look different on different people?
- What emotion do you think your partner is showing right now?
- How can you tell how they're feeling without words?
- Does your partner's face remind you of a feeling you've had before?
- What happens in your body when you mirror this emotion?
- How do you feel when you see someone reflect your expression back to you?

Tips and Tricks for dealing with challenges

- **Challenge**: Some children might exaggerate emotions into cartoonish expressions.
  Tip: The teacher should encourage real-life accuracy by asking, "How would your face really look if you felt scared?"

Difficulty level tailoring

Teachers can tailor the learning activity to three difficulty levels to meet students' needs.

- **Beginner learners (6-7 years old):** focus on broad, easily recognized emotions.
- **Advanced learners (8-9 years old):** include more nuanced feelings like embarrassment.
- **Expert learners (9–10 years old):** introduce emotion combinations (nervous-excited).

Debriefing and Reflection questions

- Did you learn anything about your own feelings?
- Was it easy or hard to recognize the emotion you were mirroring?
- What did you learn about how emotions show up in faces and bodies?
- How did it feel when someone mirrored your emotion back to you?
- Did your partner interpret your emotion the way you intended?
- How can being a good observer help us be more empathetic friends?

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3.1.2. Emotional Path (outdoor)

Brief description, and rules of the implementation of the learning activity

In this outdoor game, children walk along a path marked with stations, each representing a different emotion. At each station, they act out the emotion using facial expressions, body language, and verbal expressions.

Skill focus

Primary Skill Focus

- Emotional awareness, regulation and communication

Complementary/Secondary Skill Focus

- Empathy
- Resilience

Age group	Student number	Duration
6-10 years old	8 to 25 children	30 minutes

Proposed step by step implementation of the learning activity

1. **Preparation:** The teacher selects a safe outdoor area and sets up 5–6 clearly marked stations along a path or circuit. Each station corresponds to a specific emotion (e.g., *happiness*, *anger*, *fear*, *surprise*, *pride*, *sadness*). Each spot can be marked with signs, coloured mats, emotion cards, or simple props that evoke the feeling.
2. **Introduction:** Before starting, the teacher gathers the group and explains that at each station, children will explore an emotion through naming it, expressing it with their bodies and faces, and—if they want—sharing a personal experience.
3. **Walking the Path – Alone or in Pairs:** Children begin walking the path, one at a time or in pairs. At each station, they:
   - Read or hear the name of the emotion.
   - Say the name of the emotion aloud.
   - Show what that emotion looks like using facial expressions and body posture.
   - (Optional) Share a moment when they felt that emotion, either aloud to their partner or silently in their minds.
4. **Peer Observation:** If done in pairs, one child performs while the other observes. They can take turns at each station. The observing partner is invited to give positive feedback: “Your face really looked surprised!” or “That looked like real sadness.”

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5. **Teacher Role:** The teacher moves along the path or stands at key points, encouraging expression, supporting shy participants, and asking prompting questions like: “Can you remember a time when you felt like that?” or “How does your body feel when you're angry?”
6. **Closure and Calm Down:** After the path, the group regathers to take a few calming breaths and reflect on which emotions were easiest or hardest to express, and how it felt to observe and be observed.

Indoor/Outdoor Classroom layout notes

Outdoor only: This activity is designed specifically for outdoor use. Choose a safe, open space like a school yard, garden, or playground path where 5–6 emotion stations can be clearly spaced apart. Use cones, chalk, or laminated cards to mark each station. Stations should be arranged in a visible loop or line, allowing easy supervision. Ensure a quiet environment to encourage reflection and sharing.

How does this learning activity develop this particular skill?

This physical movement activity links spatial experience to emotional awareness. As children move through a symbolic “emotional path” (marked with stations or prompts), they pause to reflect on personal emotional experiences.

Each station might ask:

- “When did you last feel proud?”
- “How do you act when you're angry?”
- This embodied learning method helps students:
- Access emotions through memory and movement,
- Develop reflective language skills,
- Share experiences in a structured, supportive format.

The physical component also makes abstract emotions more concrete and approachable.

What do we want to achieve regarding primary skill development (student understanding and/or behaviour)?

As a result of this activity, students will:

- be able to recognize and name basic emotions
- be able to connect emotions to personal experiences
- be aware of how emotions feel physically
- be encouraged to express natural emotions in a safe space

Suggested use, and practical subject-related examples

- At the "Fear" station, a child might hug themselves tightly and say, "I feel fear when there’s a loud noise at night."
- At the "Pride" station, a child might stand tall with hands on their hips and say, "I felt proud when I helped my friend."
- At the "Surprise" station, a child might widen their eyes and open their mouth, saying, "I was surprised when my grandparents came to visit without telling me."

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- At the "Sadness" station, a child might lower their shoulders and look down, softly saying, "I felt sad when my pet was sick."

Materials and tools needed for implementation

- Cones or markers to create the path
- Emotion signs or cards at each station
- Optional: mirrors for children to see their own expressions

Guiding questions

- Which emotions were easiest to show? Which were hardest?
- Did you learn anything new about how your body feels different emotions?
- How did it feel to share a personal experience with someone else?
- Do all emotions feel the same to everyone? Why or why not?

Tips and Tricks for dealing with challenges

- **Challenge**: Some children might feel embarrassed or shy acting out emotions, especially sadness or fear.
  Tip: The teacher should model the activity first, showing that all emotions are normal.
- **Challenge**: The children exaggerate (turning fear into cartoonish horror).
  Tip: The teacher can gently guide them to explore how they *really* feel fear, focusing on physical sensations (heartbeat, posture).
- **Challenge:** Some children cannot name a personal example.
  Tip: the teacher can offer simple prompts like, "Do you ever feel proud when you learn something new?"

Difficulty level tailoring

- **Beginner learners (6-7 years old)**: the focus should be on naming emotions and acting them out with exaggerated body language, which helps them link words to feelings. They may need examples for personal experiences.
- **Advanced learners (8-9 years old):** encourage more nuanced explanations, asking them to describe not only the situation but also what changed inside them when they felt the emotion.
- **Expert learners (9–10 years old):** you can introduce paired discussions at each station, where they describe times, they felt the emotion and what they did to manage it.

Debriefing and Reflection questions

- Which emotion did you find the easiest to act out? And the most difficult?
- Did acting out emotion help you understand it better?
- What did you learn from hearing your classmates' experiences?
- Did you notice how your body changed with each emotion?
- Why is it important to recognize how we feel and share it with others?

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3.1.3. Emotion Regulation Station Rotation

Brief description, and rules of the implementation of the learning activity

This is a station rotation/relay with emotional regulation challenges at each station, where players must practice calming techniques before they can move to the next stage. It combines physical movement with emotional self-regulation practice.

Skill focus

Primary Skill Focus

- Emotional awareness, regulation and communication

Complementary/Secondary Skill Focus

- Resilience
- Empathy

Age group	Student number	Duration
6-10 years old	12 to 25 children (team of 4-6)	30-40 minutes

Proposed step by step implementation of the learning activity

A relay is a type of team-based activity where participants take turns completing segments of a course or challenge. In this version, however, each child completes the entire course individually, moving through a series of 4 to 5 stations, each designed with a small emotional self-regulation task.

1. **Set up the course:** Arrange 4 to 5 stations in an open space (indoor or outdoor). These can be marked with cones, mats, signs, or simple drawings on the floor.
2. **Introduce the game:** Explain to the children that this is a “Regulation Relay” where they will move through each station one at a time, and at each stop they will be asked to do a quick self-regulation technique before moving forward.
3. **At each station, they will:**
   - Stop and read/listen to the task
   - Do the emotional regulation activity (see examples below)
   - Only when completed, move to the next station
4. **Example of regulation tasks at each station:**
   - Station 1: Deep Breathing – Take 5 slow, deep breaths in through the nose and out through the mouth.
   - Station 2: Muscle Release – Tense your fists or shoulders tightly for 5 seconds, then slowly relax.
   - Station 3: Emotional Naming – Say out loud (or whisper) one feeling you experienced today.
   - Station 4: Shake-Off Dance – Do a 10-second silly dance to release excess energy.

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- Station 5 (optional): Visualization – Close your eyes and imagine a calm place for 10 seconds.

5. **Repeat or Reflect:** After each child finishes the course, you may invite them to reflect briefly (e.g., "Which station helped you feel more calm or focused?").

Indoor/Outdoor Classroom layout notes

The activity requires ample running space and clearly marked stations — a playground, field, or large courtyard is ideal. Use cones, ropes, or chalk lines to define the relay path and individual stations. Keep visual instruction cards at each station, weighted down if windy. Choose a quiet spot with enough room for safe movement and minimal distractions.

How does this learning activity develop this particular skill?

This physically active game supports the development of emotion regulation strategies. As children move through relay-style stations, they are faced with emotional prompts or mini-challenges that require them to recall and apply calming or coping techniques.

This activity:

- Connects movement with cognitive-emotional reflection,
- Helps children practice identifying emotions in a moment of action,
- Encourages self-regulation in a dynamic, playful format.

Through repetition and team interaction, children internalize strategies like deep breathing, counting, or reframing thoughts, and develop confidence in using them even when under mild stress or excitement.

What do we want to achieve regarding primary skill development (student understanding and/or behaviour)?

As a result of this activity, students will:

- be aware the quick and accessible calming strategies
- be more practiced in pausing and regulating emotions during activity
- be aware of the connection of physical energy release with emotional release
- be encouraged to give peer encouragement and support

Suggested use, and practical subject-related examples

- Deep Breathing Station: The player takes 5 slow, deep breaths. The teacher might say, "Imagine you've just had an argument with a friend—how can breathing help you slow down before reacting?"
- Shake-Off Dance Station: The player does a quick 10-second dance to release extra energy. The teacher might prompt: "What if you're feeling too excited to focus in class? Let's shake off that energy!"
- Tense and Release Station: The player squeezes their fists or shoulders tightly for 5 seconds, then slowly relaxes them. The teacher could suggest: "Picture yourself getting nervous before a test. Try this trick to ease the tension."

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- Name Your Feeling Station: The player pauses and says aloud (or whispers to themselves) one feeling they experienced today. The teacher can help with a question like: “Did something make you happy or annoyed this morning?”

Materials and tools needed for implementation

- Cones to mark stations
- Instruction cards with regulation challenges
- Optional: a timer or whistle

Guiding questions

- What emotion do you think this challenge is connected to?
- When you feel this way, what helps you calm down or feel better?
- Can you name a strategy you've used before to manage this feeling?
- What would you tell a friend who feels this emotion?
- How does your body feel when you're experiencing this emotion?
- What can you do right now to shift from this feeling to a calmer one?

Tips and Tricks for dealing with challenges

- **Challenge**: Some children might rush through the regulation steps without fully engaging.
  Tip: The teacher should emphasize that the point is to practice the skills, not just win. The teacher can walk alongside players, modelling slow breathing or calm body language.
- **Challenge:** Other children might get stuck naming emotions, so the teacher can provide a visual emotion chart at each station for support.
  Tip: If some children become too competitive, the teacher can shift the focus to team cooperation, encouraging teammates to cheer for each other’s regulation strategies.

Difficulty level tailoring

- **Beginner learners (6-7 years old)**: focus on body-based techniques, such as shaking off tension, stretching, or simple deep breathing, without requiring complex emotional labelling. Short, playful stations (like "wiggle your fingers and toes") keep them engaged.
- **Advanced learners (8-9 years old):** include naming feelings as part of each station, asking them to briefly explain what might trigger that feeling. This strengthens emotional awareness alongside regulation.
- **Expert learners (9–10 years old):** include self-talk strategies, such as “I can handle this” or “I’m feeling worried, but I’m okay”, reinforcing positive internal dialogue along with physical strategies.

Debriefing and Reflection questions

- Which strategy was easiest for you? Which was hardest?
- Did any technique help you feel calmer?
- How do you know when your emotions are getting too strong?
- When could you use one of these techniques at school or home?
- Why is it important to pause and notice how we feel before we react?

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3.1.4. My Emotion Journal

Brief description, and rules of the implementation of the learning activity

Children create their own Emotion Journal, where they regularly record how they feel, what caused it, and how they managed it, helping them track patterns and grow awareness.

Skill focus

Primary Skill Focus

- Emotional awareness, communication and regulation

Complementary/Secondary Skill Focus:

- Empathy
- Resilience
- Curiosity

Age group	Student number	Duration
6-10 years old	Individual or whole class (up to 25)	30 minutes (can be repeated regularly)

Proposed step by step implementation of the learning activity

1. **Introduction by the Teacher:** The teacher introduces the journal as a “special book” where children can write or draw about how they feel. It’s a private space (unless they choose to share) where they can learn to understand their emotions better.
2. **Hand Out the Templates:** Each student receives a journal sheet (paper or digital). The template may include:
   - Date
   - Emotion of the day (with emojis for non-writers)
   - What caused this emotion
   - Where they felt it in the body (head, chest, tummy, etc.)
   - What they did about it (reaction or regulation strategy)
   - Drawing space (optional, especially for younger children)
3. **Model the Process Together (First Time):** The teacher can fill out one journal entry on the board, thinking out loud: “Today is Monday. I felt… worried. Why? Because I had to speak in the teacher meeting. Where did I feel it? In my chest, it felt tight. What did I do? I took deep breaths. Now I feel more calm. I’m going to draw a cloud with my worried thoughts.”
4. **Individual Reflection Time:** Students complete their own journals quietly. Younger children may dictate their answers to the teacher or an assistant.
5. **Sharing Time (Optional):** Volunteers can share parts of their entry with the class or in pairs. The teacher reminds the class to listen with care and without judgment.

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6. **Routine Creation:** The activity can be done weekly (e.g., every Friday) or spontaneously after emotionally intense moments (e.g., conflict, celebration, changes).

Indoor/Outdoor Classroom layout notes

This activity is best conducted in a calm classroom setting with individual desks or seated circle arrangements. Provide students with a quiet atmosphere to reflect and write, possibly with gentle background music. For younger children, creating a journaling corner or using clipboards on a carpet can foster a more relaxed, emotionally open setting.

How does this learning activity develop this particular skill?

Keeping a regular journal supports emotional literacy and self-reflection. This activity allows children to record daily or weekly emotions, explore causes, and reflect on how they responded. It develops:

- Vocabulary for describing internal states,
- Awareness of emotional patterns and triggers,
- Ownership over regulation strategies.

With teacher guidance or prompts, the journal becomes a space for self-expression and quiet reflection. Over time, it can serve as a valuable tool for both emotional learning and mental well-being.

What do we want to achieve regarding primary skill development (student understanding and/or behaviour)?

As a result of this activity, students will:

- be able to build regular habits of emotional reflection
- have richer emotional vocabulary
- understand the connection between emotions and their causes and physical sensations
- be able to develop early emotional regulation strategies

Suggested use, and practical subject-related examples

A 7-year-old might write: *"I felt frustrated because I couldn't finish my puzzle. My tummy felt tight. I took a break and asked for help."*

A 10-year-old might write: *"I felt excited because I was picked for a game. My heart was beating fast, and I smiled a lot."*

When used regularly — for example, once a week or after key emotional moments — the journal becomes a powerful routine for building self-awareness and emotional vocabulary.

The teacher plays a key role in supporting the development of this skill. For instance:

- During early sessions, the teacher may offer emotion word banks, body maps, or example prompts (e.g., "Think of a time today you felt really happy or really annoyed").
- As children journal, the teacher can circulate and gently prompt deeper thinking:
- "Can you remember what happened just before that emotion started?"
- "Where else do you feel that emotion in your body?"
- "What do you usually do when you feel that way?"

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- After several weeks, the teacher might encourage children to look back at past entries to notice patterns (e.g., “I often feel nervous before group work,” or “Drawing helps me calm down”).
- In a small group setting, the teacher might guide reflective sharing circles using anonymized examples from the journals (always with consent), showing how emotions are common, manageable, and shared.

By consistently modelling curiosity and respect toward emotions, the teacher fosters a safe climate where emotions are seen not as distractions, but as valuable information to understand oneself and others.

Materials and tools needed for implementation

- Emotion Journal template (printed or hand-drawn)
- Pencils, crayons, or markers
- Optional: emotion word bank or chart

Guiding questions

- Was it easy or hard to remember your emotions today?
- Did writing about your feelings help you understand them better?
- Do you notice any patterns in how you feel?
- How do different emotions feel in your body?

Tips and Tricks for dealing with challenges

- **Challenge:** Some children might struggle to identify emotions, especially if they have limited vocabulary.
  Tip: The teacher can provide an emotion word bank and model examples aloud.
- **Challenge:** Some may always choose the same "easy" emotions like happy or sad.
  Tip: The teacher can encourage exploring less common feelings, offering prompts like, "What’s a time you felt proud?"

Difficulty level tailoring

- **Beginner learners (6-7 years old)**: keep entries short and supported with drawings. Focus on matching feelings with basic causes ("I was happy at recess").
- **Advanced learners (8-9 years old):** encourage more detailed descriptions of what happened before, during, and after the emotion. Introduce simple body-mind connections ("My chest felt tight when I was worried").
- **Expert learners (9–10 years old):** emphasize self-reflection and emotional growth, asking how they might respond differently to strong emotions next time.

Debriefing and Reflection questions

- Was there a moment this week when journaling helped you understand your feelings better?
- Which emotion do you notice shows up often in your journal? Why might that be?
- Have you learned something new about yourself by keeping this journal?
- Is there a time when writing about your emotion helped you feel calmer?
- What do you find easy or hard about writing your emotions down?

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3.1.5. Mindful Breathing Journey

Brief description, and rules of the implementation of the learning activity

This guided mindfulness exercise helps children learn to recognize, observe, and regulate their emotions using mindful breathing and visualization techniques.

Skill focus

Primary Skill Focus

- Emotional awareness, regulation and communication

Complementary/Secondary Skill Focus

- Resilience

Age group	Student number	Duration
6-10 years old	Whole class or small groups (5 to 25 children)	15-20 minutes

Proposed step by step implementation of the learning activity

The children sit in a comfortable position, either cross-legged on the floor or lying on a mat. The space should be quiet and calm, with soft lighting if possible. The teacher explains that they will go on a small inner journey using their breath to help their bodies and minds feel calm and peaceful.

Below is a step-by-step script the teacher can follow, adaptable based on the children's age and familiarity with mindfulness.

1. **Setting the tone (1-2 minutes):** "Today we're going to take a little trip—but not with our legs, with our breath and our imagination. This is called a 'Mindful Journey'. It helps our minds feel calm, and our hearts feel kind."

   "Let's all find a quiet, still position. You can sit like a mountain or lie down like a quiet lake. Close your eyes if that feels good to you or look down at your hands."

2. **Connecting with the breath (2-3 minutes):** "Let's begin by noticing our breath. Just breathe in... and breathe out. Don't change anything. Just feel it."

   "Now let's try to breathe slowly together. Breathe in slowly like you're smelling a flower... (pause)... and breathe out slowly like you're blowing on hot cocoa... (pause)."

   "Let's do that three more times. In through the nose... and out through the mouth."

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3. **Introducing the emotional journey (3-4 minutes):** "Now I'd like you to imagine a small river. It's gentle and clear. It flows slowly past you. You are sitting beside it, very still. The sun is warm on your face."

   "Now imagine that your feelings are like leaves. When you notice a feeling—maybe worry, or excitement, or sadness—you can place it gently on a leaf. Watch it float down the river. You don't have to hold it. Just let it pass by."

   "If you notice a feeling in your body—like a tight tummy or a heavy head—place that on a leaf too. And just keep breathing slowly. In... and out."

4. **Deepening awareness (3-4 minutes):** "If a thought pops up in your head—like 'I want to go play' or 'I don't like this'—you can place the thought on a leaf too. Watch it float away. Then bring your attention back to your breath."

   "Your only job is to breathe. Breathe in calm... breathe out any tension. You're safe. You're quiet. You're doing just fine."

   "Let's sit in this calm river space for a few more moments. Breathing in... and breathing out."

5. **Returning to the group (2 minutes):** "Now it's time to come back. Wiggle your fingers and your toes slowly. Stretch like a cat. Gently open your eyes when you're ready."

   "Take a moment to notice how your body feels. Are you more relaxed than before?"

   "Thank yourself for taking care of your mind and your breath."

   This script can be shortened to 5-7 minutes for younger children (age 6-7), or expanded to 10-12 minutes for older children (age 9-10), who are more capable of sustained focus.

Indoor/Outdoor Classroom layout notes

Indoor only: This activity requires a calm, quiet indoor space with minimal distractions. A classroom with soft lighting or drawn curtains is ideal. Children should sit or lie on soft mats or cushions, spaced out enough to feel personal space. If available, play gentle instrumental music or use a small bell to signal the beginning and end of the session. Ensure the teacher's voice can be clearly heard by all participants without raising the volume.

How does this learning activity develop this particular skill?

This activity strengthens self-regulation and emotional awareness by guiding children through slow, mindful breathing accompanied by a visual or narrative journey. As children imagine moving through calming scenes (like forests, clouds, or underwater worlds), they synchronize their breathing with the rhythm of the story.

This process helps children:

- Tune into their body and breath,
- Slow down physiological responses to stress,
- Practice focused attention through guided imagery.

By linking breath to mental visualization, the activity creates a gentle and enjoyable entry point into mindfulness practice, equipping children with a concrete strategy they can recall when feeling overwhelmed or emotionally activated.

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What do we want to achieve regarding primary skill development (student understanding and/or behaviour)?

As a result of this activity, students will:

- be able to pause and observe emotions
- understand the non-judgmental awareness of feelings
- be aware the breathing techniques to self-regulate emotions
- have better focus and attention

Suggested use, and practical subject-related examples

- A child feels nervous about an upcoming test; during the practice, they imagine the nervousness as a small leaf floating by on a stream, allowing them to observe and detach from the feeling.
- Another child feels excited after recess; they visualize their excitement as a bright red balloon gently rising, breathing slowly to bring their energy down and feel more cantered.
- A third child comes back from a conflict with a peer and feels angry; the teacher invites them to imagine the anger as a stormy cloud slowly drifting across the sky with each breath, noticing how it begins to lighten and move away.
- A fourth child is feeling sad and tired after a long day; through mindful breathing, they picture their sadness as a blue raindrop falling into a calm pond, watching the ripples fade as they breathe in calm and breathe out heaviness.

Materials and tools needed for implementation

- Calm background music (optional)
- A soft chime or bell to mark the start and end
- Floor mats or cushions for comfort

Guiding questions

Only debriefing questions are suggested

Tips and Tricks for dealing with challenges

- **Challenge**: Some children may giggle or have trouble staying still, especially if they are not used to mindfulness.
  Tip: The teacher should normalize this, reassuring them that learning to sit quietly takes practice.
- **Challenge**: Other children may struggle to name their emotions during the reflection.
  Tip: In this case, the teacher can offer a menu of emotions to help them find words (e.g., “Are you feeling calm, worried, excited, or tired?”). The teacher’s attitude should always be non-judgmental and supportive, emphasizing that there is no right or wrong way to feel. Modelling calm, steady breathing helps children mirror the practice.

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Difficulty level tailoring

- **Beginner learners (6-7 years old):** keep the visualization simple—just focus on the breath and imagine a cloud or balloon floating away with strong feelings. Younger children may benefit from placing a stuffed animal on their belly to observe their breath.
- **Advanced learners (8-9 years old):** introduce the concept of naming emotions silently as they notice them, encouraging a pause between noticing and reacting. They can also practice breathing techniques (4 counts in, 4 counts out) to anchor themselves.
- **Expert learners (9-10 years old):** encourage more self-reflection, asking them to notice where emotions show up in their body (tight chest, butterflies in the stomach) and guide them to breathe into those sensations.

Debriefing and Reflection questions

- Was it easy or hard to sit quietly and notice your emotions?
- Did you notice any feelings you didn't expect?
- How did your body feel before, during, and after the activity?
- Can you think of a time outside school where you could use this technique?
- Why is it helpful to observe emotions instead of ignoring them?

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3.2 CREATIVITY

3.2.1 Anticipatory reading

Brief description, and rules of the implementation of the learning activity

The anticipatory reading is an interactive teaching strategy that begins with pair work or developing the story in small groups and finally presenting it to the whole class. It encourages imaginative processes, collaboration, active participation, curiosity, sense of wonder and openness towards stories of their own and those developed by other groups.

Skill focus

Primary Skill Focus

- Creativity

Complementary/Secondary Skill Focus

- Problem-solving
- Curiosity, sense of wonder and openness
- Critical thinking

Age group	Student number	Duration
10 years old	whole class working in pairs or small groups	90 minutes

Proposed step by step implementation of the learning activity

1. **Ice breaker:** Each pair or small group gets 4 key words, and they are asked to develop a story using those words, then they choose a suitable title for it. Then each pair or small group presents their story to the whole class.
2. **The teacher reads the first paragraph of a text to the whole class**: The text is, of course, connected to the previously chosen key words). The students are then asked to predict how the story develops and write down their versions.
3. **Each pair or small group presents their stories**: Each pair present and then the process is repeated as many times as needed, depending on the number of parts the text is divided to or the time we have at our disposal.
4. **Whole class discussion:** At the end of the final set of presentations, the whole class takes part in a discussion related to some questions/problems which occurred in the text, e.g. the main character's choices or the ethics of their behaviour.

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Indoor/Outdoor Classroom layout notes

Flexible classroom seating is ideal to support pair or group work.

How does this learning activity develop this particular skill?

The anticipatory reading activity places creativity at its core: students are challenged to integrate given keywords into original narratives, invent twists, and imagine alternative outcomes. This nurtures their ability to generate ideas and express them in unique ways. At the same time, the process also strongly fosters curiosity and openness. Predicting how a story might unfold encourages students to wonder, explore different cultural or ethical perspectives, and remain open to unexpected possibilities. Reflecting on the differences between their own predictions and the original text broadens their perspective and strengthens critical thinking. Altogether, the activity builds a safe space where children can freely experiment, explore, and express creative and curious ideas in collaboration with their peers.

What do we want to achieve regarding primary skill development (student understanding and/or behaviour)?

As a result of this activity, students will:

- understand how creativity emerges from exploring possibilities, imagining alternative outcomes, and connecting ideas in new ways.
- be able to work collaboratively, build on others' ideas, and reflect on how predictions and story choices shape understanding.

Suggested use, and practical subject-related examples

Teachers can use the anticipatory reading learning activities in a number of contexts. Here are some examples:

1. History: develop a detailed narrative based on a real historical setting, adding characters, dialogue, and decisions (e.g. You are aboard Columbus's ship, and someone shouts, 'Land ahead!' What do you see as the ship approaches the shore?).
   Literature: introduce a legend or myth from a specific culture, incorporating creative twists while maintaining cultural elements (e.g. the Hungarian legend of the white stag leading hunters to the Carpathian Basin).
2. Math: students can come up with a number of possible scenarios and create their own step-by-step solutions for a given problem in imaginative ways (e.g. A group of friends is planning a trip, but they need to calculate how much money they need for tickets, food, and souvenirs. They have €200 in total. What could the items and their costs be? Students can invent different trip destinations, types of tickets, or unusual items to buy, which makes the task both creative and problem-solving oriented).

Teachers can use the anticipatory reading learning activities in the following ways for developing creativity:

- Encourage students to develop unique, imaginative stories based on key words with unexpected turns.
- Use creative writing projects or tasks that inspire dramatic play as a warm-up exercise.

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- Cherish multiple possible outcomes rather than a single "correct" answer, so that students learn that creativity is about exploring diverse approaches and solutions.

Materials and tools needed for implementation

- Writing tools: Pens, pencils, or digital devices for individual note-taking and story development.
- Paper or whiteboards: For students to jot down their thoughts, share ideas, or create characters.
- Key word cards or questions: Printed or projected key words related to the chosen text.
- Timer or clock: To manage the time allocated for each phase of the activity.
- Flip chart paper or projector: For presenting group ideas during the whole-class sharing phase.
- Optional: story cubes (bought ones or DIY versions).

Guiding questions

1. Pair/small group work questions:
   - What is the most unexpected way to introduce keywords into a story?
   - How can you create a surprising or memorable twist in the story?
   - What happens if someone makes a mistake in the story? How could it change things?
2. Whole class discussion/sharing questions:
   - What was the most creative idea you heard today? What made it stand out?
   - In which story did the characters face more challenges or problems? How did this affect the story?
   - How did each group interpret the key words differently?

Tips and Tricks for dealing with challenges

- **Challenge**: Uneven Participation - some students dominate the conversation while quieter students withdraw.
  Tip: Assign rotating roles (note-taker, speaker, idea organizer) so responsibilities shift. Use an object (ball or token) to ensure each student shares at least one idea.
- **Challenge**: Large Class Size - Too many groups make whole-class sharing time-consuming.
  Tip: Use representatives to summarize group outcomes. Use digital collaborative tools (Padlet) to visualize ideas efficiently.
- **Challenge**: Students struggle to stay imaginative - Some students focus on "correct" answers instead of creative exploration.
  Tip: Show short, surprising story starters as inspiration. Encourage wild, divergent ideas first ("brainstorming without limits").

Difficulty level tailoring

Teachers can tailor the anticipatory reading activity to three difficulty levels to meet students' needs.

- **Beginner learners (6-7 years old):** students might use pictures, visual aids or drawings, if needed, to guide them in developing their stories. They are to be encouraged to use their imagination freely.

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- **Advanced learners (8-9 years old):** the task might be made a bit more difficult by using story cubes. Pairs or small groups need to continue the story by incorporating one or more words chosen randomly by using story cubes.
- **Expert learners (8-9 years old):** pairs or small groups of students might swap stories after each round and continue another groups' story. The use of the story cubes might be as well maintained as part of the task.

Debriefing and Reflection questions

1. On creativity:
   - Which part of the activity made you feel most creative, and why?
   - What creative strategies did you try when connecting the keywords into a story?
   - How did discussing different versions help you understand creativity better?
2. On curiosity, wonder and openness:
   - What made you curious while predicting the next part of the story?
   - How did comparing your predictions with the actual text change your thinking?
   - When did you feel the most open to new ideas or perspectives during the activity?

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3.2.2 Mystery Box Challenge

Brief description, and rules of the implementation of the learning activity

The teacher places several items of different textures, shapes, and familiarity – some familiar, some unusual – into a box. Children try to guess what the object is through touch and then come up with alternative uses for the item beyond its real function.

Skill focus

Primary Skill Focus

- Creativity

Complementary/ Secondary Skill Focus

- Curiosity, sense of wonder and openness

Age group	Student number	Duration
6-7 years old	whole class working in small groups	45 minutes

Proposed step by step implementation of the learning activity

1. **Preparation and Tuning In:** The teacher prepares one or more boxes filled with various objects. These should be safe but not immediately recognizable—unusual in shape, old, or rarely used. The goal is to provide diverse tactile experiences through a variety of materials and textures. The teacher explains the purpose and rules, emphasizing it's an exploratory, playful task with no wrong answers. Students are encouraged to use imagination and touch. It's important to create a safe group atmosphere, especially for more hesitant children.
2. **Object Exploration – Tactile Phase:** Students approach the box one by one or in groups (e.g., carousel style) and feel an object inside the box using only their hands.
3. **Alternatively, a blindfold can be used without a box.** The aim is to identify the object solely by touch. The teacher may guide them with questions like: "Is it smooth or rough? Cold or warm? Soft or hard?"—this helps perception and also builds vocabulary.
4. **Identification and Description:** Students describe what they felt and guess what the object might be, using their own words freely. All responses are acknowledged by the teacher—this phase is about experimentation, not correctness. The whole class may try to guess together.
5. **Alternative Use Brainstorming (Individually or in Groups):** Once the item is revealed, students enter the creative phase: What else could this object be used for? What role could it play in a story or a play city? They may invent a short story around it ("Imagine it's a magical item..."). Ideas can be expressed verbally, in drawings, or pantomime.

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Indoor/Outdoor Classroom layout notes

Flexible classroom seating is ideal to support pair or group work.

How does this learning activity develop this particular skill?

The "Mystery Box Challenge" learning activity is cantered around sensory exploration and creative thinking. Children must identify unknown objects solely by touch and then imagine alternative uses for them. This process directly develops creativity, as it encourages children to reimagine familiar objects in new, unusual contexts. Curiosity is naturally activated by the challenge of discovering hidden items, creating a playful and motivating environment. Additionally, the task fosters openness, as children are invited to consider and accept diverse viewpoints and unconventional ideas, while freely expressing their own. The playful format, combined with both individual and group-based exploration, supports active engagement and allows imagination to flourish.

What do we want to achieve regarding primary skill development (student understanding and/or behaviour)?

As a result of this activity, students will:

- be able to think creatively about everyday objects, explore unfamiliar sensations with curiosity, and imagine multiple possible functions for the same item.
- understand how flexibility of thinking helps them form hypotheses, compare sensory impressions, and generate alternative ideas.
- be able to describe objects based on tactile cues, express imaginative interpretations, and remain open to unconventional or unexpected viewpoints during group sharing.

Suggested use, and practical subject-related examples

This activity is adaptable for various group settings and can fit at different points in the school day. It's best done individually or in small groups so every student can engage in tactile exploration and share their ideas. The teacher selects safe, everyday or unfamiliar items for the closed box—students reach in with their hands only or wear a blindfold. Objects should be interesting to the touch but not dangerous. Examples: toothbrush, old phone cord, bottle cap, fluffy sock, climbing carabiner, kitchen strainer, toy catapult or spring, jar with plastic caps, hair tie, string or beaded chain, mini funnel, pliers.

Step-by-step Usage: Preparation: Teacher selects 6–10 different items and places them in individual or one shared "feely box." Sensation: Students take turns feeling the objects. Silence and focus are important students shouldn't reveal the item right away. Guessing: Students or groups share their guesses. Brainstorming: Students find creative, possibly absurd or story-like alternative uses.

Examples: A strainer could be a "rain helmet for dolls" or a "galactic space radar." A bottle cap could be a "tiny robot head" or a "magical coin." A sock might be a "monster's sleeping bag" or a "secret message carrier."

Presentation: Students can draw the new function or act it out as a short scene (e.g., like a commercial or story segment). Each group or individual presents their idea while others observe and give feedback.

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Materials and tools needed for implementation

- A closed, opaque box (e.g., shoebox with lid)
- 6–10 various objects (different materials, sizes, purposes)
- Blindfolds or alternative touch-only containers
- Paper, pencils for note-taking or drawing
- Interactive whiteboard for group sharing (optional)

Guiding questions

In pairs/small groups:

- "What shape and material is the object?"
- "What does it remind you of?"
- "What could it be used for if we didn't know its real function?"

Whole class:

- "Was there an object everyone imagined differently?"
- "Which idea was the most creative and why?"
- "What did you learn about yourself or others during the game?"

Tips and Tricks for dealing with challenges

- **Challenge**: Fear or anxiety about touching unknown objects
  Tip: Offer alternative roles (observer, assistant, note-taker) so anxious children can join later. Start with a familiar object to build confidence.
- **Challenge**: Safety concerns (sharp edges, allergens, unsuitable items)
  Tip: Pre-check every item for safety before placing it in the box. Provide a mixed selection of safe but surprising items (e.g., fuzzy fabrics, springs, silicone shapes).
- **Challenge**: Uneven participation in groups
  Tip: Rotate roles (feeler, describer, guesser, presenter). Use time limits or a turn-taking object to give each child an equal chance.
- **Challenge**: Students reveal items too quickly
  Tip: Remind them that the goal is sensory exploration, not speed. Trick: Use a sand timer during the tactile phase.
- **Challenge**: Low creativity in alternative-use phase
  Tip: Give playful prompts (e.g., "Imagine this object belongs to a superhero… What is it for?"). Model one or two absurd/fantastic ideas to activate imagination.
- **Challenge**: Younger children struggle with abstract thinking
  Tip: Use simpler, larger objects for • Beginners (6-7 years old). Let more advanced students choose from "mystery levels" of difficulty.

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Difficulty level tailoring

This activity can be adapted to different levels depending on the students' familiarity with objects and their ability to use them creatively.

- **Beginner learner (6-7 years old):** work with simple, well-known objects where only identification is required. Examples include a pencil, a ball, or a toothbrush.
- **Advanced learners (8-9 years old)**: students are introduced to less familiar or multipart objects and are encouraged to generate creative ideas for reuse. Examples could be a strainer, a zipper, or a key.
- **Expert learner (9-10 years old):** students combine objects and think of more abstract or symbolic uses, often integrating them into a story or narrative. Examples at this level include a board game piece, an old mobile phone, or a machine part.

Debriefing and Reflection questions

These reflection questions help students recognise, name, and discuss the development of creativity, curiosity, and flexible thinking during the activity.

On curiosity and openness:

- What made you curious while touching the object without seeing it?
- Which part of the object surprised you the most? Why?
- How did your curiosity influence the guesses you made?

On creativity and flexible thinking:

- Which alternative use did you invent that you found the most imaginative?
- How did you come up with new functions for the object?
- How did hearing others' ideas help you think more creatively?

On the process of discovery:

- What helped you stay open to different possibilities?
- Was there a moment when you changed your mind? What triggered it?
- How did touch-only exploration change the way you imagine objects?

On applying the skill to other situations:

- When could creativity and curiosity help you in other subjects (science, reading, problem-solving)?
- How can flexible thinking help you at school or in everyday life?

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3.2.3 Flyswatter

Brief description, and rules of the implementation of the learning activity

The Flyswatter is an energetic and playful learning activity in which students work in teams to identify the correct card representing words, numbers, pictures, or concepts by "swatting" it first. While the original version is fast and competitive, this version is a creativity-focused learning activity, where students generate alternative solutions, invent strategies, and creatively connect clues to cards. Instead of only reacting quickly, students explore multiple possible answers, find unique links between concepts, and express original ideas while collaborating with teammates.

Skill focus

Primary Skill Focus

- Creativity

Complementary/ Secondary Skill Focus

- Problem solving
- Flexibility
- Curiosity, sense of wonder and openness
- Critical thinking

Age group	Student number	Duration
6-7 years old	Whole class working in pairs or small groups	45-60 minutes

Proposed step by step implementation of the learning activity

1. **Warm-up:** The teacher briefly introduces the activity and shows the materials: cards, flyswatters, and the task types (e.g., clues, riddles, associations).
2. Students brainstorm creative ways to find links between concepts (e.g., word families, metaphors, funny associations).
3. **Exploration phase:** In small groups, students observe the cards on the table and think of surprising associations; alternative groupings; creative ways to categorize cards; metaphors or stories that connect them. This builds a creative mindset before the game starts.
4. **Guided practice:** The teacher gives a few open-ended clues (not only "right/wrong" ones), e.g.: "Swat something that could be part of a story about space." "Swat something with a hidden connection to water." "Swat a card that could be combined with another card to make something new." Students explain their creative reasoning.
5. **Main activity – Creative Flyswatter Game:** In two teams, students listen to creative prompts and swat the card they believe fits best. Examples: "Swat the card that matches this riddle…"; "Choose the card that could have more than one meaning…"; "Pick a card that you can connect to today's topic in a unique way…" Teachers encourage multiple acceptable answers if reasoning is creative.

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6. **Group challenge – Invent your own clues:** Teams create their own creative clues, riddles, or tasks for the other team.
7. **Whole-class sharing:** Students present their invented clues and explain their creative choices.

Indoor/Outdoor Classroom layout notes

The activity can be implemented both indoors and outdoors. A flexible classroom layout is recommended, allowing students to move freely, collaborate in pairs or small groups, and arrange materials in a way that supports exploration and creativity. Indoors, desks can be grouped or pushed aside to create an open working area; outdoors, students may gather around a central space or move between stations. The layout should encourage visibility of materials, smooth transitions between activity phases, and a safe, spacious environment for creative interaction.

How does this learning activity develop this particular skill?

This learning activity fosters creativity by encouraging students to think divergently, explore multiple possible answers, and make surprising associations between concepts. Students are invited to generate ideas quickly, refine them collaboratively, and remain open to new interpretations. Through imagining alternative ways to “solve” each clue, students practise flexible thinking, originality, and creative problem solving.
The playful, low-pressure environment motivates them to take creative risks, while the game mechanics reward not only speed but inventive reasoning, storytelling, metaphorical thinking, and explanation of ideas.

What do we want to achieve regarding primary skill development (student understanding and/or behaviour)?

As a result of this activity, students will

- be able to generate original ideas, explore multiple creative connections between different concepts, and express their thinking in flexible and imaginative ways.
- understand that creativity is not about one correct answer but about exploring possibilities, making unusual connections, and valuing diverse ideas.
- be able to articulate their creative reasoning, build on each other’s suggestions, and appreciate the creative contributions of their peers.

Suggested use, and practical subject-related examples

Language Arts / English: vocabulary development, synonyms, metaphors, word families, categorising story elements.

Mathematics: matching tasks with shapes, numbers, operations, problem-solving clues, categories (even/odd, multiples).

Science: sorting materials, animals, plants, weather concepts, energy types.

Ethics / Social Studies: social scenarios, moral dilemmas, “Which card represents fairness?”, “Which one connects to empathy?”

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Materials and tools needed for implementation

- Flyswatters (1 per team)
- Cards with words, images, numbers, shapes, or categories
- Table or floor space for arranging cards
- Timer (optional)
- Whiteboard for clue creation
- Coloured markers for group brainstorming
- Optional: thematic card sets (animals, adjectives, scientific categories, shapes, story elements)

Guiding questions

Pair / small group:

- What strategy did you try first? Why?
- How did you come up with a creative connection between the clue and the card?
- Did you find more than one possible answer? Which one felt the most original?

Whole class:

- What surprised you about others' choices?
- Which idea made you think differently about the clue?
- How did your creativity develop during the game?

Tips and Tricks for dealing with challenges

- **Challenge**: Students swat randomly without thinking.
  Tip: Add a 3-second "thinking time" before swatting. Ask, "What connection did you imagine?" before awarding points.
- **Challenge**: Stronger students dominate the activity.
  Tip: Rotate roles (swatter, clue-reader, idea-explainer). Each point must be justified by someone who was not the swatter.
- **Challenge**: Students focus only on speed, not creativity.
  Tip: Introduce "creative points" for unusual associations. Bonus point for explanations that start with "What if...?"
- **Challenge**: Some students feel hesitant or anxious.
  Tip: Allow non-physical roles (idea connector, creative thinker). Trick: Let pairs swat together for support.

Difficulty level tailoring

This activity can be adapted to different levels depending on the students' familiarity with objects and their ability to use them creatively.

- **Beginner learners (6-7 years old):** Use simple, concrete word/picture cards. Clues are direct and familiar: "Swat something that is an animal." Students explain their choices in one short sentence.

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- **Advanced learners (8-9 years old)**: Use multi-layered clues (riddles, metaphors, category overlaps). Students must invent at least one alternative answer. Pair work includes short brainstorming before swatting.
- **Expert learners (9-10 years old):** Students create their own complex clues for classmates. Cards represent abstract concepts (e.g., fairness, energy, connection). Students explain the reasoning behind each creative connection.

Debriefing and Reflection questions

Creativity

- Which part of the activity made you feel most creative? Why?
- What unexpected idea or connection did you invent?
- Did someone else's idea inspire you? How?

Flexibility

- Did your first idea change during the activity?
- How did you adapt when someone else suggested a different answer?

Curiosity and Openness

- Which clue made you the most curious?
- What new question came to your mind while exploring the cards?

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3.2.4 Onion Rings

Brief description, and rules of the implementation of the learning activity

The *Onion Rings* learning activity is a structured, movement-based creativity exercise in which students stand in two concentric circles ("rings") facing a partner. When the teacher gives a prompt, the pairs respond together by co-creating ideas, solutions, comparisons, or imaginative scenarios. After each prompt, one ring rotates, creating new partners and new creative combinations. This activity transforms a simple movement structure into a rich creative thinking process, where students explore multiple perspectives, generate ideas quickly, adapt to new partners, and express their imagination in flexible and collaborative ways.

Skill focus

Primary Skill Focus

- Creativity

Complementary/ Secondary Skill Focus

- Curiosity, sense of wonder and openness
- Flexibility
- Connectedness
- Empathy

Age group	Student number	Duration
6-7 years old	Whole class working in pairs or small groups	45-60 minutes

Proposed step by step implementation of the learning activity

1. **Warm-up:** Moving into creativity. The teacher sets up two circles of students, an inner and an outer ring. Students face a partner. Light warm-up: "Turn to your partner and show a creative gesture about how you feel today."; "Invent a handshake no one has seen before." This sets a playful, safe tone for creativity.
2. **Exploration phase:** Idea generation with partners. Pairs respond to open-ended creative prompts, such as: "Invent a new animal by combining yours and your partner's favourite animals."; "Create an object that solves a problem at school."; "Imagine a place where both your favourite foods grow on trees, what does it look like?" They share aloud and quickly sketch or mime the ideas. After each prompt, the outer ring rotates one step, creating new combinations.

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3. **Guided activity:** Deepening creative reasoning. Now the teacher introduces prompts requiring explanation, not only idea generation: “What could your combined creature be used for?”; “What rule would exist in the world you just invented?”; “How would your object change everyday life?” Pairs justify their ideas using: imagination; storytelling; playful reasoning. The aim: reasoning behind creativity.
4. **Main activity:** Creative partner mash-ups. Students rotate partners every 1–2 minutes after each creative challenge. Possible challenge types: 1. Mash-up: Combine two unrelated words (e.g. mushroom + bicycle). 2. Transformation: Turn an object into something else (e.g. “How can a spoon become a musical instrument?”). 3. Problem solving: Invent a creative solution based on combined ideas. 4. Story spark: Create a 1-sentence story together using the two prompt words. The teacher encourages: multiple possible answers; building on a partner's ideas; accepting unexpected or unusual thinking. This is the core creativity-development phase.
5. **Creative extension:** Students choose their favourite partner-created idea and: draw it; act it out; write a mini-story; create a “title” and tagline for it. This consolidates creative thinking into a visible product.
6. **Whole-class closing reflection:** Students gather in a circle and share: what idea inspired them; what surprised them; how their creativity evolved through partner change.

Indoor/Outdoor Classroom layout notes

The activity works both indoors and outdoors. A flexible space is ideal: two circles formed safely; students can rotate and move freely; sketching stations available around the area; materials visible and accessible. The layout should encourage collaboration, communication and curiosity.

How does this learning activity develop this particular skill?

Onion Rings develops creativity by immersing students in continuous idea generation with multiple partners. The frequent rotation encourages divergent thinking (many possible ideas); flexible thinking (adapting to new partners quickly); creative communication (expressing and combining ideas); co-creation (building something new together); openness (valuing others’ ideas). Students experience creativity as a dynamic process, not a fixed ability.

What do we want to achieve regarding primary skill development (student understanding and/or behaviour)?

As a result of this activity, students will:

- be able to generate original ideas together with different partners, explore multiple creative connections between concepts, and express their thinking in imaginative and flexible ways.
- understand that creativity thrives when ideas are shared, compared, and combined.
- be able to adapt quickly to new collaborative situations and build on others’ suggestions.

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Suggested use, and practical subject-related examples

Language Arts

- Create imaginative comparisons ("My partner's animal is like…").
- Develop short creative dialogues.
- Practice descriptive adjectives through mash-ups.

Mathematics

- Combine shapes to create new geometric forms.
- Use number-related prompts (e.g. magical number transformations).
- Categorization and pattern creation.

Science

- Explore adaptations ("What new creature could survive in water AND desert?").
- Mix materials (wood + glass → new invention).
- Discuss systems (layers of habitats → onions as metaphor).

Social Studies

- Values blending ("Combine fairness + courage → What action shows this?").
- Role-play culturally inspired characters.
- Connecting empathy + imagination.

Arts

- Movement-based creative expression.
- Collaborative sketches.
- Designing hybrid characters or tools.

Materials and tools needed for implementation

- Prompt cards (words, pictures, questions, objects)
- Open space for two circles
- Optional sketch papers, markers
- Timer
- Music (optional)

Guiding questions

Pair / small group:

- How did you combine your two ideas?
- What made your mash-up or invented object unique?
- What new idea came to your mind after hearing from your partner?

Whole class:

- How did changing partners affect your creativity?
- Which idea surprised you?
- What did you learn about being open to others' ideas?

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Tips and Tricks for dealing with challenges

- **Challenge**: Students create repetitive or literal ideas.
  Tip: Encourage "three versions" rule. Add constraints (underwater, future world, tiny size, giant size).
- **Challenge**: Students feel shy when changing partners.
  Tip: Provide clear sentence starters. Begin with non-verbal creative gestures.
- **Challenge**: Uneven participation.
  Tip: Give rotating roles (idea starter, explainer, illustrator). Each pair must share one joint idea.
- **Challenge**: Overwhelm or confusion during fast rotations.
  Tip: Use a visual timer. Keep prompts simple and fun.
- **Challenge**: Students focus only on the product, not the process.
  Tip: Celebrate surprising questions, not "best drawings." Use mini-reflections after each partner rotation.

Difficulty level tailoring

This activity can be adapted to different levels depending on the students' familiarity with objects and their ability to use them creatively.

- **Beginner learners (6-7 years old):** Simple picture prompts. One idea per rotation. Scaffolded questions ("What could this become?")
- **Advanced learners (8-9 years old):** Abstract prompts (emotions, materials, functions). 2–3 creative explanations needed. Stronger emphasis on storytelling
- **Expert learners (9-10 years old):** Purpose-driven mash-ups (solve a societal or environmental problem). Complex reasoning behind connections. Present creations to the whole class with detailed justification

Debriefing and Reflection questions

Creativity

- What idea today felt the most original to you?
- How did your partner's ideas change your thinking?

Flexibility

- How easy or difficult was it to switch partners?
- What helped you stay open to new possibilities?

Curiosity and Openness

- Which prompt made you the most curious?
- What new question did the activity raise in your mind?

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3.2.5 Wonderful Inventions

Brief description, and rules of the implementation of the learning activity

Wonderful Inventions is a creativity-cantered learning activity in which students design imaginative inventions that solve real or fictional problems. Students begin by identifying everyday challenges (in school, at home, in nature), then generate bold, playful, or futuristic solutions. The focus is on: divergent thinking; flexible idea generation; building on partners' suggestions; expressing creative reasoning; curiosity-driven exploration. The goal is not a polished invention, but a creative problem-solving process.

Skill focus

Primary Skill Focus

- Creativity

Complementary/ Secondary Skill Focus

- Empathy
- Problem Solving,
- Curiosity, sense of wonder and openness
- Flexibility

Age group	Student number	Duration
6-10 years old	Whole class working in pairs or small groups	45-60 minutes

Proposed step by step implementation of the learning activity

1. **Warm-up:** What counts as an invention? The teacher shows 3–4 surprising inventions (e.g., self-watering plant pot, foldable bike). Students discuss: What problem does it solve? Why is it creative? What makes an idea unique?
2. **Creative explorer activity:** identifying problems. Students walk around the classroom or playground and note small "problems" or needs: "My backpack is too heavy."; "The classroom gets noisy."; "It's hard to find lost pens."; "The bins overflow." They share findings in pairs and choose one to invent for.
3. **Guided activity:** Idea generation. Students generate multiple creative solutions before choosing one: crazy, impossible ideas; futuristic ideas; funny ideas; very simple ideas. Teacher prompts: "What if the invention could fly?"; "What if it could talk?"; "What if it transformed?"; "What if it helped not just you, but others too?"
4. **Main activity:** Design the invention. Students draw and label their invention. They must include: name of invention; what problem it solves; how it works; special functions; who benefits from it. Pairs or small groups present short explanations.

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5. **Creative extension:** Students create an advertisement for their invention; a jingle; a mini-story where their invention saves the day.
6. **Whole-class closing reflection:** Students discuss how their creativity grew and what surprised them.

Indoor/Outdoor Classroom layout notes

Ideal classroom layout includes grouped desks for creative work; a circle space for reflection; a "design studio" vibe with materials visible. Outdoors is also suitable for inspiration walks.

How does this learning activity develop this particular skill?

This activity nurtures creativity through generating multiple solutions; imagining unconventional ideas; looking at problems from different angles; transforming everyday frustrations into opportunities; building flexible, exploratory thinking; valuing personal originality. Students learn that creativity is not "being artistic," but exploring possibilities.

What do we want to achieve regarding primary skill development (student understanding and/or behaviour)?

As a result of this activity, students will

- be able to generate original ideas, explore multiple creative solutions to everyday problems, and express their thinking in imaginative and flexible ways.
- understand that creativity involves curiosity, openness, and the courage to share and refine ideas.
- be able to describe their reasoning and build creatively on the ideas of others.

Suggested use, and practical subject-related examples

Language Arts

- write stories featuring the invention
- create instructions or persuasive texts

Science

- inventions that solve environmental problems
- machines that use renewable energy
- tools to help animals

Social Studies

- inventions that help fairness, empathy, community
- identify who benefits and why

Mathematics

- design shapes, proportions, simple patterns
- measure, draw diagrams

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Materials and tools needed for implementation

- Paper, markers, coloured pencils
- Optional: recycled materials for 3D prototypes
- Prompt cards (problem cards, “What if…?” cards)
- Timer
- Presentation area

Guiding questions

- What problem did you notice and why did it interest you?
- How did your idea change as you discussed it?
- What unusual or surprising idea came up?
- Which part of the creation made you feel most imaginative?
- What new question did this invention make you think of?

Tips and Tricks for dealing with challenges

- **Challenge**: Students choose the first obvious idea.
  Tip: Require three alternatives before selecting. Use “What if…?” twists.
- **Challenge**: Fear of being wrong or silly.
  Tip: Encourage “wild ideas welcome”. Teacher models a humorous invention.
- **Challenge**: Uneven participation in pairs.
  Tip: Assign rotating roles (drawer, idea generator, explainer). “Idea ping-pong” — alternate phrases.
- **Challenge**: Difficulty expressing the idea clearly.
  Tip: Provide simple sentence frames. Students act out what the invention does.

Difficulty level tailoring

- **Beginner learners (6-7 years old):** Choose from prepared “problem cards.” Draw simple pictures with 1–2 features. Use sentence starters.
- **Advanced learners (8-9 years old):** Create detailed mechanisms or multi-step solutions. Add diagrams, labels, and written descriptions. Present to the class.
- **Expert learners (9-10 years old):** Address community or environmental issues. Create 3D prototypes. Write persuasive or reflective texts about the invention.

Debriefing and Reflection questions

Creativity and Flexibility

- Which idea were you proudest of? Why?
- What made your invention unique?
- Did your idea change during the activity?
- How did your partner help reshape your thinking?

Curiosity

- What new question did your invention raise?

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3.3 PROBLEM-SOLVING

3.3.1 Design thinking

Brief description, and rules of the implementation of the learning activity

Design Thinking is a way of thinking and working that involves coming up with creative solutions to problems ranging from subject-specific, cross-curricular to real live problems that the children may encounter in their own daily lives. Here we will solve problems by looking closely, if needed empathizing, and thinking cleverly.

Skill focus

Primary Skill Focus

- Problem solving

Complementary/Secondary Skill Focus

- Creativity
- Critical thinking
- Empathy

Age group	Student number	Duration
6 + years old	Individual or whole class working in pairs or small groups	50-100 minutes

Proposed step by step implementation of the learning activity

The design thinking revolves around these key ideas:

1. Understanding the problem properly: Don't start with a solution right away but get to know the problem really well first.
2. Coming up with creative ideas: Then you come up with many possible solutions.
3. Empathy: (if needed) You try to understand what someone needs or struggles with.
4. Trying out and making: You choose an idea and make a prototype (sample).
5. Testing and improving: You show it to others, see what works and adjust it.

Running the activity – step-by-step implementation

1. **Who has a problem/what's the problem? Understanding (if needed: Empathy):** "You look carefully around you: What is a problem? Who suffers from something, who could use help, or what could be better? The teacher and/or students present a problem. "
   - subjects, people, animals, groups, things or places

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2. **What exactly is the problem? (Define): "You will explore what is not going well or what is difficult.** You ask questions, look carefully and try to understand the problem."
   - something that needs to be combined, subject related, is difficult, works awkwardly, is missing or confusing, could be different
3. **What can we think of to help? (Coming up with ideas):** "You think of as many solutions as possible. All ideas are welcome! You think creatively, together or alone."
   - make something, change it, add to it, improve it or think of something completely new.
4. **Make an example of your idea (Prototype):** "You make a model or example of your solution. You can do this with different materials. It doesn't have to be perfect yet."
   - drawing, building, tinkering, pasting, digital design.
5. **Show it and improve it (Testing and improving):** "You show your idea to others. You listen to what they think of it and adjust your idea to make it even better."
   - present, discuss, modify, build further, analyses critically

In this way, students learn to solve a problem in a clever and creative way

Indoor/Outdoor Classroom layout notes

It can be done both indoors and outdoors. Both surroundings have specific and different real live problems for students.

When indoors ensure that the (class-)room is quiet enough to allow focus and thoughtful discussion and explanations during research. If practiced outside, choose a quiet corner of the playground where students can stay focused and avoid interference.

How does this learning activity develop this particular skill?

This learning activity stimulates problem-solving thinking by actively involving children in recognising and tackling real problems. It starts with developing empathy: children learn to put themselves in other people's shoes and observe situations in which something is not going well. In this way, they learn to recognise problems, which is the first step in solving them. They then analyse the situation to clearly define the problem. By asking questions and distinguishing between main and secondary issues, they learn that a well-formulated problem leads to better solutions. Ideas are then generated in a creative phase in which all suggestions are welcome. This promotes free thinking, collaboration and imagination. The students convert their chosen idea into a prototype — a tangible elaboration such as a drawing, model or digital form. This encourages experimentation and shows that the process is more important than a perfect end result. Finally, the prototype is tested and improved based on feedback. Students learn to reflect, deal with criticism and think in iterations: improving by trying and adapting.

The role of the teacher here is that of a guide: someone who supports the thinking process, asks questions and creates a safe environment in which mistakes are allowed. In this way, children are encouraged to dare to think, do and improve — essential elements of sustainable problem-solving behaviour.

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What do we want to achieve regarding primary skill development (student understanding and/or behaviour)?

As a result of this activity, students will:

- Develop problem-solving abilities**:** students learn to break down complex situations and think in steps.
- Encourage creative thinking: generating new, diverse ideas without fear of being wrong.
- Strengthen critical thinking**:** evaluating ideas, asking meaningful questions, and refining solutions.
- Improve collaboration**:** students work in teams, listen to others, and share their own ideas.
- Foster empathy: understanding the needs, feelings, and perspectives of others.
- Build self-confidence: by seeing that their ideas matter and have value.
- Learn to take initiative and show ownership of their work.
- Embrace iteration: understanding that trying, failing, and improving is part of the process.
- Show perseverance**:** staying motivated even when things are challenging.
- Practice reflection: thinking about what worked, what didn't, and how to improve.

Suggested use, and practical subject-related examples

Here are some examples of how Design Thinking can be applied across various subject areas:

Science

Problem definition: Plants in the classroom are not growing well and often die.

1. Who has a problem?

   The class and teacher want healthy plants but don't know why they fail.
   - Pupils observe the plants and talk about what they notice.
   - Discuss why plants might be important for the classroom environment.

2. What exactly is the problem? (Define)

   The plants may not be getting the right amount of water, light, or nutrients.
   - Pupils ask questions: How often are plants watered? How much light do they get?
   - Write observations on the board.

3. What can we think of helping? (Coming up with ideas)

   Now the pupils get to be creative! We come up with as many ideas as we can to help.
   - Brainstorm ideas: reminder system, self-watering pots, moving plants closer to light.
   - Pupils draw and explain their ideas
   - Discuss each other's plans, together we choose one idea from all the proposals.

4. Make an example of the idea (Prototypes)

   We are going to make a model or example of our idea. It doesn't have to be perfect yet. Students will work in small groups. Crafting with paper, cardboard, LEGO, clay, valuable free material
   - Build a model of a self-watering plant pot using bottles or recycled materials.

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5. Show it and improve it (Testing and improving)

   We show our idea to the problem owner person and ask: does this help? Each group shows how it would work and presents it to the class.
   - Try the solution with a real plant.
   - Observe changes and improve the design if needed.

6. The teacher and the class give feedback.
   Adjustments to the idea if necessary are made.

Learning focus: scientific observation, experimentation, cause and effect.

Math

Problem definition: Pupils find it difficult to understand division with remainders.

1. Who has a problem?

   Students feel confused and frustrated during math lessons.
   - Teacher discusses how pupils experience division problems.

2. What exactly is the problem? (Define)

   Division feels abstract and hard to visualize.
   - Identify where learners get stuck.

3. What can we think of helping? (Coming up with ideas)
   - Brainstorm ideas: games, visual aids, real-life examples (sharing food, toys).
   - Pupils suggest creative tools.

4. Make an example of the idea (Prototypes)
   - Create a hands-on division game using blocks, counters, or paper circles.

5. Show it and improve it (Testing and improving)
   - Try the game in class.
   - Pupils give feedback and adjust the rules or materials.

6. The teacher and the class give feedback.
   - Adjustments to the idea if necessary are made.

Learning focus: problem-solving, logical thinking, hands-on math.

Environmental Studies

Problem definition: There is too much waste on the school playground.

1. Who has a problem?

   The school community is affected by litter.
   - Pupils observe the playground and discuss how it looks and feels.
   - Discuss why is it bad that the schoolyard is full of litter?

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2. What exactly is the problem? (Define)

   Waste is not sorted properly, and bins are unclear or missing.
   - Pupils ask questions and identify where and what kind of waste is found.
   - Write observations on the board.
3. What can we think of helping? (Coming up with ideas)
   - Brainstorm: better bins, signs, campaigns, rewards.
   - Pupils sketch ideas
4. Make an example of the idea (Prototypes)

   Students are going to make a model or example of our idea. Crafting with paper, cardboard, LEGO. clay, valuable free material
   - Design a new recycling bin, posters, or a simple awareness campaign.
5. Show it and improve it (Testing and improving)

   Students show their idea to the problem owner person and ask: does this help? Each group shows how it would work and presents it to the class.
   - Present ideas to other classes or try them on the playground.
   - Gather feedback and improve.
6. The teacher and the class give feedback.
   Adjustments to the idea if necessary are made.

Learning focus: sustainability, responsibility, real-world problem solving.

Art

Problem definition: The classroom walls feel empty and unwelcoming.

1. Who has a problem?

   Students want a nicer, more inspiring classroom.
   - Discuss how the classroom environment affects mood and learning.
2. What exactly is the problem? (Define)

   There is no visual identity or artwork representing the class.
   - Decide what the classroom should express
3. What can we think of helping? (Coming up with ideas)
   - Brainstorm murals, exhibitions, themed artwork.
   - Pupils draw ideas and explain their concepts.
4. Make an example of the idea (Prototypes)
   - Create small-scale versions or sketches of the artwork.
5. Show it and improve it (Testing and improving)
   - Class discusses designs, gives feedback, and improves before creating the final artwork.
6. The teacher and the class give feedback.
   Adjustments to the idea if necessary are made.

Learning focus: creativity, visual communication, collaboration.

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Why This Works

- Starts from real problems
- Encourages empathy and teamwork
- Connects learning to meaningful, real-life situations
- Fits naturally into any subject

This makes learning active, engaging, and purposeful.

Materials and tools needed for implementation

For Design Thinking, you don't need expensive or complicated materials. It is mainly about thinking, doing and making - so materials that support creativity, collaboration and research are most important.

Here is an overview of possible tools and materials depending on your topic:

- Question cards (with who/where/why/how?)
- Worksheets to jot down observations or draw
- Photo camera or tablet to record things
- Post-its for initial ideas or comments
- Large sheets of paper or whiteboards
- drawing materials
- Brainstorming cards or inspiration photos
- Paper, cardboard, glue, scissors, tape
- Reusable materials (valuable no-cost materials such as toilet rolls, boxes, bottle caps, etc.)
- LEGO, blocks, clay or magnetic and/or construction materials
- Tablets or apps for digital design (optional)
- Open ended materials

Guiding questions

The teacher primarily asks questions to guide students' thinking process, without providing immediate answers. These questions encourage thought, exploration, reflection and collaboration during the various stages of Design Thinking.

For example:

- What would you do if you were in that situation?
- What is actually the real problem here?
- What ideas can you combine?
- Can you make something small that shows how it works?
- What worked well with your idea?
- What have you already discovered?

Tips and Tricks for dealing with challenges

- **Challenge**: Common problems here are differences in skills, frustration at failure, or group dynamic:
  Tip Start small and simple. Start with a short and simple problem or practice project. This way children first learn about the process without making it too big or complicated. Delineating the roadmap to 3 steps can also help, for example:

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- Who has a problem?
- What is the problem?
- What can we do to help?

- **Challenge:** Frustration at “not knowing” or “making mistakes”?
  Tip 1: Repeat often that making mistakes is part of the process. Celebrate attempts, failures and improvements. Use posters or cards with phrases such as “I'll try again” or “I don't know yet, but...”

  Tip 2: Bridge Differences in Working Together. Provide clarity about roles: for example, a draftsman, questioner, builder, or presenter. Allow children to alternate roles so everyone discovers their talents.
  Tip 3: Focus on process, not perfect end product. Emphasize steps, not a beautiful result. “How did you come up with that idea?” is more important than “Did it turn out nicely?” Have several children tackle the same problem - then you'll see how many ways there are to think!
  Tip 3: Use smiley cards or stickers to give feedback visually. Keep it playful and flexible! Children learn best when they feel safe to explore. Leave room for fun, imagination, crazy ideas - and show that their voices matter.
- **Challenge:** Young learners feel stress or chaos because of the variety of choice.
  Tip: Guide materials selection. Limit the number of materials with young learners to avoid choice stress or chaos. Create “prototyping kits” with simple items for each group: paper, tape, straws, cardboard, string, etc. (this is not the same as giving an example!)
- **Challenge**: Young children are frustrated because of the time pressure
  Tip: Work with a time clock or hourglass for each step. Working short keeps them energized and organized. Have them write down or draw what they would do if there was no time - that too is valuable thinking!

Difficulty level tailoring

When working with Design Thinking in the classroom, you can differentiate into three levels. These levels match the age and developmental stage of pupils aged 6 to 10 and help make the process appropriate and achievable.

- **Beginner learners (6-7 years old):** they work on simple, recognizable problems and receive a lot of guidance from the teacher. They often choose from a few suggested solutions and, with help, create a prototype. The emphasis is on discovery, fun and learning in steps.
- **Advanced learners (8-9 years old):** they are given more freedom to explore a problem together and come up with their own ideas. They work in small groups, choose their own materials and learn to give and receive feedback. The teacher guides them through the process with targeted questions.
- **Expert learners (9-10 years old):** they work independently or in teams on more complex problems closer to the real world. They combine ideas, make multiple versions of a prototype and reflect critically on their process. Here, the teacher mainly has a coaching role and provides space for creativity and ownership.

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Debriefing and Reflection questions

1. About the process (thinking and doing)
    - What did you enjoy doing most?
    - What was the most difficult part?
    - Did you do something you hadn't tried before?
    - What would you do differently next time?
    - When did you learn something from a mistake?
2. About working together
    - How did your group work together?
    - What did you do to help your group?
    - Did you listen carefully to others? And did they listen to you?
    - What went well in the collaboration, and what didn't?
    - If you could choose again: would you work together like this again?
3. About the idea and the result
    - What makes your solution clever or special?
    - Do you think your idea really helps? Why (not)?
    - What did others think of your idea?
    - Would you recommend your prototype to someone else?

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3.3.2 Six thinking hats

Brief description, and rules of the implementation of the learning activity

De Bono's thinking hats (Edward de Bono's Six Thinking Hats) are a thinking technique that helps to look at a problem, idea or situation in different ways. Each "hat" represents a particular way of thinking. This makes it easier for children (and adults) to organize their thoughts and reflect together without confusion or discussion.

This method is very good to use in the design process or Design Thinking, especially in reflection and collaboration.

Skill focus

Primary Skill Focus

- Problem solving

Complementary/Secondary Skill Focus

- Critical thinking
- Creativity
- Empathy

Age group	Student number	Duration
6-10 years old	Individual and whole class working in pairs or small groups	25-50 minutes

Proposed step by step implementation of the learning activity

Before the lesson or activity:

1. **Preparation**

- Choose a topic. For example: a design idea, a group assignment, a class problem, or the evaluation of a project.
- Make the thinking hats visible
- Use real (coloured) hats, paper hats, cards, or hat posters with pictograms.
- Make the colours stand out well (e.g. yellow sun for the yellow hat, cloud for the blue hat).
- Explain the meaning of each hat
- Keep it simple and visual. Let children give their own examples for each hat. You can practise this with a playful topic.

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During the lesson or activity:

2. **Choose the topic or question:** Decide what you want to think about with the students. This could be a problem, an idea, a situation or a project. The topic can be anything and may vary per lesson or group.
3. **Explain the thinking hats:** Introduce the six thinking hats to the class, briefly mention what each colour means and in what way the hat is used. Make sure students understand the different perspectives.
4. **Use the thinking hats one by one:** Walk through all the hats together with the class. Encourage pupils to share their thoughts, feelings or ideas about each hat. This can be done verbally, through drawings, with post-its or other creative ways.
5. **Ask targeted questions for each hat:** Use open-ended questions that match the colour of the hat to guide thinking, for example:
    - Facts and information (white)
    - Feelings and intuition (red)
    - Critical points and risks (black)
    - Positives and opportunities (yellow)
    - New ideas and alternatives (green)
    - Process and planning (blue)
6. **Discuss and evaluate the outcomes:** Summarise what was said in each hat and discuss with students what this means for the topic or next steps. Have students reflect on the use of the hats and what they have learned.
7. **Apply the method flexibly:** Depending on the aim and the group, you can choose which hats to use and in what order. Sometimes fewer hats are enough, or you can repeat them with new topics.
8. **Integrate the thinking hats regularly into classroom practice:** Use the thinking hats in various activities such as brainstorming, group discussions, problem solving, reflection moments and decision-making to practise structured thinking.

Indoor/Outdoor Classroom layout notes

It can used both indoors and outdoors. Both surroundings have specific and different activities and real live problems for students.

When indoors ensure that the (class-)room is quiet enough to allow focus and thoughtful discussion and explanations during research. If practiced outside, choose a quiet corner of the playground where students can stay focused and avoid interference.

How does this learning activity develop this particular skill?

Before the lesson: preparation

Visualising thinking hats helps children to recognise and use different ways of thinking. By choosing the right topic (e.g. a classroom problem or design question), thinking is immediately linked to a real challenge.

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During the lesson:

1. Choose a topic or question
   - By choosing a specific problem or situation, you activate problem-oriented thinking.
   - Children learn that problems have different sides and that you can examine them systematically.
2. Explain the thinking hats
   - Each hat represents a specific thinking style:
     o White: gathering facts
     o Red: feelings and intuition
     o Black: risks and objections
     o Yellow: advantages and opportunities
     o Green: creative ideas
     o Blue: overview and planning
   - Children learn that problem solving does not require a single way of thinking, but a combination of perspectives.
3. Use the hats one at a time
   - By exploring each perspective separately, children learn:
     o To think systematically
     o To use multiple angles
     o To collaborate and listen to others
   - This promotes flexible and analytical thinking.
4. Ask specific questions for each hat
   - Open questions encourage deep thinking and evaluation of ideas.
   - Children learn:
     o To look critically at facts (white)
     o To assess risks (black)
     o To come up with creative solutions (green)
     o Seeing positive aspects (yellow)
     o Reflecting on the process (blue)
5. Discuss and evaluate the results
   - By reflecting together, children learn to:
     o Draw conclusions
     o Weigh up solutions
     o Substantiate decisions
   - This is a core skill in problem-solving thinking.
6. Apply and integrate flexibly
   - Regular use of thinking hats makes structured thinking a habit.
   - Children learn that problem solving is a process that can be practised and improved.

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7. Role of the teacher
    - Encourages thinking, asks probing questions and provides a safe environment in which children dare to think.
    - Does not provide answers but guides the process so that children arrive at solutions themselves.

What do we want to achieve regarding primary skill development (student understanding and/or behaviour)?

Using De Bono's thinking hats in the classroom stimulates problem-solving thinking in a playful and structured way. This form of work teaches children not only to react spontaneously, but also to think consciously from different perspectives.

As a result of this activity, students will:

- able to examine problems from multiple perspectives and understand that there may be more than one valid solution.
- understand to separate emotions, facts, and ideas in order to think more clearly and systematically.
- able to approach problems step by step, moving from understanding the problem to critical analysis and creative solution-finding.
- able to analyse problems by identifying what is happening and why and reflect on their own thinking by comparing it with the ideas of others.
- understand to evaluate what works and what does not.
- able to distinguish facts from opinions or feelings.
- able to make informed decisions by considering and choosing between different options.
- able to generate multiple, original, or unexpected solutions to a problem.
- be aware the needs and perspectives of others into account.
- able to listen actively to others.
- able to express their own ideas clearly.
- able compare different viewpoints respectfully and without judgment.

Suggested use, and practical subject-related examples

This creative problem-solving technique can be used in any lesson whenever students need to interpret a given situation, examine it from multiple perspectives, solve a problem or situation, make a decision, and so on. Such a lesson situation can be incorporated into any class.

In the following, we will introduce how to incorporate the "six hats" technique into the classroom:

1. **Introduce the topic:** ‘We are going to discuss our idea for the schoolyard with the six thinking hats.’ Explain what you are going to think about and what the actions are. Divide the class in small working groups

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Make the thinking hats-scene visual in the classroom and make the six coloured hats (or cards) available to the whole class

Hat	Question you ask	Sample activity
White (facts)	What do we already know?	Write down or draw information
Red (feelings)	What do we think or feel?	Let children choose or draw an emoji
Black (critical)	What doesn't work well?	Put a cross by what might be tricky
Yellow (positive)	What's good about it?	Have children draw a sun by their idea
Green (creative)	What else can we think of?	Brainstorm on paper or with LEGO/blocks
Blue (overview)	What should we do next?	Have children make a roadmap or divide tasks

2. **Think for each hat (one at a time):** Walk step by step through each thinking hat. At each hat, give children space to share their opinion, idea or feeling - verbally, on a post-it or via a worksheet. Children present their idea for the playground with their group. Every student expresses their opinion, feeling, vision or possible solution to each hat
3. **Reflect together:** Discuss briefly what you have learned. For example:
   - 'What did we discover by thinking like this?'
   - 'What idea do we want to develop further?'
   - 'What did you find difficult or fun about this way of thinking?'

Materials and tools needed for implementation

1. Visual representation of the hats (mandatory)
   - Coloured hats (real hats, paper hats or headbands)
   - Thinking hats posters (one per colour with meaning in words and pictures)
   - Cards or sticker sheets with the colours and matching symbols
   - Digibord slides or printables to visually support the meaning
2. Work-form materials for students
   - Worksheets per hat (draw, write, colour, fill in)
   - Post-its or coloured papers per hat colour (for brainstorming or feedback)
   - Emoticons or smiley cards (for the red hat)
   - Reflection cards or talking boards
   - Colour pencils or markers in the six hat colours

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3. Basic classroom supplies
   - Large sheet of paper or flap chart for shared mind maps
   - Valuable free and open-ended materials, craft materials for creative elaboration (e.g. green hat - creative thinking)
   - Timer or hourglass (for structure per hat)

Guiding questions

Questions depend on which hat is talking, for example:

- White hat - Facts and information - What do we still need to find out to understand it better?
- Red hat - Feelings and intuition - Do you think this is nice, difficult, exciting or fun? Why?
- Black hat - Critical thinking and risks - What could go wrong?
- Yellow hat - Positive thinking and opportunities - What could this mean for someone?
- Green hat - Creative thinking and new ideas - What could you do differently?
- Blue hat - Overview and reflection - Which hat do we use now and why?

Tips and Tricks for dealing with challenges

- **Challenge:** Children do not always understand abstract thinking hats very well at first.
  Tip: Make it visual and concrete
  - ➢ Use clear colours, pictograms and simple language.
  - ➢ Hang visual posters or work with real hats or headbands.
  - ➢ Child-friendly explanations work better than theory.

- **Challenge:** Too many hats at once confuses younger children.
  Tip: Start with 2 or 3 hats (e.g. white, red, yellow) and expand slowly.
  - ➢ Less is more, especially in the beginning. Build it slowly
- **Challenge:** Children don't know how to think properly at a particular hat this requires training and repetition. As a teacher, think out loud: 'When I think with the black hat, I see that…'.
  Tip: Give example-thinking
  - ➢ Modelling helps tremendously in thinking development.

- **Challenge:** Some children are afraid to speak out or follow others.
  Tip: Alternate classroom and individual
  - ➢ Let children draw or write individually first and only then share. This way each child gets thinking space.

- **Challenge:** Children quickly lose the thread in the process.
  Tip: Use fixed routines. Therefore, work with a fixed rhythm, e.g.:
  - ➢ Choose hat
  - ➢ Ask question
  - ➢ Share answer
  - ➢ Repetition builds confidence.

- **Challenge:** Children lose focus in long sessions.
  Tip: Keep it short and energetic
  - ➢ Use a timer per hat (e.g. 3 minutes per line of thinking) and make sure there are active forms of work (drawing, moving, choosing cards) this ensures more involvement.

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- **Challenge:** Children often only want to think positively (yellow) or creatively (green).
  Tip: Encourage all thinking, including the 'difficult'
  - ➢ Explain that all hats are important - including critical thinking or allowing for feelings.
  - ➢ Use examples where the black or red hat makes a difference.

Difficulty level tailoring

To tailor working with the thinking hats to pupils' level, you can differentiate into three levels:

- **Beginner learners (6-7 years old):** students explore one or two thinking hats at a time, with a lot of support from the teacher. The questions are simple and visual, and answers may also be drawn. Thinking aloud together is central.
- **Advanced learners (8-9 years old):** students use several thinking hats in succession. They think independently, share their ideas in groups and write or draw their answers. The teacher guides mainly by asking questions and reflecting together.
- **Expert learners (9–10 years old):** students use all six thinking hats independently or in groups, also with more complex topics or their own projects. They consciously switch perspectives, ask each other in-depth questions and reflect critically on their thinking process.

This structure makes it possible to build thinking skills step-by-step, tailored to the pace and level of the children.

Debriefing and Reflection questions

1. On thinking itself
   - Which hat did you find easiest to think with?
   - Which hat did you find most difficult? Why?
   - Did you think or say something you wouldn't normally do?
   - Which hat helped you come up with a new idea?
2. About the process
   - How did you feel about thinking step by step?
   - What happened when we started thinking with a different hat?
   - Did we get a good look at all sides of the problem?
   - What was the difference between creative thinking and critical thinking?
3. About empathy and collaboration
   - What did your group do well while thinking?
   - Did you listen to each other well?
   - Who helped you to think further?
   - What would you do differently in the group next time?
4. About learning and growth
   - What did you learn about yourself as a thinker?
   - Is there anything you understand better now than before?
   - How can you use this thinking in other situations?

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3.3.3 Scientific concepts in motion

Brief description, and rules of the implementation of the learning activity

Turning scientific concepts into movement involves children experiencing abstract principles (such as states of matter) through movement. Children depict physically these concepts with their bodies, exploring how a concept works, how to represent it, and how to improve it.

Skill focus

Primary Skill Focus

- Problem-solving

Complementary/Secondary Skill Focus

- Critical thinking
- Creativity

Age group	Student number	Duration
6-10 years old	Individual and whole class working in pairs or small groups	30-50 minutes

Proposed step by step implementation of the learning activity

1. **Exploration through Movement:** Pupils practice the different movement criteria with their bodies, for example moving smoothly or following a specific pattern. Encourage open exploration and trying out ideas.
2. **Applying the Concept:** Pupils work in groups to present the concept through movement with their bodies. They experiment, exchange ideas, and try out solutions.
3. **Presentation:** Present this to the class: one group performs while the other observes, focusing on how the concept and movement criteria are applied.
4. **Reflection:** Reflect together: discuss what was discovered, which movement criteria and concepts were visible, and what could be done differently or improved.

Indoor/Outdoor Classroom layout notes

It can be done indoors or outdoors.

If you do it indoors, make sure the (classroom) is spacious and allows the class and individual student to move freely. But also, that you can make it quiet enough for them to concentrate on your explanations and instruction.

If you do it outside, choose a quiet but spacious place on the playground where pupils can stay focused and not be disturbed by other activities.

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How does this learning activity develop this particular skill?

This learning activity focuses on problem-solving. Pupils are given a scientific concept, such as states of matter, and the challenge is to represent it through movement. They test different ways to express it.

Working individually or in small groups, pupils generate ideas, try out solutions, and refine their approach until they find an effective way to depict the concept through movement. Finally, they reflect on their choices and how their representation could be improved.

What do we want to achieve regarding primary skill development (student understanding and/or behaviour)?

As a result of this activity, students will:

- able to experiment with their ideas, evaluating them, and refining them through improvement.
- understand that multiple solutions are possible for a single problem.
- able to critically reflect on their learning process by asking what worked, why a particular solution was chosen, and what could be done differently next time.

Suggested use, and practical subject-related examples

A clear example is that pupils represent the states of matter and their transitions through movement. For instance, a block of chocolate that smelts: they first move as a solid object and gradually “melt” into a liquid phase. They use the particle model to guide their movement: initially, the pupils stand close together in a structured way (solid) and then gradually spread out (melting).

Materials and tools needed for implementation

Here is an overview of possible tools and materials depending on your concept:

- Instruction cards
- Photo camera or tablet to record things
- Post-its for initial ideas or comments
- Large sheets of paper or whiteboards
- inspiration photos

Guiding questions

These are example questions applied to states of matter.

Observing the Concept

- How does a solid object actually move?
- What changes when something starts to melt?
- Can you feel how the particles behave differently?

Experimenting with Movement

- What happens if you move faster or slower?
- Can you show the difference between a solid, liquid, and gas?
- How can you show that the particles gradually move further apart?

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Problem-Solving Thinking

- Which movement best shows the melting process?
- Can you think of another way to represent the same concept?
- Does your strategy work for the whole group? If not, what can you change?

Tips and Tricks for dealing with challenges

- **Challenge:** The students are unsure how to start
  Tip 1: Suggest they focus on the basic characteristics first (e.g., “Are the particles close together or far apart?”). Encourage small experiments: try one simple movement and adjust.
- **Challenge:** The students move too quickly or chaotically
  Tip 1: Ask them to slow down and exaggerate the differences between states.
  Tip 2: Use counts or beats to coordinate group movement.
- **Challenge: T**he concept seems very abstract for the students
  Tip 1: Give a concrete example, like melting chocolate or ice.
  Tip 2: Ask them to think about the particle model: how would the particles move?
- **Challenge:** The group has difficulty coordinating
  Tip 1: Break the movement into stages: first show the solid, then the liquid, then the gas.
  Tip 2: Use visual cues (markers or zones) to guide spacing and formation.

Difficulty level tailoring

When exploring scientific concepts through movement, you can differentiate on three levels:

- **Beginner learners (6-7 years old):** Children perform simple, guided movements and discover mainly through imitation and feeling. They receive visual support and clear instructions. Think of jumping, falling or balancing with help.
- **Advanced learners (8-9 years old):** Children combine movements and think about cause and effect. They work in groups on short movement sequences and reflect on their choices. They are already able to experiment and vary within an assignment.
- **Expert learners (9–10 years old):** Children design creative movement solutions, plan independently and reflect deeply on their process. They can physically represent abstract concepts such as stability or state of aggregation and evaluate their approach.

At each level, problem-solving thinking is stimulated by open assignments, targeted questions and room for experimentation. This allows you to connect with each child's development and make science tangible and active.

Debriefing and Reflection questions

1. Understanding the concept
   - What did you discover about [gravity/force/balance]?
   - Why do you think this happened when you [jumped/pushed/rolled]?
   - Can you explain what would happen if we changed something?
2. Problem-solving process
   - What ideas did you try first?
   - What worked well? What didn't work? Why do you think that is?
   - How did you decide which solution to use?

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3. Collaboration and communication
    - How did you work together to solve the problem?
    - What did someone in your group do that helped you?
    - How did you listen to each other's ideas?
4. Reflection on learning
    - What did you learn today that you didn't know before?
    - How did it feel to try something new?
    - How did the way you moved help to clearly show the concept.

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3.3.4 What next

Brief description, and rules of the implementation of the learning activity

During an investigation or design activity, students encounter an unexpected problem that blocks their progress. They must think of possible solutions, make a choice, and adjust their approach to continue.

Skill focus

Primary Skill Focus

- Problem-solving

Complementary/Secondary Skill Focus

- Critical thinking

Age group	Student number	Duration
6-10 years old	Individual and whole class working in pairs or small groups	30 minutes

Proposed step by step implementation of the learning activity

1. Students begin the investigation or design task individually, in pairs, or in small groups.
2. An unexpected problem or obstacle arises during the activity.
3. Students identify and discuss the problem and think of possible solutions.
4. They select one solution, gather the necessary materials or resources, and test their idea.
5. Students evaluate whether the solution works and, if necessary, adapt their approach.
6. The activity ends with a short reflection and class discussion about the problem-solving process.

Indoor/Outdoor Classroom layout notes

This activity can be conducted both inside the classroom and in outdoor settings, depending on the investigation or design task.

How does this learning activity develop this particular skill?

- Encountering the problem: Students face an unexpected obstacle that prevents them from continuing their investigation or design task, which triggers the need for problem-solving.
- Analysing the situation: They examine the problem carefully, identifying the cause and the constraints, which develops analytical thinking.
- Generating alternatives: Students brainstorm possible solutions, exploring multiple approaches rather than settling on the first idea.
- Evaluating options: They weigh the pros and cons of each possible solution, learning to assess feasibility, effectiveness, and potential consequences.

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- Making a reasoned decision: Students select the most suitable solution and implement it, practicing decision-making based on evidence and reasoning.
- Reflecting on outcomes: After attempting their solution, students reflect on what worked, what didn't, and why, which reinforces critical thinking and iterative problem-solving.

What do we want to achieve regarding primary skill development (student understanding and/or behaviour)?

As a result of this activity, students will:

- be able to recognize and analyse unexpected problems
- be able to develop and implement effective solutions
- able to reflect critically on their decision-making process.

Suggested use, and practical subject-related examples

This activity is suitable for tasks where unpredictable problems can naturally arise.

- Science investigations: During an experiment, a piece of equipment fails or results are unexpected, prompting students to figure out how to proceed.
- Design and engineering tasks: While building a model or prototype, students discover that a part doesn't fit or a design doesn't work as intended.
- Outdoor learning activities: Students encounter environmental or logistical obstacles, such as weather conditions or unavailable materials, requiring creative solutions.
- Project-based learning: When planning or executing a project, students face unforeseen challenges like missing data, time constraints, or conflicting ideas.

Materials and tools needed for implementation

The exact problem and the materials needed cannot be predicted in advance; students must identify the obstacle and, based on their proposed solution, determine and gather the materials required to address it.

Guiding questions

Teacher's role: the teacher is coaching, inquisitive and supportive, encouraging thinking, explaining and rethinking

Understanding the problem:

- What is the obstacle you are facing?
- Why can't you continue with the task?

Identifying needs:

- What do you need in order to move forward?
- What resources or materials could help you overcome this challenge?

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Exploring possibilities:

- What can you use from the classroom or environment to help you?
- Are there alternative ways to solve the problem if your first idea doesn't work?

Decision-making and reflection:

- Which solution seems most feasible and why?
- How will you test whether your idea works?
- What might happen if your solution doesn't work as planned?

Tips and Tricks for dealing with challenges

- **Challenge:** Students may rush into solving the problem without fully understanding it.
  Tip: Encourage students to pause and analyse the problem before jumping to a solution.
- **Challenge:** Students may become frustrated when their first idea does not work.
  Tip: Ask guiding questions to stimulate critical thinking rather than giving the answer.
- **Tip: Challenge:** Some students may struggle to think of more than one possible solution
  Tip: Promote brainstorming multiple solutions and considering alternatives.
- **Challenge:** Students may see mistakes or failed attempts as failure rather than part of learning.
  Tip: Emphasize that mistakes are learning opportunities and part of the process.
- **Challenge:** Students may have difficulty identifying or adapting suitable materials and resources.
  Tip: Allow students time to gather or adapt materials based on their chosen solution.
- **Challenge:** Some students may rely too heavily on the teacher or stronger peers for decisions.
  Tip: Support collaboration but let students make decisions independently when possible.

Difficulty level tailoring

When using smart match as a working form with students aged 6 to 10, you can easily differentiate at three levels: beginner, advanced and expert.

- **Beginner learners (6-7 years old)**: Provide smaller, simpler tasks where the obstacle is obvious. Offer hints or partial suggestions for materials needed. Encourage working in pairs to support problem-solving.
- **Advanced learners (8-9 years old):** Use more complex or ambiguous problems that require independent thinking. Limit hints, so students must brainstorm multiple solutions themselves. Encourage reflection on why certain solutions may or may not work.
- **Expert learners (9–10 years old):** Introduce open-ended or multi-step obstacles where the problem may have multiple possible solutions. Students must anticipate potential challenges and identify materials independently. Encourage them to evaluate the effectiveness of their solution critically and consider alternative strategies.

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Debriefing and Reflection questions

- What did you learn about how to approach unexpected problems?
- Which strategies helped you solve the problem most effectively?
- What would you do differently if you faced a similar problem next time?
- How can you apply what you learned about problem-solving in other tasks or subjects?
- Did you notice any personal strengths or areas to improve in how you handle challenges?

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3.3.5 Who am I?

Brief description, and rules of the implementation of the learning activity

"Who Am I?" is an activity where each player wears a card on their forehead with the name of a famous person, animal, or fictional character, without knowing who they are.
By asking only yes/no questions, each player tries to figure out their identity.
The first player to guess correctly wins the learning-game!

Skill focus

Primary Skill Focus

- Problem-solving

Complementary/Secondary Skill Focus

- Critical thinking

Age group	Student number	Duration
6-10 years old	whole class working in pairs or small groups	50-100 minutes

Proposed step by step implementation of the learning activity

1. Write the name of a person, animal, profession or famous figure on each post-it note.
2. Stick a post-it notes on the forehead of each player without them seeing what is written on it.
3. Choose someone to start. That person may ask one yes/no question to a classmate. Then it is the next player's turn.
4. If someone thinks they know who they are, they may take a guess during their turn.
5. The game ends when everyone has correctly guessed their post-it note.

Indoor/Outdoor Classroom layout notes

Set up tables or mats on the floor where small groups of 3–6 players can comfortably sit. Let them sit in circle. This makes it easy for everyone to ask each other questions.
Outdoor: In a quiet and clean environment, the pupils can also sit outside in a circle.
Outdoors, the game can also be played while moving around. Everyone walks around and you can ask a question when you bump into someone. This way, there is not only movement but also more interaction between the different players.

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How does this learning activity develop this particular skill?

The learning game ‘ Who Am I?’ encourages problem solving because players must actively develop strategies to discover their identity. They first learn to gather information by asking specific yes/no questions and then must logically analyse which questions will lead them to the answer most quickly. Players plan their approach: they decide which categories to exclude first and how to use their questions as efficiently as possible.

What do we want to achieve regarding primary skill development (student understanding and/or behaviour)?

As a result of this activity, students will:

- be able to gather and analyse information through yes/no questions;
- able to ask effective and logical questions;
- able to use reasoning to eliminate unlikely options and identify their hidden identity;
- able to adapt their thinking based on new information and responses from others.

Suggested use, and practical subject-related examples

- Choose themes that are appropriate for the lesson (professions, animals, historical figures, etc.).
- Post-it on forehead: “Horse”

Questions:

1. Am I an animal? ✅
2. Am I a human? ❌
3. Do I have four legs? ✅
4. Can I fly? ❌
5. Can I run fast? ✅
6. Do I have a tail? ✅
7. Do I have a long neck? ✅
8. Do I make sounds like neighing? ✅
9. Can people ride me? ✅
10. Do I live on a farm or in a stable? ✅
11. Am I smaller than a dog? ❌
12. Do I eat grass? ✅

Materials and tools needed for implementation

- Post-it notes
- Pens or markers

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Guiding questions

Helpful questions before the game (preparation & strategy)

- How can you ask questions in such a way that you quickly obtain a lot of information?
- Which category do you think is useful to exclude first (e.g. animal, profession, famous person)?
- What can you do if you are not sure what the answer is?

Helpful questions during the game (process guidance)

- Which questions have helped you and which haven't?
- Can you try a different strategy to get to the answer faster?
- What do you think someone else would ask if they were in your position?
- Can you combine information from different answers to rule something out?

Tips and Tricks for dealing with challenges

- **Challenge**: Students may ask questions that are too specific too early in the game. **Tip:** Encourage students to start with broad category questions and gradually narrow down the possibilities step by step.
- **Challenge**: Students may struggle to think of effective questions.
  Tip: Suggest using opposite questions or eliminating large groups of possibilities at once to make questioning more strategic.
- **Challenge**: Students may forget previous answers or repeat the same questions.
  Tip: Encourage students to listen carefully, remember eliminated options, or write down important clues before making a guess.

Difficulty level tailoring

Beginners (6-years old):

- The general category of the characters can be given. For example: everyone is a plant.
- Hints can be given if they are struggling.
- Playing together in pairs: Two students can guess together and help each other ask questions.

Advanced learners (8-9 years old):

- Provide a slightly broader mix of categories (e.g., animals, professions, and well-known characters) without narrowing them too much.
- Encourage students to ask both category and detail questions (e.g., “Am I an animal?” and “Do I live in water?”).
- Allow students to work individually but support them with occasional peer discussion if needed.
- Reduce hints compared to beginners, but still offer minimal support when students are stuck.
- Encourage students to explain briefly why they think a certain answer helps them get closer to the solution.

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Expert learners (9-10 years old):

- Use more challenging categories, such as historical figures, book characters, or professions.
- Limit the number of questions each player may ask before making a guess.
- Encourage students to explain their reasoning after each question or guess.
- Add a time limit to increase strategic thinking and quick decision-making.
- Let students create their own characters or categories for classmates to guess.

Debriefing and Reflection questions

- Which strategy worked best to find the answer? Why?
- Which questions were less effective and what would you do differently next time?
- Did you discover new ways of thinking during the game that you can use for other problems?
- How can you better plan which questions to ask first?

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3.4 CRITICAL THINKING

3.4.1 Dilemma thinking

Brief description, and rules of the implementation of the learning activity

The pupils are presented with a dilemma and must think about whether they are more in favour or against it. They weigh the pros and cons, argue their point of view, and justify their choices based on their reasoning.

Skill focus

Primary Skill Focus

- Critical thinking

Complementary/Secondary Skill Focus

- Empathy

Age group	Student number	Duration
6-10 years old	Individual or whole class working in pairs or small groups	50-100 minutes

Proposed step by step implementation of the learning activity

1. Introduction to the theme and giving the dilemma.
2. giving content
3. thinking activity in small groups and making a decision
4. class discussion. Each group presents their opinion and arguments. Encourage a variety of viewpoints.
5. Reflection on thinking

Indoor/Outdoor Classroom layout notes

This activity can be carried out flexibly both indoors and outdoors, as long as students are able to sit in small groups and engage in focused discussion.

How does this learning activity develop this particular skill?

Students are working at critical thinking because:

- they weigh multiple perspectives against each other.
- they are required to make deliberate choices and justify them.

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What do we want to achieve regarding primary skill development (student understanding and/or behaviour)?

As a result of completing this task, students will:

- be able to analyse a real-world dilemma (living near a volcano) by identifying and weighing advantages and disadvantages.
- be able to articulate their reasoning, justify their decisions, and support their viewpoint with evidence.
- be able to demonstrate collaborative problem-solving skills by discussing, negotiating, and reaching a decision in small groups.
- be able to show critical thinking and reflection by considering multiple perspectives and evaluating the reasoning behind their own and others' choices.

Suggested use, and practical subject-related examples

The dilemma must be realistic and meaningful. Examples of dilemmas;

- Geography: Would you live near a volcano?
- Biology: Should we eat fruit or cookies every day?
- History: Should we preserve old historical buildings or replace them with modern ones?
- See attachment: Would you live near a volcano?

Materials and tools needed for implementation

It depends on the dilemma. But provide enough information about the topic so that pupils can make well-considered choices

Guiding questions

Analysing the Problem / Situation

- What are the main aspects of this situation?
- What information do you need to make a well-informed judgment?
- Are there different ways to look at this problem?

Weighing Pros and Cons

- What are the possible advantages of this choice?
- What disadvantages or risks do you see?
- Which advantage or disadvantage do you consider most important, and why?

Reasoning and Justifying

- How can you explain your choice to others?
- What evidence or examples support your opinion?
- What objections might someone raise, and how would you respond?

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Tips and Tricks for dealing with challenges

- **Challenge:** If pupils struggle to start thinking
  Tip 1: Encourage them to first list any advantages and disadvantages they can think of.
  Tip 2: Suggest focusing on one aspect at a time to avoid feeling overwhelmed.
- **Challenge:** If pupils give vague or shallow answers
  Tip 1: Ask prompting questions like: “Why do you think that is important?” or “Can you give an example?”
  Tip 2: Encourage them to consider both sides of the dilemma before deciding.
- **Challenge:** If pupils disagree strongly in groups
  Tip 1: Remind them that it’s okay to have different opinions.
  Tip 2: Encourage listening to each other and finding common ground or compromises.
- **Challenge:** If pupils are stuck on the decision
  Tip 1: Ask them to think about what additional information would help them decide.
  Tip 2: Suggest imagining the situation from different perspectives (e.g., farmer, tourist, child).
- **Challenge:** If pupils rush the process
  Tip 1: Remind them that careful thinking is more important than quickly choosing an answer.
  Tip 2: Encourage them to write down reasons and evidence before announcing their decision.

Difficulty level tailoring

- **Beginner (6-7 years old):** Provide clear, concrete dilemmas with pros and cons that are easy to understand. Use short texts, pictures, or videos to give context. Example: “Should we eat fruit or cookies every day?”
- **Advanced learners (8-9 years old):** Provide more complex dilemmas where multiple factors play a role. Let pupils think of pros and cons themselves and justify their choices. Example: “Should people live near a volcano?”
- **Expert learners (9–10 years old):** Provide abstract or real-world dilemmas where pupils must weigh multiple perspectives. Encourage them to justify their decision with evidence or data and reflect on possible counterarguments. Example: “Should governments invest in nuclear energy or renewable energy to combat climate change?”

Debriefing and Reflection questions

- What helped you to think more deeply?
- What helped you think carefully about your choice?
- What was difficult about making a decision?
- Would you change your decision if you had more information?

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3.4.2 Categorise

Brief description, and rules of the implementation of the learning activity

Categorizing means that children group things based on similarities or differences, such as colour, shape, function, or theme. For young learners, this is a playful and active way to learn to think logically and critically. For example:

- Sorting objects by colour or material
- Classifying animals into “domestic” and “wild” animals
- Matching words related to the same theme (e.g. “autumn” or “farm”)

This activity helps children make connections, develop language and create overview. It can be done individually, in pairs or in groups, using materials such as cards, pictures or real objects.

Skill focus

Primary Skill Focus

- Critical thinking

Complementary/Secondary Skill Focus

- Creativity
- Problem solving
- Connectedness

Age group	Student number	Duration
6 + years old	Individual and whole class working in pairs or small groups	15-50 minutes

Proposed step by step implementation of the learning activity

1. **Introduction -** Explain what categorising means: "Categorising means grouping things that belong together. These can be words, pictures, numbers, animals, or even ideas."
   - Words that belong to the same theme
   - Animals that are similar
   - Sums that are the same amount

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2. **Students get material:** Depending on your topic, give them cards, pictures, words, sentences, numbers or concrete material.
   - Language: single words (house, tree, walking, chair, writing)
   - Maths: sums or numbers (2+3, 5, 1+4, 10-5, 8-3)
   - World orientation: pictures of animals, professions, vehicles
   - Social skills: behaviours or emotions (angry, happy, honest, listening, shouting)
3. **Assignment:** "Make groups of things that belong together. Think about how you want to classify them. Give each group a name. Then tell why you did it that way."
   - this instruction depends on the material or working form (e.g. on a worksheet) you offer
   - let them work individually or in pairs into small groups.
4. **Explanation and substantiation:** Let the students tell:
   - Why do these things belong together?
   - What is this group called?
   - Could something also fit in another group? Why yes/no?
   - This way they practise articulating their thinking, an important part of critical thinking.
5. **Class discussion:** Have a few groups share their categorisation and discuss:
   - Are there multiple ways to categorise?
   - What would change if you grouped by a different property?
   - This shows that there are multiple correct solutions, as long as they are logically based.

Indoor/Outdoor Classroom layout notes

It can used both indoors and outdoors. Both surroundings have specific and different activities and real live problems for students.

When indoors ensure that the (class-)room is quiet enough to allow focus and thoughtful discussion and explanations during research. If practiced outside, choose a quiet corner of the playground where students can stay focused and avoid interference.

How does this learning activity develop this particular skill?

This learning activity encourages critical thinking by making children consciously think about how they organise and interpret information. It starts with understanding categorisation: pupils learn to recognise characteristics, similarities and differences, and discover that there are multiple ways of looking at information.

A diverse range of materials — such as words, sums or emotions — challenges them to actively analyse and recognise patterns. They then make their own choices about how to group and name the materials. This requires logical reasoning, weighing up alternatives and substantiating their decisions. When children explain their choices, they practise arguing and reflecting. They learn to articulate their thought process and are open to other perspectives. In classroom discussions, they discover that there can be multiple correct answers and that critical thinking is about logic and flexibility, not about finding one correct answer.

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What do we want to achieve regarding primary skill development (student understanding and/or behaviour)?

As a result of completing this task, students will:

- analyse and compare items to decide what belongs together and what does not;
- develop reasoning skills by explaining and justifying their choices;
- evaluate different possibilities and consider alternative ways of grouping or thinking;
- verify and reflect on their decisions, strengthening both critical thinking and language development.

Suggested use, and practical subject-related examples

1. **Introduction (classroom, 5-10 minutes)**

   Purpose: To explain what “categorisation” is.

   What you say (example): "Today we are going to sort or classify things into groups that belong together. This is called “categorising”. Think about the difference between animals that can fly and those that walk on the ground."

   Show 2-3 objects or pictures (e.g. a ball, an apple, a book), and ask: "Which ones belong together, and why do you think so?"

2. **Prepare materials (prepare in advance)**

   Choose 15-20 items (pictures or real objects), such as:

   - Animals
   - Food
   - School stuff
   - Transport equipment

   Make sure there are several logical ways of classifying (e.g. by colour, function, type).

3. **Small groups or pairs form**

   Divide the class into small groups of 2-4 students. Give each group a set of materials/tickets.

4. **Assignment: sort and explain (15-20 min)**

   Have the children categorise the cards in a way that they find logical. They should:

   - Group the cards
   - Give a name to each category (for example: “animals that live in water”)
   - Explain why they put something in a particular group

5. **Discussion and reflection (classroom, 10 min)**

   Have some groups present their classification. Discuss differences:

   - Did other groups have a different format?
   - What stood out?
   - Which categories were difficult?

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Materials and tools needed for implementation

This depends on how and with what materials you want to work out the categorising and in what form. This can range from a single pre-prepared worksheet to materials you collect with the children in the forest.

1. Cards or pictures
   - Word cards (e.g. nouns, verbs, emotions, professions)
   - Pictures or photos (animals, objects, nature, people, situations)
   - Theme-specific sets (e.g. autumn, traffic, farm)
2. Physical objects (if available)
   - Small objects from classroom or school, park and forest etc.
   - Toys or materials from corners (cars, plastic animals, blocks)
3. Worksheets/sort sheets
   - Blank sort sheets with boxes or circles
   - Worksheets with space to name categories
   - Venn diagrams or matrices (for slightly older or stronger pupils)
4. Thematic materials (subject-specific)
   - Language: words by theme or word type
   - Maths: sums, numbers, units of measurement
   - World orientation: nature images, weather symbols, maps
   - Social education: pictures of behaviour, emotions or situations
5. Digital materials (optional)
   - Digiboard or tablet with drag-and-drop categorization tasks
   - Online tools such as educational apps or digital learning environments

Key tip: Choose materials that contain enough variety and doubt, so that students must think about why something does or does not fit into a category - this triggers critical thinking.

Guiding questions

The teacher guides this process by asking curious questions, allowing room for experimentation, and encouraging students to examine their own thought processes. This creates a learning environment that focuses on critical thinking, where students learn not only to give answers, but also to understand why those answers are logical. Questions depend on which topic, for example:

- Why did you put these together?
- Could this card also fit in another group? Why yes/no?
- What happens if we sort by another characteristic, such as colour or size?
- What stood out?
- Which categories were tricky?
- Why do these things belong together?
- What is this group called?
- Can something also fit into another group? Why yes/no?
- Are there multiple ways to categorise?

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Tips and Tricks for dealing with challenges

- **Challenge:** Children misunderstand the assignment or get confused.
  Tip: Provide clear instructions: Give a short example before the task (e.g. 'Apple and banana belong together because you can eat them.'). Repeat core instructions and check that pupils understand them
- **Challenge:** Abstract thinking is still difficult for many young children.
  Tip: Use visual and concrete materials: Work with pictures or real objects instead of just words. Let children sort it physically first before doing it on paper
- **Challenge:** Overly complex classifications cause frustration or confusion.
  Tip: Start with simple categories: Start with clear differences (e.g. animals vs vehicles). Slowly build up to more abstract categories (such as feelings, functions, properties)
- **Challenge:** Children choose a "wrong" category according to the teacher.
  Tip: Listen to their reasoning, not just the "right" answer: Ask: "Why did you do it this way?" Sometimes children have surprisingly logical reasons - that's exactly where critical thinking begins
- **Challenge:** Students think there is one right answer.
  Tip: Recognise that multiple solutions are possible: Encourage different ways of classifying. Say, for example, 'That's an interesting way to think, who did it differently?'
- **Challenge:** Children have difficulty putting their choices into words.
  Tip: Encourage language and explanation: Provide linguistic support: 'You put these together because…'. Use sentences as steppingstones: 'I think these belong together because…'
- **Challenge:** Group work can become chaotic, or some pupils do not participate.
  Tip: Allow collaboration but keep it orderly: Work in pairs or small groups of max 3-4 students Give everyone a role (e.g. "mapmaker", "category name creator", "explainer").
- **Challenge:** Children wander off or finish quickly.
  Tip: Maintain pace and attention: Use a timer (e.g. 10 minutes sorting, 5 minutes explaining). Give a follow-up task: 'Can you think of another way to sort?'.
- **Challenge:** The task does not go as planned.
  Tip: Be flexible if things go differently: Let the process be more important than the perfect end result. Learn from the moment and adjust the assignment next time according to what you have seen
- **Challenge:** Reduced motivation or commitment.
  Tip: Make it a game! Make it a game format: 'Which group comes up with the most different categories?'. Reward creative thinking, not just the "right" answer

Difficulty level tailoring

When using categorising as a working form with students aged 6 to 8, the teachers can easily differentiate at three levels: beginner, advanced and expert.

- **Beginner learners (6-7 years old)**: benefit from concrete material, clear visual support and pre-given categories, such as "animals" or "food". They mainly practise recognising and simple sorting.
- **Advanced learners (8-9 years old):** can already think up categories independently, work with doubtful cases and use multiple sorting criteria, such as colour, function or theme.

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- **Expert learners (9–10 years old):** are challenged to make abstract or multiple sorting, argue their choices and compare alternative classifications. This way, you tailor the work form to each student's thinking and language level and encourage critical thinking.

Debriefing and Reflection questions

1. About the chosen format
    - Why did you put these things together?
    - What feature do these things have in common?
    - Was it easy or difficult to make groups? Why?
    - Did you think first or just try? Which worked best?
2. About alternative possibilities
    - Could you have grouped these things differently?
    - Can you give an example of something that could fit into two groups?
    - What would happen if we sorted by a different characteristic, such as colour/size/function?
3. About cooperation (in group work)
    - How did you decide on the classification together?
    - Did you have different ideas? How did you solve them?
    - Did anyone come up with an idea you didn't have yet?
4. About language and reasoning
    - Can you explain why you did it this way?
    - Which category did you find most difficult to name? Why?
    - What words do you need to explain well what you mean?
5. About learning
    - What did you learn from this assignment?
    - What would you do differently next time?
    - What did you like most/most about this activity?

General tip: You can also let students think up questions for each other - that stimulates even more thinking and language.

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3.4.3 Open ended enquiry

Brief description, and rules of the implementation of the learning activity

Open ended enquiry means that students formulate their own research question and discover in their own way how to answer it. The teacher guides them in this process but deliberately leaves room for their own input and creativity, with an emphasis on curiosity, self-discovery and critical thinking. Rather than giving answers, the teacher stimulates the thinking process by asking focused questions and creating a stimulating learning environment. This can be done with concrete material as well as with theoretical concepts.

Skill focus

Primary Skill Focus

- Critical thinking

Complementary/Secondary Skill Focus

- Curiosity, sense of wonder
- Connectedness

Age group	Student number	Duration
6 -10 years old	Whole class working in pairs or small groups	30-45 minutes

Proposed step by step implementation of the learning activity

1. **Start with a stimulating topic:** Choose a topic/theme or an object that sparks curiosity and is relevant to the children.
2. **Let the children think of questions:** Encourage them to formulate their own research questions and learn what makes a good question.
3. **Hypothesise:** Encourage children to make predictions and give reasons for them.
4. **Plan and carry out the investigation:** Let them experiment, observe and collect results independently (or in groups).
5. **Reflect during and after the investigation:** Discuss and share findings and encourage children to think critically about what they have discovered and how they know it. Together with the pupils, draw conclusions that clarify the central learning points.

Indoor/Outdoor Classroom layout notes

It can be done both indoors and outdoors. When indoors ensure that the (class-)room is quiet enough to allow focus and thoughtful discussion and explanations during research. If played outside, choose a quiet corner of the playground where students can stay focused and avoid interference.

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How does this learning activity develop this particular skill?

1. Start with a stimulating topic
    - Critical thinking starts with curiosity.
    - A relevant and engaging topic motivates pupils to ask questions and think beyond the superficial.
    - They learn that learning starts with wonder and daring to ask questions.
2. Let children come up with questions
    - Formulating questions themselves = practising critical thinking.
    - Students learn:
        - What makes a good question (open, investigable, relevant)
        - How to guide their own thought process
    - This promotes self-reflection, analysis and problem-oriented thinking.
3. Formulate hypotheses
    - Predicting and substantiating stimulates logical reasoning.
    - Pupils must:
        - Make an assessment
        - Substantiate that assessment with arguments
    - This requires conscious thinking, reasoning and evaluation of knowledge.
4. Planning and conducting research
    - Independent research strengthens critical thinking because pupils:
        - Collect data
        - Make observations
        - Interpret results
    - They learn to look critically: What do I really see? What does that mean?
5. Reflecting during and after the research
    - Reflection is at the heart of critical thinking.
    - By discussing together:
        - What have we discovered?
        - How do we know that?
        - What does this mean for our hypothesis?
    - Pupils learn to evaluate their own thought processes and draw conclusions based on evidence.

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What do we want to achieve regarding primary skill development (student understanding and/or behaviour)?

As a result of completing this task, students will develop critical thinking and curiosity by:
Developing critical thinking skills, including:

- Analysing situations and problems to better understand what is happening and why.
- Using logical reasoning and evidence to support predictions or conclusions.
- Distinguishing between facts and opinions by critically evaluating the reliability of information.
- Evaluating their approach and results and reflecting on areas for improvement.
- Exploring alternative perspectives and considering different possible solutions.

Fostering curiosity, including:

- Asking open, thoughtful, and inquisitive questions.
- Learning through exploration by experimenting, observing, and discovering new things.
- Using curiosity to inspire creative problem-solving approaches and research methods.
- Developing intrinsic motivation by directing and taking ownership of their own learning.
- Cultivating a sense of wonder and interest in how the world around them works.

Suggested use, and practical subject-related examples

Teachers can use the Open-ended enquiry-technique throughout different subjects in the following ways:

1. **Introduce a broad topic:** Choose a topic that matches their interests, such as nature, technology or everyday life. For example, "How does a rainbow work?", "Why do some objects float?" or "What can you do with different blocks of wood?
2. **Encourage questioning:** Let the children think of questions about the topic. Use prompts such as
   - 'What do you want to know about this?
   - ‘What do you think would happen if...?
   - What can you do with it?
3. **Make a choice:** Help the children to choose a research question that is feasible and concrete, for example:
   - 'How can we make a rainbow?
   - Which materials sink in water, and which don't?
   - How can we build something?
4. **Planning the research**
   - Let the children work out for themselves how to answer their question:
   - For younger children: Give simple choices (experiment, observe, draw).
   - For older children: Encourage their own experiments or data collection.
5. **Experiment and discover:** Let the children carry out their plans. Examples:
   - Make a rainbow with a glass of water and a mirror.
   - Test different objects in water to see what floats.
   - Build a tower with different types of blocks and on different surfaces.

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6. **Reflect and share:** Let the children share their findings:
    - Draw pictures, make diagrams or give oral presentations.
    - Discuss what they have learned and how they know, using pictures or designs they have made.

Materials and tools needed for implementation

The choice of materials depends largely on the subject. Centrally, it can be said that open ended materials should be used.

Definition of open-ended materials:

Open-ended materials are objects or tools that have no specific purpose or fixed outcome. They can be used in a variety of ways and encourage creativity, imagination and problem solving. Examples include building blocks, natural materials (such as stones, branches or sand) or art materials such as paint and clay.

Use open-ended materials:

- Free play: Children are free to experiment and express their ideas without restrictions.
- Problem solving: They can use the materials to find solutions to self-imposed or given challenges.
- Creativity and imagination: The open-ended nature of the materials encourages children to think of new applications or constructions.
- Collaboration and communication: In group activities, these materials help to brainstorm and share ideas.
- Motor development: Manipulating open-ended materials helps develop fine and gross motor skills.
- Supporting inquiry-based learning: The materials provide opportunities for experimentation, making connections and understanding concepts.

The use of open-ended materials in the classroom promotes a learning environment where curiosity, autonomy and creativity are central. They are particularly suitable for topics that provide space for exploration and investigation, as in open-ended inquiry.

- Writing tools: Pens, pencils, or digital devices for individual reflection and note-taking.
- Paper or whiteboards: For students to jot down their thoughts, share ideas, or create diagrams.
- Prompt cards or questions: Printed or projected prompts related to the topic or subject
- Timer or clock: To manage the time allocated for each phase of the activity.
- Flipchart or projector: For presenting group ideas during the whole-class sharing phase.

Optional: -Markers or sticky notes for students to visually organize and display their thoughts

Guiding questions

Example on topic: 'Why does ice melt faster in the sun than in the shade?

1. Ask questions: The children think of questions such as 'What will happen if we cover the ice with something?
2. Hypothesis: 'I think the ice melts less quickly with a cloth over it.
3. Research: Let the children test different materials (cloth, paper, plastic).

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4. Reflection: Discuss:
    - 'Which materials worked best?
    - 'Why do you think this happened?
    - 'How can we improve our experiment?

Tips and Tricks for dealing with challenges

- **Challenge:** Children do not know how to formulate a clear research question.
  Tip: Helping children to ask good questions
    - ➢ Use tools such as question starters ('Why...', 'How...', 'What happens if...') or provide examples of good questions.
    - ➢ Let the children draw or write their questions in their own words before you help them to refine them.
- **Challenge:** Children may be overwhelmed by too many choices or easily distracted.
  Tip: Provide enough structure within freedom
    - ➢ Provide a clear roadmap (e.g. 1. develop question, 2. make plan, 3. implement, 4. reflect).
    - ➢ Use visual aids such as pictograms or a step-by-step poster in the classroom.
- **Challenge:** In groups, some children take the lead while others are less involved.
  Tip: Encouraging cooperation without dominance
    - ➢ Assign roles within the study (e.g. materials manager, note-taker, presenter) to encourage equal participation.
    - ➢ Ask the children to reflect on their collaboration ("What went well? What can we do better?").
- **Challenge:** Children get frustrated when their investigation fails or has an unexpected outcome.
  Tip: Encourage perseverance
    - ➢ Normalise mistakes and emphasise that this is an important part of the learning process.
    - ➢ Ask questions such as: What can we learn from this?" or "What could we try differently?
- **Challenge:** The tendency to give answers or direct the children too much.
  Tip: Guide without directing
    - ➢ Ask deeper questions rather than offering solutions, e.g.: 'How can you work this out?' or 'What do you think this means?
    - ➢ Show that you are curious and don't know the answer, so that the children feel free to experiment.
- **Challenge:** Lack of inspiration or limited opportunities in the classroom.
  Tip: Use a variety of materials and resources
    - ➢ Provide a collection of open-ended materials (building blocks, recycled materials, natural materials) and simple tools (magnifying glasses, water bowls, measuring tapes).
    - ➢ Introduce new materials step by step to stimulate curiosity and avoid chaos.
- **Challenge:** Research takes longer than planned or children lose focus.
  Tip: Keep time and expectations realistic
    - ➢ Break the process down into smaller, manageable steps with clear time limits.
    - ➢ Allow time at the end of each session to reflect on what they have achieved and what the next step is.

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- **Challenge:** Some children may feel insecure about sharing their ideas or results.
  Tip: Creating a safe learning environment
  - ➢ Praise their efforts, regardless of the outcome, and emphasise that every contribution is valuable.
  - ➢ Let children share in small groups before presenting to the whole class.

Difficulty level tailoring

Teachers can tailor this learning activity to three difficulty levels to meet students' needs.

- **Beginner learners (6-7 years old)**: the emphasis is on asking simple questions and providing strong guidance from the teacher.
- **Advanced learners (8-9 years old):** they are given more freedom to investigate, collaborate in groups, and experiment with various materials.
- **Expert learners (9–10 years old):** they work more independently, formulate complex questions, and critically analyse their findings.

Throughout this progression, the teacher gradually reduces direct instruction, allowing for increased independence, reflection, and creativity. This approach ensures that open inquiry evolves alongside the child's development.

Debriefing and Reflection questions

1. Questions about the process of research
   - What was your research question, and why did you choose this question?
   - How did you decide how you would approach the research?
   - What worked well in your approach? - What did you encounter, and how did you solve it?
   - What would you do differently next time to make your research even better?
2. Questions about the results
   - What did you discover?
   - Was this what you expected? Why or why not?
   - How can you be sure your results are correct?
   - Can you explain your results to others? How would you do that?
   - What new questions have arisen from your research?
3. Questions to stimulate critical thinking
   - Why do you think your experiment worked this way?
   - What could be other ways to answer your question?
   - What did you learn that you can use in other situations?
   - How do your findings affect how you think about the topic?
   - What information or materials could have helped you better?
4. Questions on cooperation (if applicable)
   - How did you work together as a group?
   - What went well in the collaboration?
   - How did you resolve differences in ideas?
   - What can you do next time to improve cooperation?

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5. Questions to stimulate curiosity and motivation

   - What did you like best about the research? Why?
   - What new things would you still like to explore?
   - What did you learn about yourself during this investigation?
   - How can you link this research to something outside the classroom, for example at home or in nature?

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3.4.4 Smart Match

Brief description, and rules of the implementation of the learning activity

After a theory explanation, the students receive a worksheet. In the left column, there are various terms, and in the right column, the explanations of these terms. The explanations are not in the correct order (or next to the correct term).

Skill focus

Primary Skill Focus

- Critical thinking

Complementary/Secondary Skill Focus

- Problem-solving

Age group	Student number	Duration
6 -10 years old	Individual and whole class working in pairs or small groups	15-20 minutes

Proposed step by step implementation of the learning activity

How does it work:

The goal is for students to find the correct combination.

Indoor/Outdoor Classroom layout notes

Indoors: ensure that the (class-)room is quiet enough to allow focus and thoughtful discussion and explanations during research. The children also need to be able to write, so it is best if they sit at a desk.

How does this learning activity develop this particular skill?

- Analysing information: Students carefully read the descriptions and break down the meaning, which develops their ability to examine information in detail.
- Comparing and contrasting: By comparing different descriptions, students learn to identify similarities and differences, a key step in evaluating options critically.
- Making reasoned decisions: Students make deliberate choices based on evidence and reasoning rather than guessing, which strengthens judgment and reflective thinking.
- Evaluating alternatives: They consider why some descriptions do not fit, which trains them to question assumptions and think logically about cause and effect.

What do we want to achieve regarding primary skill development (student understanding and/or behaviour)?

Critical thinking:_Students are able to critically evaluate descriptions, make informed matches, and clearly explain their reasoning.

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Suggested use, and practical subject-related examples

Ideally, you also include one extra term without a description. Because there is one description missing, the students really have to think about which one does not fit and eliminate it.
Key tip: Choose terms that belong to the same general theme, but still contain enough variety and doubt, so that students must think about why something does or does not fit into a category – this triggers critical thinking.

Materials and tools needed for implementation

The worksheet

Guiding questions

Teacher's role: the teacher is coaching, inquisitive and supportive, encouraging thinking, explaining and rethinking

- Let students explain their choices (e.g., “Why do you think these belong together?”) encourages argumentation
- Exploring alternatives (e.g., “Could you have hesitated between two concepts?”) discussing doubts and alternatives
- Reflecting on how they arrived at their answer (e.g., “How did you decide?”) encourages reflection on their choices
- Questioning descriptions (e.g., “What makes you think this description doesn’t fit?”) promotes critical evaluation.

Tips and Tricks for dealing with challenges

- **Challenge**: Students may struggle to clearly explain why they matched certain terms with specific definitions.
  Tip: Encourage students to verbalise their thinking and justify each choice using simple reasoning sentences.
- **Challenge**: Students may match terms and definitions impulsively without reading carefully.
  Tip: Ask guiding questions that prompt them to reflect before choosing, such as “What keywords help you here?” or “Does this explanation really fit the term?”

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- **Challenge**: Students may find it difficult to correct or reconsider incorrect matches once made.
  Tip: Allow time for review and adjustment, encouraging them to re-check and compare alternatives instead of sticking with their first answer.
- **Challenge**: Students may feel overwhelmed by multiple terms and explanations at once.
  Tip: Break the task into smaller steps, for example by first eliminating clearly incorrect matches or working with a few terms at a time.
- **Challenge**: Students may rely too much on peers without engaging in their own thinking.
  Tip: Organise students in pairs or small groups where everyone must explain at least one match.
- **Challenge**: Students may see mistakes as failure instead of part of the learning process.
  Tip: Emphasise that errors are valuable opportunities to learn and improve understanding.

Difficulty level tailoring

When using Smart Match, as a working form with students aged 6 to 10, the teachers can easily differentiate at three levels: beginner, advanced and expert.

- **Beginner learners (6-7 years old):** Fewer terms and descriptions, with clearer hints or examples. Focus on one criterion per match (e.g., recognizing a single definition).
- **Advanced learners (8-9 years old):** More terms and descriptions, some overlapping or slightly confusing. Must identify connections independently and justify their choices. Extension: discuss in small groups and provide reasoning.
- **Expert learners (9–10 years old):** Complex or abstract descriptions with multiple possible interpretations. Must critically evaluate alternatives and support their decisions. Extra challenge: create new matches or counterexamples.

Debriefing and Reflection questions

- How did you decide which match was correct? What reasoning did you use?
- Were there any options that seemed correct at first but didn't fit? Why?
- What alternative solutions did you consider, and why did you reject them?
- How did your thinking change after reviewing or discussing the matches?
- What strategies helped you evaluate information more carefully

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3.4.5 True or False? You're not fooling me!

Brief description, and rules of the implementation of the learning activity

The teacher starts with a thought-provoking question on any topic, followed by a fictional answer and then the real scientific explanation. Students brainstorm possible answers, discuss their reasoning, and evaluate which explanation is more convincing. Through reflection, they learn to recognize the difference between plausible-sounding ideas and factual knowledge. For example, the topic could be animal features (*Why are flamingos pink?*), but the same approach can be applied to many other subjects.

Skill focus

Primary Skill Focus

- Critical thinking

Complementary/Secondary Skill Focus

- Creativity

Age group	Student number	Duration
6 -10 years old	Individual and whole class working in pairs or small groups	30-45 minutes

Proposed step by step implementation of the learning activity

Steps:

1. Present a thought-provoking question.
2. Let students brainstorm possible answers.
3. Provide the first explanation (fictional or scientific — students do not know which it is).
4. Ask whether this answer seems correct and why.
5. Provide the second explanation (the other perspective) and repeat the discussion.
6. Compare both explanations and reflect on which is more credible.
7. Emphasize the importance of critical evaluation; when repeating the activity, alternate which explanation comes first.

Indoor/Outdoor Classroom layout notes

This activity can be done in the classroom or outdoors. In class, students can read and discuss texts, while outdoors the questions can be linked to direct observations in nature or the environment.

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How does this learning activity develop this particular skill?

This activity develops critical thinking by asking students to evaluate the credibility of different explanations. They brainstorm their own ideas, then read two different answers without knowing which one is fictional and which one is scientific. By comparing and discussing both, students learn to question information, weigh arguments, and distinguish between plausible-sounding ideas and factual knowledge. These are aspects of critical thinking.

What do we want to achieve regarding primary skill development (student understanding and/or behaviour)?

Critical Thinking: Students learn to think critically by evaluating different explanations, identifying which arguments are more credible, and justifying their opinions. They become more aware of the difference between what sounds plausible and what is scientifically accurate. This helps them develop a questioning attitude and transfer these skills to other contexts, such as media or everyday information.

Suggested use, and practical subject-related examples

Examples of thought-provoking questions about animals:

- *Can penguins fly?*
- *Why are flamingos pink?*
- *Why does a pelican have such a large beak?*
- *Why does the panda have black spots?*
- *Why does the giraffe have such a long neck?*

Photos of the animals can be shown to support discussion.
The activity can be adapted to any topic where students can compare different explanations, fictional or factual.

Science:

- *Why do we see lightning before we hear thunder?*
- *Why does ice float on water?*
- *Why does metal feel colder than wood at the same temperature?*

Geography:

- *Why does it rain more in some countries than in others?*
- *Why are some mountains always covered in snow?*
- *Why do rivers usually flow towards the sea?*

Everyday life/technology:

- *Why do smartphones need to be charged every day?*
- *Why do mirrors show a reversed image?*
- *Why do airplanes leave white lines in the sky?*

Human body:

- *Why do we need to sleep every day?*
- *Why does our heart beat faster when we run?*
- *Why do we get goosebumps when we are cold?*

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Why do leaves change colour in autumn? (plants/nature)
Variant: Using a photo instead of text

- Show students a photo designed to provoke doubt or curiosity*: a swing placed in the middle of a road*.
- Teacher asks questions: *What do you see? Could this happen in real life? Why or why not?*
- Students brainstorm: *What seems off? What makes this suspicious?*
- Discuss in groups: *Could this be real or not?*
- Students provide arguments for and against the authenticity.
- Optional: vote – *Who thinks it is real? Who thinks it is not?*
- Reveal the truth: explain that the image was AI-generated.
- Reflect and discuss: *How can you recognize manipulated images? What can you learn from this? What does this teach us about how we interpret images?*
- *Can we still trust what we see?*

Materials and tools needed for implementation

The exact problem and the materials needed cannot be predicted in advance; students must identify the obstacle and, based on their proposed solution, determine and gather the materials required to address it.

Guiding questions

Questions during the brainstorming phase

- What do you think the answer could be?
- Why do you think that?
- Can you explain your reasoning?
- What other possibilities could there be?

Questions during the first (fictional) explanation

- Does this answer seem believable to you?
- What makes you think it is true or false?
- What evidence would support or contradict this explanation?
- Does this explanation make sense logically?

Questions during the second (scientific) explanation

- Does this answer seem more convincing than the first one? Why?
- What clues helped you determine which answer is more credible?
- How does this explanation compare with what you thought initially?

Tips and Tricks for dealing with challenges

- Challenge: Students may give immediate answers without following a structured reasoning process.
  Tip: Provide a thinking schema and guide students to work step by step (e.g., first predict, then compare explanations, then justify their choice before checking the correct answer).

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Statement	Do I think this is True or False?	Why do I think that?	What evidence do I have?
...	True / False	...	...

Difficulty level tailoring

When using smart match as a working form with students aged 6 to 10, you can easily differentiate at three levels: beginner, advanced and expert.

- **Beginner learners (6-7 years old):** Students are given simple questions with two clearly different answers (one obviously fictional, one scientific). They discuss in pairs or small groups which answer seems more credible and why. Teacher guides the discussion closely, asking prompting questions.
- **Advanced learners (8-9 years old):** Use more complex or ambiguous problems that require independent thinking. Limit hints, so students must brainstorm multiple solutions themselves. Encourage reflection on why certain solutions may or may not work.
- **Expert learners (9–10 years old):** Students create their own thought-provoking question and write a fictional answer. The answer should relate to the animal's appearance. They must invent a logically plausible reason for the feature.

  Finally, students research the scientific (true) explanation themselves.

Debriefing and Reflection questions

Debriefing questions

- What strategies helped you decide which explanation was more credible?
- How can you apply this way of thinking to other subjects or everyday life?
- What helps you think critically?
- Did your opinion change? Why?
- Did you notice that something first seemed logical, but actually wasn't correct?
- Did anything surprise you during this activity? Why?
- How did your group discussion influence your opinion?
- What signs or clues help you recognize when information might be fictional or misleading?
- Do you feel more confident questioning what you read or see now?

Reflection questions

- What is the difference between a plausible-sounding idea and a factual explanation?
- How can you tell if information is reliable?
- How might you apply this way of thinking outside of school (e.g., in media, everyday life)?

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3.5 RESILIENCE

3.5.1 Fishing

Brief description, and rules of the implementation of the learning activity:

This learning activity focuses on developing the following four areas of resilience: future-oriented mindset and optimism; flexibility and problem solving; perseverance and self-control; emotional awareness, regulation, and communication; and supportive social relationships. It is a competition-based learning activity. During the challenge, children may experience failures, things may not work as they had planned, but even then, they must control their emotions and do everything they can to help their team win.

Skill focus

Primary Skill Focus

- Resilience

Complementary/Secondary Skill Focus

- Flexibility
- Problem-solving
- Emotional awareness, regulation, and communication

Age group	Student number	Duration
7+	groups of 4 to 6 students class size	10-15 minutes

Proposed step by step implementation of the learning activity

This is a skill-based and tactical learning activity. To perform the activity, students work in teams to catch fish (with fishing rods equipped with magnetic "hooks") containing various pieces of information. Each fish is associated with a piece of information or a task, which the participants try to work on in a way determined by the teacher in advance. After successfully completing the task, the activity can continue with new fish and tasks. The winner is the team that can complete the most tasks in the given time.
The activity is explained using a specific example:
For example, if we want to use it in a math lesson, we should split the class into teams of preferably equal number of students. Each team receives the same worksheet with the results of math operations (addition, multiplication). The math operations are written in both side of the "fishes" The task is for the teams to find all the math operations (addition, multiplication), that match the results on the worksheet.

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1. We throw the fish into the "lake" so that the operations on them are clearly visible. In the basic case, there must be as many operations as there are teams, and each result corresponds to exactly one correct operation. (Changing these conditions makes the activity more difficult.)
2. One player from each team fishes at a time, memorizes the math operation on the fish they catch, throws the fish back into the lake, and returns to their team.
3. The team members work together to match the math operation on the caught fish with one of the results on the worksheet.
4. Then another student can go to the lake to catch another fish.
5. The activity takes place for a fixed amount of time, and the team with the most correct math operation matches wins.

Indoor/Outdoor Classroom layout notes

The activity can be carried out both outdoors and indoors. In the classroom, a symbolic “pond” made of blue fabric is needed as the playing area, along with one table per team placed at least five meters away from the pond.
Outdoors, a real water environment can be created, for example, a small pond or a children’s inflatable pool filled with water.

How does this learning activity develop this particular skill?

This activity develops students' resilience by:

- encouraging adaptation, immediate problem solving, and decision making (for example, the student's plan is to find an operation for 28, but the right fish is on the other side of the lake, while the one fish for 35 is very close and can be fished out easily and quickly, so they have to decide immediately which one to choose)
- developing the ability to cope with failure at both the individual and group levels (individual failure may occur, for example, if the student does not fish quickly and skilfully, or catches a fish that already has the been matched, or forgets the operation by the time they return to their team group failure may occur if the task is not completed within the given time or if there are incorrect pairings on the worksheet)
- develops self-control, perseverance, emotion regulation, and communication, because students must continue the activity even when they feel they are going to lose or fail
- strengthens social coping and social support, because in case of failure (either individual or group), students can only achieve success if they support and help each other emotionally
- develops the ability to find alternative solutions to achieve success - open mindset - (for example, during a higher difficult level, the group has an opportunity to change the order of the fishing students according to who is good at what - memory, speed, etc.).

What do we want to achieve regarding primary skill development (student understanding and/or behaviour)?

As a result of this activity, students:

- understand that mistakes and failure are a natural part of learning and that they can learn from them,
- accept challenges and are more courageous when faced with new or difficult situations,
- become able to rethink and try again after failure,

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- become able to gain experience in self-control when facing difficulties,
- actively cooperate with their peers, supporting each other in solving common problems,
- understand that their peers who have failed/been in difficulty need emotional support.

Suggested use, and practical subject-related examples

The activity can be used in various subject lessons, leisure sessions, thematic weeks, or project days. It is easily adaptable according to the subject or the learning goals. For example:

- In math lessons, the fish are marked with numbers, and students can use them to practice addition, subtraction, or multiplication.
- In language lessons, the fish contain letters or words, which students use to solve word formation or sentence construction tasks.
- In science lessons, the fish display pictures or names of animals, plants, or natural phenomena, and students answer related questions or complete tasks.

Materials and tools needed for implementation

- A large blue fabric symbolizing the lake where the fish swim
- Laminated paper fish (with numbers on their bodies and paper clips attached at their mouths)
- One magnetic fishing rod per team (made from a mop handle or stick, with a string hanging down and a strong magnet attached to the end)
- If playing outdoors, a small inflatable kiddie pool filled with water can be used, and the fish can be made from wooden boards, so they float on the water surface
- Dice (e.g., made of foam and larger than usual), two per team – if needed

Guiding questions

- What can we do if we don't succeed in solving a task the first time?
- How can you change your original ideas if the original ones don't work?
- How can you help each other in the team if someone gets stuck?
- How do you feel when you are faced with a difficulty, and how can you cope with it?
- How can you recognize when someone on the team needs emotional support during the activity?
- Why is it important to persevere and try again, even if we don't succeed at first?
- How can you work together so that everyone's voice is equally heard?
- What else would you like to try next time?

Tips and Tricks for dealing with challenges

- **Challenge:** Difficulty in developing an effective strategy.
  Tip: Give teams time to plan and discuss possible solutions, which strengthens creative thinking and cooperation.
- **Challenge:** The original tactic does not lead to success.
  Tip: Allow students to redesign their strategy and adapt to changing conditions.

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- **Challenge:** Conflict or disagreement within the team.
  Tip: Guide students toward finding solutions, supporting communication and problem-solving skills development.
- **Challenge:** Observing fair play rules and helping each other.
  Tip: Emphasize fair play and encourage teams to adopt a helpful attitude and cooperate.

Difficulty level tailoring

General tips for tailoring

- Changing the complexity of tasks: Choose simpler or more complex tasks tailored to the age and knowledge level of the students (e.g., using easier numbers or shorter words).
- Modifying the time frame: You can allow more or less time for the tasks to be completed, depending on the children's attention skills.
- Amount and quality of support: Initially, provide more help (e.g., guidance, examples), then gradually reduce it so that students become more independent.
- Simplify or complicate the rules: It is possible to apply more or fewer rules, or to introduce new challenges (e.g., there are many more identical fish than the number of team members; there are fewer fish with the same math operation on it than the number of teams; there is a math operation on only one side of the fish that is not visible when they are in the lake; there is a math operation for which there is no answer on the worksheet).
- Changing the number of the team members

Beginners (6-7 years old): – Learners with low resilience

The aim of the activity: to help children safely participate in teamwork, practice emotional control, persist in trying, and experience that failures can be managed.

- Tasks are simple, with few fish and limited information, and the rules are clear.
- The teacher supports participation, demonstrates how the activity works, encourages the children, and provides examples of how to apply simple strategies.
- Children experience individual failure (e.g., catching the wrong fish) and team failure (e.g., the team does not complete the plan), with the teacher giving encouraging feedback to support further attempts.
- The activity helps children practice cooperation within the team, manage their emotions, and understand that failure does not reduce their willingness to participate.

Advanced learners (8-9 years old): – Learners with moderate resilience

The aim of the activity: to develop effective team participation, strategic thinking, perseverance, flexible problem-solving, and constructive handling of failures.

- Tasks are moderately complex, with more fish and information, requiring children to work together according to a strategy.
- Children actively participate in developing the team strategy and carrying out the tasks.
- The teacher supports with encouraging questions, e.g., “What could be the next step?” or “How can you work together more effectively?”
- The activity helps children contribute ideas independently, pay attention to their teammates, manage individual and team failures, and think optimistically and future oriented.

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Experts (9–10 years old): – Learners with high resilience

The aim of the activity: to develop conscious strategic thinking, advanced problem-solving, perseverance, self-control, and active, responsible team participation.

- Tasks are complex, with multiple fish and information, and potentially more complicated rules, requiring the team's flexibility and strategic planning.
- Children work fully collaboratively with their team, taking responsibility for the strategy, task completion, and handling team failures.
- The teacher provides support only, if necessary, with emphasis on process awareness and reflection ("It's valuable how you planned and executed the task together, even if not everything worked perfectly at first").
- The activity strengthens perseverance, self-control, problem-solving skills, strategic thinking, and supportive teamwork, while teaching that managing failures is an essential part of success.

Debriefing and Reflection questions

- What worked well in your team?
- How were you able to cooperate?
- What did you experience or learn about yourselves during the activity?
- Did anyone feel that they are now better at adapting to new challenges and changes?
- How could you help teammates who find it harder to overcome obstacles?
- What would you change next time? (rules, behaviour, attitude)
- What was the most difficult part of the activity, and how did you manage to deal with it?
- What new ideas did you try when you faced difficulties?
- How did you feel when your team successfully completed a task?
- Was there a moment when you had to change your team strategy? How did you decide to do this?
- How can you use this perseverance and adaptability in other situations?

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3.5.2 Sadness Eater

Brief description, and rules of the implementation of the learning activity

The Sadness Eater is a decorated box that “swallows” or “devours” problems and worries.

Children write down their troubles (whether real or perceived grievances) on a piece of paper and anonymously place it into the mouth of the Sadness Eater, thereby helping to reduce emotional burdens.

The Sadness Eater is emptied at regular intervals, during which the group attempts to find solutions to the written problems. It is recommended to do this either at the end of each school day or on the last day of the week. This activity is not subject-specific and is designed to support group cohesion.

Skill focus

Primary Skill Focus

- Resilience

Complementary/Secondary Skill Focus

- Emotional awareness (emotional regulation and communication)
- Empathy
- Flexibility
- Connectedness

Age group	Student number	Duration
9 + years old	class size	variable

Proposed step by step implementation of the learning activity

1. A non-decorated box (the Sadness Eater) is introduced to the group before its first use, with an explanation of its purpose and function. It is then decorated together with the children.
2. In the case of regular use:
3. Children are invited to write down their worries, concerns, or perceived problems on a piece of paper.
4. The written notes are placed into the Sadness Eater through its opening, symbolically representing the act of releasing emotional burdens.
5. At predetermined intervals, the Sadness Eater is opened, and the collected notes are read aloud to the group.
6. The teacher reads the notes anonymously and asks the children to try to imagine how the owner of each worry might feel (emotion cards can be used to support this process).
7. A few children are invited to share what they thought or felt during this activity.

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8. After empathizing with the anonymous owner of the worries, the children discuss the identified problems and, where appropriate, jointly explore possible solutions or coping strategies.
9. The activity is repeated regularly, either at the end of each school day or on a weekly basis, depending on the needs of the group.
10. If the teacher considers a worry to be serious, an individual meeting with the concerned student can take place at the end of the activity.

Indoor/Outdoor Classroom layout notes

- The collection and processing of information can take place either indoors or outdoors.
- The Sadness Eater box is located in the classroom.
- The activity does not require any rearrangement of the classroom.

How does this learning activity develop this particular skill?

This activity develops students' resilience by:

- supporting the recognition and expression of emotions,
- providing a safe and anonymous way to express tensions and grievances,
- offering relief through writing down and releasing problems,
- creating regular opportunities for emotional release - emotional regulation and communication; self-control
- strengthen the children's belief that they are not alone with their problems and that it is possible to ask for and receive help,
- encouraging community support and the development of empathy,
- promoting collective reflection and problem-solving, planning the alternative ways of recover from difficulties.
- contributes to the development of emotional security, self-confidence, self-belief, and optimism.

What do we want to achieve regarding primary skill development (student understanding and/or behaviour)?

As the result of completing this task, students will:

- be able to recognize and put into words their own emotions and difficulties,
- understand that problems do not have to be kept inside and can be shared, and help can be asked for and received
- recognise that they are not alone with their feelings and that others face similar situations,
- be able to gain experience in finding solutions to problems,
- be able to use of positive coping strategies,
- become more empathetic toward their peers' problems, thereby strengthening the sense of community.

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Suggested use, and practical subject-related examples

- The activity can be used at any time if necessary (e.g., in stressful school situations, in cases of emotional stress/conflict between groups or individuals) based on the teacher's decision, or in higher grades, based on the children's request.
- In addition, the notes placed in the box must be checked regularly (e.g., weekly).
- In the event of a specific problem, when a child turns directly to the teacher for help, the child should be asked during the discussion whether they want us to use the Sadness Eater box.

Materials and tools needed for implementation

Paper, a collaboratively decorated box, and writing tools.
The box should resemble a funny monster that can “devour” worries. It should have a slot where papers can be inserted, and a lid or opening that can be unlocked by the teacher to remove the papers.

Guiding questions

- How did it feel to write down what was bothering you?
- Do you think others might feel the same way?
- What can be done in situations like this?
- Who could you talk to if something similar happened to you?
- What advice would you give to someone who wrote the same thing in the Sadness Eater?
- What do you think makes a situation like this better?
- What has helped you before in similar situations?

Tips and Tricks for dealing with challenges

- **Challenge:** Children do not always fully understand the purpose of the Sadness Eater box.
  Tip: Before using it, it is important to clearly explain the goal of the activity, and if possible, involve the children in making the box so they feel more ownership of it.
- **Challenge:** Due to initial enthusiasm, small, everyday problems may also be placed in the box (e.g., “I’m upset with X.Y. because they ate at my desk”).
  Tip: It is acceptable for minor concerns to appear at first; over time, children will learn what truly belongs in the Sadness Eater.
- **Challenge:** The Sadness Eater only works well in groups where there are sufficient trust and familiarity among the children.
  Tip: It is recommended to use it only with groups that are well known and where time is dedicated to building trust.
- **Challenge:** Placing the box can be challenging if it is not put in a suitable location.
  Tip: Choose a place where children can easily access it, but the teacher can also monitor it to prevent unauthorized opening.
- **Challenge:** Some problems may be too serious for the teacher to handle alone.
  Tip: It is important to have a clear protocol in place for when and how to involve professional support.

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Difficulty level tailoring

The activity can be adapted flexibly according to the age, maturity, and emotional security of the student group. For younger or less verbal children, expressing the problem through drawing or a single word may be sufficient, while students with more developed emotional expression skills can articulate their feelings and thoughts in greater detail.

The teacher can also decide whether the discussion of problems happens openly or rather in a feedback-supportive manner—for example, by formulating general suggestions for solutions. The guiding questions and the way of processing can be simplified or deepened according to the group's needs.

It is important that children feel safe and that no one feels forced to self-disclose—this is especially crucial for developing resilience.

Beginners (6-7 years old): – Learners with low resilience

The aim of the activity: to help children safely express their feelings, recognize simple worries, and reduce emotional tension.

- The teacher provides simple, concrete examples of what kinds of problems can be written in short sentences.
- Pre-prepared sheets with pictures can be used, which children only need to select or minimally complete.
- The teacher supports participation with encouraging feedback, without evaluating the content of the problems immediately.
- Children place the sheets anonymously into the Sadness Eater, and the problems are only addressed at the end of the designated period.
- The activity helps children recognize their emotions, reduces internal tension, and strengthens their sense of safety, which is a foundation for emotional resilience.

Advanced learners (8-9 years old): – Learners with moderate resilience

The aim of the activity: to practice independent emotion recognition and problem expression, and to strengthen safe participation in the group and problem-solving skills.

- Children write about their feelings and problems based on their own experiences, with the teacher offering encouraging questions only when needed ("What made today difficult?").
- Sheets are placed independently into the Sadness Eater, learning that there is a safe place for their emotions.
- The teacher gives feedback supporting participation and the process ("It's good that you shared what's on your mind.").
- Processing occurs at the end of the period, when the group can reflect together on the problems and possible solutions.
- The activity helps children independently recognize their emotions, practice emotional self-regulation, and develop a flexible, constructive approach to problems.

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Experts (9–10 years old): – Learners with high resilience

The aim of the activity: to develop conscious emotional awareness, independent problem recognition, social support skills, and constructive problem-solving.

- Children can write about more complex or longer-term problems and reflect on possible solutions.
- Sheets are placed completely independently into the Sadness Eater, and if needed, children can support their peers in participating and expressing themselves.
- The teacher provides feedback that highlights awareness of participation and supports the process ("It's valuable that you pay attention to your feelings and share them with others.").
- Processing occurs at the end of the period, when the group explores solutions and reflects on the experiences.
- The activity develops children's conscious self-regulation, emotional awareness, problem-solving skills, and strengthens their capacity to provide social support.

Debriefing and Reflection questions

- How did you find this activity?
- What was the easiest part? What was the hardest part?
- How did it feel to hear others' thoughts?
- Did you learn anything new about yourself or others?
- How did your mood change by the end of the activity?
- What will you take away from this session?
- What would you do differently next time?
- Did the person who wrote the problem receive helpful advice?

Once the children are familiar with and regularly use the tool, the following questions can be asked:

- Has anyone followed the advice given? Were they able to solve the problem?
- Have you been able to help someone else with an issue you previously needed help with?

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3.5.3 Say and show

Brief description, and rules of the implementation of the learning activity

Say and Show is a growth mindset development activity. In this activity, children learn how to give authentic and credible (expressed through words and body language – said and shown) positive and supportive feedback on their peers' work (e.g., drawings, math problems, reading out loud, etc.) that praises the effort and process and suggests strategies for improvement in case of mistakes.

The children work in pairs or small groups: they praise each other's work or suggest improvements. The teacher will role-model, teach, provide a framework, and guide the process, and at the end, a joint discussion will help with reflection.

Skill focus

Primary Skill Focus

- Resilience

Complementary/Secondary Skill Focus

- Emotional awareness, regulation, and communication
- Empathy
- Creativity
- Valuing people and nature

Age group	Student number	Duration
6 + years old	class size	5-10 minutes

Proposed step by step implementation of the learning activity

Initially - instruction:

The teacher teaches and practices the process. They make sure that everyone understands the difference between praising the process and praising the person. They make it a habit to listen to and thank each other for feedback.

The teacher will role-model, teach, provide a framework, and guide the process,

A brief discussion about what it means to praise well and how to phrase it appropriately if something needs to be improved.

The teacher (if necessary) gives two examples:

- positive praise,
- and supportive, constructive feedback.

At the end, a joint discussion will help with reflection.

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If the children already know what to do:

During the lesson, the teacher regularly gives the children the opportunity to evaluate each other's work (drawings, answers, classwork at the end of the lesson, solving math problems, etc.). The teacher stops the lesson at a point where the children can give feedback.

1. The teacher stops the lesson and asks the children to give feedback. For example, the children receive each other's drawings, then:
    - first, they give positive feedback, praise
    - then they make a supportive comment (if necessary) in the manner they have learned, to help make improvements.
2. While giving feedback, the children also pay attention to ensuring that their body language—such as eye contact, friendly facial expressions, and open posture—supports and underpins what they are saying
3. Collectively, they briefly discuss how it felt to give and receive feedback, how they were able to support what they were saying with body language, and what they found easy or difficult about the process. (in the case of the non-experienced children it has to be done right after the feedback, in the case of the advanced children it could be at the end of the lesson)

Indoor/Outdoor Classroom layout notes

Can be done indoors or outdoors. Does not require any special room layout.

How does this learning activity develop this particular skill?

This learning activity is an important growth mindset development activity and provides a basis for children to think about their own and their peers' performance in an open and developable way. In the long term, this develops children's problem-solving skills, creativity, cognitive flexibility, and in total, their resilience, i.e., their ability to "bounce back" in the face of failure (academic or otherwise) and other difficulties. In the process, children regularly praise each other's work in terms of effort and process and offer suggestions for improvement. In the process, children regularly praise each other's work in terms of effort and process and offer suggestions for improvement. Praising their own and others' work and efforts develops a mindset (themselves and others) that they are capable of progressing, adapting, and successfully managing unexpected circumstances, setbacks, and difficulties. This learning activity helps children in a safe, guided way to:

- experience, learn, and practice evaluating and "praising" the efforts, specific work strategies ("process praise") and results of others and themselves, rather than praising their good qualities ("person praise");
- see the success in the work process and not in their personal qualities and skills.
- develop the awareness that they can directly influence their successes and failures through their own efforts, and that they are able to overcome problems in the case of failure;
- develop an understanding that failures arise from the process/activity and can be corrected
- experience that difficulties and failings are opportunities for development, and react flexibly to supportive criticism;
- develop their perseverance, cognitive flexibility, and resilience, and learn that challenges and failures are learning opportunities, not a personal failure.

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All of these contribute to the development of resilient individual characteristics: children will be able to cope with stress, conflicts, and changes in later life with greater confidence, balance, and flexibility.

What do we want to achieve regarding primary skill development (student understanding and/or behaviour)?

As a result of completing this task, students will:

- be able to evaluate their peers' work independently in a positive and stimulating way, emphasizing the process and effort;
- be able to formulate development/ bounce-back strategies for others and themselves (with the help of teachers if necessary) at their own level;
- be able to view their own failures as opportunities for development and accept constructive criticism flexibly;
- be able to give feedback in a way that's coherent with their words and body language;
- be able to listen to and accept others' opinions in an understanding way (active listening)
- be able to give supportive feedback, i.e., communicate in a supportive way about others' work
- be able to build supportive, collaborative relationships and accept support and help when needed.

Suggested use, and practical subject-related examples

The activity is widely applicable and can be easily adapted to different lessons.

Classroom applications:

- Visual culture: giving brief, specific praise for each other's drawings and making subtle suggestions.
- Language and literature: evaluating compositions, stories, or reading of short texts with a few positive comments and a suggestion for improvement.
- Techniques and design: quick feedback on finished projects (what went well, what could be improved).
- Environmental science: giving simple, supportive feedback after group posters or presentations.
- Math: brief evaluation of solutions ("it was a good idea to try it this way," "you could try something else").

Extracurricular/social applications

- In class community-building situations where the goal is to strengthen a positive atmosphere. For example: sitting in a circle, each child praises the person sitting next to them for a small thing ("I liked that you helped your classmate today").
- At the end of project work, to acknowledge each other's contributions. For example: groups briefly highlight one strength each ("You helped a lot with your ideas").
- In short daily routines, such as morning or evening circles. At the end of the day, one child praises a classmate in one sentence for something they noticed that day.
- Any other school or community achievement.

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Materials and tools needed for implementation

Student work (drawings, writings, creations, posters, or any other work or task that can be evaluated)
Optional: A board or shared space where the class can collect good examples of positive feedback (e.g., a "praise wall") – optional

Guiding questions

- What do you find most interesting or creative about your classmate's work?
- What do you do to do this task well? Can we say this in a way that helps your classmate improve?
- Do you think your partner did better this time than last time? How could we praise them for this?
- What did you notice about how your classmate worked? (e.g., they tried hard, tried a new solution, spent a lot of time on one detail)

Tips and Tricks for dealing with challenges

- **Challenge:** Children tend to give overly general praise ("it's pretty").
  Tip: The teacher should give examples of specific feedback or help them formulate it. "Tell me exactly what you liked! The colours? The shapes? The idea?"
- **Challenge:** A child makes overly critical, negative comments.
  Tip: It is worth helping to reframe the criticism in a supportive way: "What could you suggest while remaining kind?"
- **Challenge:** A debate arises about the feedback.
  Tip: It is the teacher's job to guide the conversation back to the rules: "Remember: one thing you liked and one thing that helps."
- **Challenge:** The group has difficulty keeping the conversation on track.
  Tip: It is advisable to agree on a time frame in advance: 1 minute for praise, 1 minute for suggestions, 1 minute for summary.
- **Challenge:** The body language of the speaking student is not consistent with what they are saying (for example, they praise but turn away or grimace).
  Tip: The other children can be involved: "What advice would you give to make body language more friendly?" A short brainstorming session can help.
- **Challenge:** The child praises the person ("you are very clever") rather than the performance.
  Tip: The teacher can gently guide the child: "Can you tell me exactly what went well? The colouring? The details?" This way, the child learns to focus on performance.
- **Challenge:** The child compares the performance to another child's during feedback.
  Tip: It is very important not to leave room for comparisons to others! Neither positive nor negative. Always measure performance against themselves and help the child giving praise to see the progress. E.g., multiplication was faster now than a few days ago. The learning was worth it!

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Difficulty level tailoring

- **Beginners (6-7 years old):** – Learners with low resilience: The goal of the activity: the children should feel safe giving feedback, practice giving positive praise and helpful suggestions. The teacher gives specific examples of how to praise or make suggestions about their peers' work. The children give short, simple feedback (for example, they highlight one thing they like or make a small suggestion), and the teacher continuously supports their efforts. Feedback is brief and positive, and the teacher helps with appropriate wording, and prompt guiding questions. If a classmate gives critical feedback, or if a child cannot find the right words to express praise, or if a classmate does not accept their suggestion, the teacher provides encouraging feedback. The teacher continuously provides role models and praises the students more than usual in an appropriate manner. In this way, a "culture of praise" and learning from mistake climate is developed in the class.
- **Advanced learners (8-9 years old):** – Learners with moderate resilience: The aim of the activity is to encourage independent ideas for coping strategies, practice constructive feedback, reinforce the feeling of playing an active role in success, and deal with failure in a resilient way. The children give feedback based on their own experiences and ideas, and the teacher only helps with encouraging questions when necessary ("What would you highlight in your partner's work?", "How could you say what else could be added?"). Feedback can be more detailed, covering several points, and children encourage each other. The teacher helps them reflect on their feelings and solutions ("How did you feel when your partner thought differently? What could help you to keep trying?"). The activity promotes the expression of children's independent ideas, listening to each other, flexible adaptation, and the safe practice of giving feedback.
- **Experts (9–10 years old):** – Learners with high resilience: The aim of the activity is to promote conscious cooperation, creative problem solving, independent practice of giving and receiving feedback, and independent planning of coping strategies. Children independently develop feedback for more complex works and, if necessary, help their peers in the process of coping strategies. Feedback may include praise, suggestions, and questions that encourage their peers to think („Why did you think that? How could the picture be even more colourful?"). Children experience individual failure and develop solutions consciously: if their feedback misses the mark, they try again in a different way, and if they receive negative feedback on their own work, they try to think through possible changes. The teacher only helps when necessary. They actively follow the process, but the focus is on reflection and reinforcement of the process ("It's valuable that you worked together and shared your opinions, even if not all suggestions were accepted immediately").

Debriefing and Reflection questions

- Why is it important for everyone to have the opportunity to express their opinion?
- How did you feel when your classmate praised your work?
- How did you feel when your classmate said something about your work that you didn't like? Was it easy or difficult for you to listen to that?
- What helped you respond to your partner's work in a supportive way?
- Why is it important to be open to feedback from others?
- What will you take away from what your partner said?
- How did you feel when you thanked them for their feedback?

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3.5.4 Group drawing

Brief description, and rules of the implementation of the learning activity

This activity focuses on developing another fundamental element of resilience: a future-oriented mindset and optimistic outlook. The basic task is for the children to work together to draw a much more positive "future situation" - which we call the dream position - compared to a "situation" defined by a teacher. The group members work together to create a single drawing in which each student's contribution is clearly represented. They co-create one unified piece of art.
This activity can be linked to any subject where visual expression is possible. It is only considered complete if done through cooperation, meaning that students must rely on each other within their group.

Skill focus

Primary Skill Focus

- Resilience

Complementary/Secondary Skill Focus

- Emotional awareness, regulation, and communication
- Problem solving
- Flexibility

Age group	Student number	Duration
7 + years old	groups of 2 to 6 students, class size	15-45 minutes (depending on the topic, paper size, and technique)

Proposed step by step implementation of the learning activity

1. The teacher provides the "starting situation", or the children choose one together. The current situation (starting point) can be anything: for example, we can use a scene from a fairytale where the characters get into trouble and ask the children to draw a positive outcome. Or we can recall a past (already resolved) situation when the children were at an emotional low point and draw the "dream position." The goal is that the children work together to create a rich (detailed) picture that represents a much better future state.
2. The group discusses how the drawing should look, who will take responsibility for each part, and how the different elements will be connected.
3. Each student works on their part according to the plan, making sure all sections come together as one single image.
4. At the end, the group looks at the finished piece together. Everyone shares how they contributed and how they felt during the activity.

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5. Ask the students to explain the different parts of the picture, i.e., why this situation is better. What do they think the characters did to get to this state? In this context, the teachers can raise the question of reality, what skills are needed for this, or who can be asked for help (supportive social relationship development).

Indoor/Outdoor Classroom layout notes

It can be carried out both indoors and outdoors, provided the conditions are suitable. A table or surface is needed where the drawing paper can be placed, and children can sit around it.

How does this learning activity develop this particular skill?

This activity helps develop students' resilience by:

- the activity essentially and primarily develops resilience by helping children to imagine and visualize a positive, optimistic future. Visualization through drawing is particularly important because it develops and reinforces the skill much more powerfully than "simple" storytelling.
- requiring children to consider each other's ideas, which supports the development of flexible thinking and acceptance,
- presenting situations where the drawing may not turn out as originally imagined, helping students learn to cope with disappointment and seek new solutions,
- involving shared planning and space management, which can lead to disagreements that must be resolved peacefully and collaboratively,
- encouraging children to carry the group task through even when they face difficulties, strengthening their perseverance,
- reinforcing children's self-confidence through active participation in the joint drawing and recognizing their own contributions – building the feeling of "I can cope and contribute."

What do we want to achieve regarding primary skill development (student understanding and/or behaviour)?

While creating a collaborative drawing of the "better future", students must agree on how to represent the chosen topic. They need to be able to explain why they think the situation is better, and what in the picture shows that the situation is better. Everyone needs access to the paper, which requires planning and organization. This process supports the development of important personality traits such as acceptance, patience, problem-solving thinking, responsibility, social skills, empathy, and a solution-focused mindset.

As a result of completing this task, students will:

- be able to develop a positive dreamed position and understand that the situation can always be better.
- are able to imagine and explain an optimistic future in detail, and to understand and imagine the logical steps needed (including the asking and receiving help and support) to achieve it.
- by experience the joy of success (the realistic achievement of the better, dreamed future), which reinforces their future-oriented and optimistic mindset.

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In addition

- be able to accept that their own idea may not always be the one implemented, yet they still play a valuable role in the shared work.
- become more flexible in adapting to group decisions and changing circumstances during the task.
- be able to emerge challenges or disagreements are approached through cooperation and calm communication.
- show perseverance in working toward the common goal, even when they experience frustration.
- Their self-confidence and positive self-image grow as their contributions to the final product are recognized and appreciated by others.

Suggested use, and practical subject-related examples

Creating a collaborative drawing should never be an end in itself – it should always serve a specific purpose, such as decorating the classroom, summarizing content, or supporting storytelling.
This method is well-suited for text-based activities. Students create a joint illustration of the story or passage and then use the drawing to support an oral presentation. If the drawing is successful, it often makes it easier for students to recall and retell the content of the reading.

Specific lesson related examples:

- Math: The initial story behind the exercise: the squirrel has lost the nuts it collected for the winter. The children work together to draw a "happy future" in which the forest animals help the squirrel; their task is to hide and count a specific number (e.g., 15) of nuts in the drawing.
- Reading and Writing: We pause at the sad part of a short animal story, and the group draws a happy ending. Since they are just learning to write, instead of a long text, they write only 1–2 simple words that describe the picture or a single sentence next to the drawing (e.g., “The cat is happy.”).
- Environmental Studies: The starting point is a very trash-filled, neglected playground or park forest (which the children can easily imagine). In the group drawing, they create a clean, rebuilt dream playground, where they must consciously include recycling bins and people helping one another.
- Grammar (Vocabulary): The children transform a stormy, scary picture into a cheerful, sunny, peaceful drawing. As a grammar exercise, they must collect and write down simple pairs of opposites (e.g., dark-light, sad-happy, stormy-calm) around the finished drawing.
- Language: The problem is a very basic situation: a puppy is hungry and cold. The group draws the ideal situation (the puppy eating in a warm little house) and names the basic elements in the drawing using the language they have learned (e.g., dog, house, happy, food).
- Music and Visual Arts: The teacher plays a slow, sad piece of music (representing the problem), then switches to a cheerful, upbeat tune, to which the children must paint the “happy future.” In the visual arts class, the task is supplemented by the requirement that they may only use warm, bright colours (yellow, orange, red) to express joy.

Materials and tools needed for implementation

Coloured pencils, markers, watercolour, tempera paint (with necessary accessories such as brushes), paper.

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Guiding questions

- Ask the students to explain the different parts of the picture, i.e., why this situation is better.
- You can also discuss what made the situation better (what needed to be done to achieve this). What do they think the characters did to get to this state?
- In this context, the teachers can raise the question of reality, what skills are needed for this, or who can be asked for help (supportive social relationship development).
- You can also ask them to enrich the picture by adding the positive emotions of the people in the picture (difficulty level). What do the children think the characters be happy (focus on the benefit of the new situation)
- The next guided questions support the development of both skills: resilience and flexibility. If children choose a topic freely (not the dreamed positive future), this activity is excellent for developing flexibility.
- Were you able to plan together what you wanted to create?
- Did you consider everyone's ideas? Were you able to make compromises when your opinions were different?
- How could you draw your idea in a way that fits well with the others' drawings?
- What happens if someone wants to draw in the same place as you? How can you talk about it and find a solution?
- How did you feel when someone suggested something different from what you wanted?
- How can you work together so that everyone feels good while creating?
- Was there a part you had to do differently from how you first planned? How did you manage that?

Tips and Tricks for dealing with challenges

During the activity, children are not given pre-assigned roles within the group (as in cooperative learning structures) unless necessary.
Creating a collaborative drawing should never be an end in itself – it should always serve a purpose, such as decorating the classroom, summarizing content, supporting storytelling or dramatization, etc. Make sure that you always make the children draw a positive future only. Older children (aged 14+) can already start thinking about what could make the situation worse and plan their protection in advance (flexibility – conscious preparation for change – development).

Common challenges and suggested strategies:

- **Challenge:** Several children want to draw in the same spot.
  Tip: Encourage finding a joint solution, such as merging ideas or sharing the space.
- **Challenge:** Some children become sidelined or do not engage in the activity.
  Tip: It can help to address them directly and offer a smaller, clearly defined role to get them involved.
- **Challenge:** Someone is unwilling to change their original idea.
  Tip: Reminding them of the shared goal and encouraging flexible thinking may support collaboration.
- **Challenge:** A disagreement or conflict arises.
  Tip: Support children in finding their own peaceful solution to the disagreement.

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Difficulty level tailoring

Teachers can tailor the group drawing activity to three difficulty levels to meet learners' needs.

- **Beginners (6-7 years old):** – Learners with low resilience: The aim of the activity: to help children safely participate in group art and practice future-oriented thinking. The starting story is simple and easy to understand, with few characters and a clear, easily grasped conflict. The teacher provides concrete examples of how the problematic starting situation can be transformed into a positive outcome, for instance briefly explaining how the characters could solve the problem or what positive ending could be drawn. Children work on smaller parts, focusing on simple tasks, while the teacher supports participation and guides the process. The teacher gives encouraging feedback, for example: "You did a great job on your part, which was a nice idea!" The activity helps children recognize that situations can be turned in a positive direction and provides a safe environment to practice cooperation.
- **Advanced learners (8-9 years old):** – Learners with moderate resilience: The aim of the activity: to develop independent idea generation, cooperation, and future-oriented thinking. The starting story is moderately complex, with more characters or minor complications, allowing for a more detailed positive outcome. Children actively participate in planning, discuss who will draw which part, and how the elements connect. They work independently on their own parts, while paying attention to other group members and supporting each other if needed. The teacher gives supportive feedback on participation and cooperation, for example: "Nice how you fit all the parts together." The activity helps children contribute ideas independently, pay attention to others, and envision the future optimistically, while experiencing the value of group work.
- **Experts (9–10 years old):** – Learners with high resilience: The aim of the activity: to develop conscious future-oriented thinking, creative problem-solving, and active, responsible participation in the group. The starting story is complex, with multiple characters and conflicts, possibly emotionally challenging, requiring children's creativity and problem-solving skills. Children create more detailed, complex, positive visions of the future and reflect on the skills needed to achieve the goals and who could help. They complete the drawing completely independently, yet cooperatively, with each group member supporting others' participation and the process. The teacher supports reflection, for example: "It's valuable how you planned and created the picture together." The activity strengthens children's creativity, independent future planning, problem-solving skills, and capacity for social support, while teaching that group work makes goals more realistic and achievable.

Debriefing and Reflection questions

- What was the biggest challenge for you during the group drawing? How did you manage to solve it?
- Was there a moment when you had to give something up? How did that feel, and what took its place?
- What helped you keep going even when something was difficult?
- What did you learn about yourself while working together?
- Why was it important to work as a team instead of drawing separately?
- What would you say to a friend if they had trouble with a task like this?
- If you could start over, what would you do differently? Why?

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3.5.5 Kindness Tree

Brief description, and rules of the implementation of the learning activity

The Kindness Tree is a creative activity for children that promotes kindness, connectedness, and self-control, and through these, resilience. The activity focuses on developing the three fundamental elements of resilience, such as developing and maintaining supportive social relationships, self-control, and emotional awareness, regulation, and communication.

Skill focus

Primary Skill Focus

- Resilience

Complementary/Secondary Skill Focus

- Emotional awareness, regulation, and communication
- Empathy
- Connectedness
- Valuing people and nature

Age group	Student number	Duration
6 + years old	class size	variable

Proposed step by step implementation of the learning activity

Each child adds paper "leaves," "flowers," or "fruits" to the tree, symbolizing their kind actions – such as helping others or sharing something. As the tree "grows," it serves as a visual reminder of positive behaviour and a supportive community. This helps children become emotionally more resilient and enables them to face challenges with empathy and care.

1. Prepare a large tree trunk and branches from paper or cardboard. Cut out leaves, flowers, or fruits from coloured paper.
2. Introduce the activity by starting a conversation about kindness. Explain that every kind action becomes a new leaf, flower, or fruit on the tree.
3. Children write or draw one kind action on each paper shape. (For example: "I helped someone carry their bag.")
4. Attach the completed shapes to the tree. The tree “grows” continuously as new acts of kindness are added.
5. Regularly revisit the tree: occasionally review the new leaves together and discuss how these actions affected others and what feelings they evoked.

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Indoor/Outdoor Classroom layout notes

It is primarily an indoor activity. The "tree" can be placed on one of the classroom walls, with branches within the students' reach. It does not require rearranging the classroom furniture. The activity can be carried out at any time, either as planned or ad hoc, when the teacher feels that social relationships need to be strengthened in order to improve the classroom climate.

How does this learning activity develop this particular skill?

Learning to be kind to others is an essential part of resilience. The Kindness Tree supports resilience by focusing on the following elements of the skill:

- Emotional awareness, regulation, and communication: As students reflect on their kind actions or receive recognition for them, they learn to process their emotions constructively, building greater self-awareness and emotional control.
- Building positive relationships: Children need to be open to maintain a supportive social network, which will be an important help for them in getting back up again from a crisis situation. As they share kind gestures — such as writing appreciation notes — students develop stronger bonds with classmates, creating a more connected and supportive classroom community.
- Boosting self-confidence and optimism: When students see that their kind actions are noticed and appreciated, they become more confident in their ability to have a positive impact. And vice versa: when they receive kindness, praise, and thanks publicly, they feel valued, which helps build their self-confidence and a sense of "I can do it." The feeling of "I can do it" is essential for setting goals from an emotional bottom-end point, and for believing that they can achieve them.
- Open communication: As students post their kind acts on the tree, they openly express their emotions and gratitude, both verbally and in writing. This exercise helps them develop clearer, more positive communication skills while creating a supportive classroom environment. To respond with resilience to serious challenges requires a combination of inner strengths combined with the ability to access outside resources. It is important that students learn and understand that they can get help from others, but only if they communicate their feelings.

What do we want to achieve regarding primary skill development (student understanding and/or behaviour)?

The goal of the Kindness Tree activity is to help students become more aware of the importance of kind and helpful behaviour, enabling them to recognize, practice, and appreciate it in themselves and others.

As a result of completing this task, students will:

- be able to identify and express acts of kindness;
- be able to initiate positive, prosocial behaviours more frequently (e.g., helping, cooperating, being considerate);
- recognise and understand that their actions have a positive impact on the whole community, which enhances their self-esteem and emotional stability.
- the classroom atmosphere improves, and feelings of trust and social support increase;

The development of student understanding and behaviour thus directly contributes to strengthening resilience - emotional adaptability and coping strategies.

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Suggested use, and practical subject-related examples

- As part of a morning circle or start-of-day discussion, when students reflect on the previous day and share a kind act.
- As a week-ending reflection, when students highlight the positive moments of the week.
- Connected to class events or holidays, such as Christmas or Easter, when attentiveness and empathy are emphasized themes.
- As a supplement to lessons focused on emotional education and social skills development.
- During special educational sessions (e.g., with the school psychologist, special education teacher, or during homeroom classes).

Materials and tools needed for implementation

Materials for the tree: large sheets of paper or cardboard for the trunk and branches; scissors; glue, tape, or magnets for attaching; bulletin board, folding screen, magnetic board, or a blank wall.

Paper shapes (leaves, flowers, fruits): coloured paper (pre-cut or made together with the children).

For writing and decorating: graphite and coloured pencils, markers; stickers and decorative elements (optional).

Guiding questions

- What did you do today to help someone or make them happy?
- How did it feel when you were kind to someone?
- Why is it important to pay attention to how we treat each other?
- Did you see something today that should be added to the Kindness Tree?
- How can someone be kind to others even when they are having a bad day?
- How is kindness different from simply being “polite”?

Tips and Tricks for dealing with challenges

- **Challenge:** Students may not know what counts as a kind act.
  Tip: Facilitate understanding through group brainstorming or discussing stories.
- **Challenge:** Some students find it difficult to express their thoughts.
  Tip: Allow them to illustrate their actions through drawings and offer help with wording if needed.
- **Challenge:** Students are not always honest in their entries.
  Tip: Emphasize genuine experiences and feelings rather than “expected” answers – creating a safe atmosphere is crucial.
- **Challenge:** Some students are reluctant to participate.
  Tip: Involve them based on feedback from other students (e.g., “I saw you help someone today – let’s add that to the tree.”).

Difficulty level tailoring

The activity can only be progressed in sequence; the difficulty level can be increased only after the previous one has been mastered. It is flexible how quickly the group advances to the next level, which depends on the group’s composition and social sensitivity.

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The activity can be adapted flexibly according to the age, maturity, and emotional security of the student group. For younger or less verbal children, expressing the problem through drawing or a single word may be sufficient, while students with more developed emotional expression skills can articulate their feelings and thoughts in greater detail.
The teacher can also decide whether the discussion of problems happens openly or rather in a feedback-supportive manner - for example, by formulating general suggestions for solutions. The guiding questions and the way of processing can be simplified or deepened according to the group's needs.
It is important that children feel safe and that no one feels forced to self-disclose - this is especially crucial for developing resilience.

- **Beginners (6-7 years old):** – Learners with low resilience: The aim of the activity: To increase the sense of safety and support children in noticing and sharing simple acts of kindness. At the beginning of the activity, the teacher provides clear, concrete examples of kindness that can be written on the leaves (e.g., "I helped tidy up."). Children can use pre-prepared leaves with pictures, which they only need to select or minimally complete. The teacher assists in formulating the acts and places the leaf together with the child, reducing uncertainty. Feedback should be highly supportive and immediate ("That was very kind of you!"). During group discussions, the teacher involves students with simple guiding questions ("Which leaf tells your story?"). It is sufficient for these children to participate less frequently or with fewer leaves.
- **Advanced learners (8-9 years old):** – Learners with moderate resilience: The aim of the activity: To strengthen recognition and expression of independent acts of kindness. Children write or draw the leaves based on their own experiences, with the teacher offering guidance only when necessary ("Did you help someone today?"). They place the leaves on the tree independently, which increases their sense of responsibility. Reflective, simple questions can be used during discussions, for example: "How might the person you helped have felt?" "Why did you choose to do this?" Teacher support can be gradually reduced so that children participate more confidently in the activity. These learners can contribute more regularly with new leaves.
- **Experts (9–10 years old):** – Learners with high resilience: The aim of the activity: To develop conscious, independent kindness and active participation in the social dynamics of the class. These learners can formulate more complex or longer-term acts of kindness (e.g., helping someone over several days). Creating and placing the leaves is done entirely independently, and they may also support others in the process. During group discussions, deeper, self-reflective questions can be used: "Why was this act of kindness important for others?" "How did you handle a difficult situation with kindness?" They can also help keep the Kindness Tree organized and continuously growing (e.g., arranging new leaves). Their contributions can be more frequent and intentional, enriching the positive atmosphere of the class.

Debriefing and Reflection questions

- Which letter or message did you like the most on the tree? Why?
- How has the mood in the class changed since we started using the Kindness Tree?
- What did you learn about yourself during this activity?
- What was the most difficult part of this task for you?
- What new thing did you notice in other people's behaviour?
- What will you take with you from this experience into the coming weeks?

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3.6 FLEXIBILITY

3.6.1 Challenge Cube

Brief description, and rules of the implementation of the learning activity

The “Challenge Cube” is a playful classroom activity that helps students try out new approaches when they get stuck on a task. Students roll a cube when they are unable to continue, and the challenge associated with the rolled number (e.g., “Try a different way!”, “Ask for help!”, “Draw it!”) supports them in finding a solution. The goal is to develop cognitive flexibility in a playful and engaging way.

Skill focus

Primary Skill Focus

- Flexibility

Complementary/Secondary Skill Focus

- Creativity
- Problem solving
- Curiosity, sense of wonder and openness

Age group	Student number	Duration
6 + years old	class size	variable

Proposed step by step implementation of the learning activity

1. Students work individually or in pairs to solve tasks related to the lesson content.
2. When the teacher signals, regardless of whether the student is on the right track or not in completing the task, they have to roll the Challenge Cube.
3. Based on the result, they apply another strategy and try the task again.
4. The teacher observes throughout the process but does not give direct answers; rather, they support independent problem-solving.
5. At the end of the lesson, a short discussion can take place: Which challenge helped you the most? How did it feel to try again?

Indoor/Outdoor Classroom layout notes

Primarily an indoor activity, desks or tables are needed for rolling the cube. No special classroom arrangement is required.

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How does this learning activity develop this particular skill?

This learning activity focus on two major elements of flexibility: understanding and handling new circumstances, and Growth mindset and shifting strategy what includes “openness to the change” As a result of this, the activity develops students’ flexibility by

- encouraging them to try alternative approaches when a solution does not work (e.g., different methods, visualization, asking for help),
- practicing the use of multiple thinking strategies so that students don’t get stuck in a single, habitual pathway,
- fostering openness to others’ ideas and solutions, for example, by accepting peer support or working together to find answers,
- introducing cognitive flexibility in a playful way, making adaptation and experimentation feel natural and enjoyable,
- reducing anxiety around making mistakes by shifting the focus from being error-free to exploring and testing possible solutions.

What do we want to achieve regarding primary skill development (student understanding and/or behaviour)?

As a result of completing this task, students will:

- be able to accept that a task can have multiple solutions and become willing to try new strategies,
- be able to do not rigidly stick to a single approach but shift their thinking more easily when their first attempt fails,
- be able to adapt flexibly to learning situations, for example, when task conditions change or new information emerges,
- become more open to different perspectives or ideas, whether from peers or the teacher,
- solve problems with greater confidence, as they experience that there is more than one path to a solution,
- become more patient and persistent in their learning, viewing failure not as an endpoint but as an opportunity to try again.

Suggested use, and practical subject-related examples

The Challenge Cube can be used in any lesson where students are solving tasks and may need to try a new approach when they get stuck.

- The student rolls the cube, and the challenge (e.g., “Draw it!”, “Try a different way!”, “Ask for help!”) supports flexible thinking and encourages persistence.
- It works well, for example,
  - in math lessons for solving text-based exercise,
  - in science or environmental studies for interpreting processes,
  - or in language lessons for reading comprehension or spelling practice.
- The activity teaches students in a playful way that problems can be approached in multiple ways, and that thinking can be flexible, creative, and diverse.

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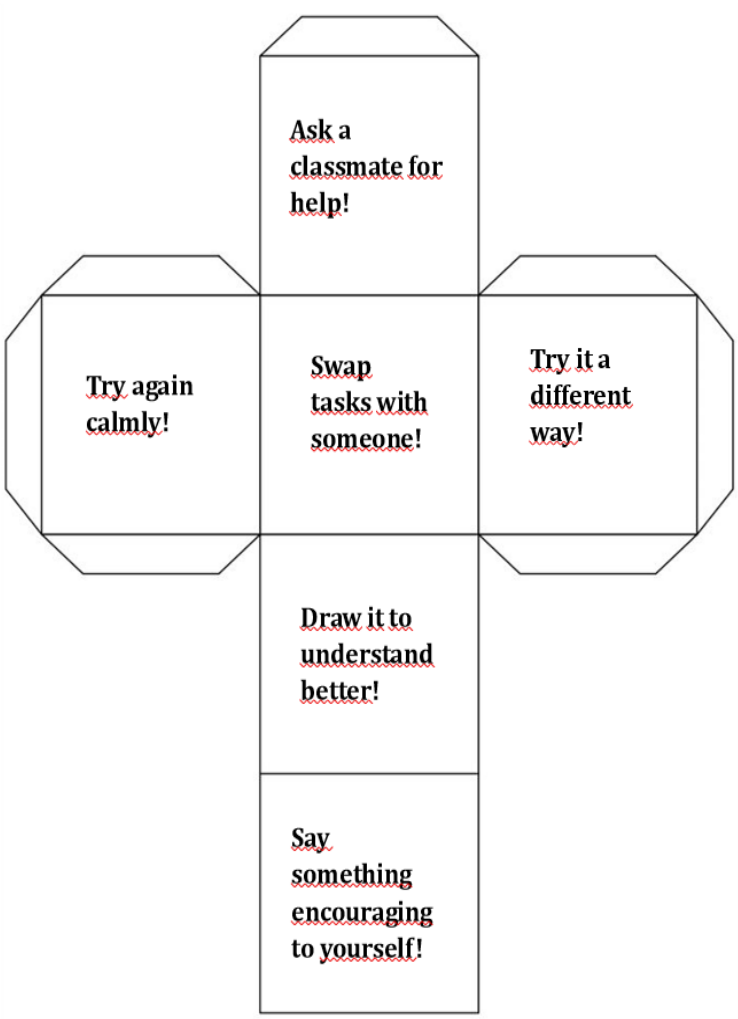
It is important that the texts on the dice can be changed according to the given situation/task. Dice rolling can be used not only in the context of a subject, but also in relation to a class/group situation (e.g., in the case of a given situation, conflict, or problem solving) to develop divergent and lateral thinking.

The following diagram provides an example of the type of "attitude-changing" instructions that we can give. Please note that this is only an example. Always adjust the instructions to the specific circumstances and task.



Materials and tools needed for implementation

- A die (traditional or paper-folded, possibly customized for a specific subject).
- A list of challenges associated with the die (displayed on the board, on cards, or written/stuck onto the die).
- Worksheets or practice exercises related to the subject being studied (e.g., math, science, etc.).
- (Optional) A worksheet or journal for students to record which challenges they tried and how these helped them.

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Guiding questions:

- What other way could you use to solve this task?
- What would you do differently if you tried again?
- How did it feel to change your problem-solving strategy?
- How does it feel to leave the familiar thought path/comfort zone?
- How can a peer or a new idea help you move forward?
- Why is it important not to give up if your first attempt doesn't succeed?

Tips and Tricks for dealing with challenges

- **Challenge:** The student doesn't understand the instruction on the die (e.g., "Try a different way!").
  Tip: It's helpful to go through each challenge together when introducing the activity and provide concrete examples for clarification.
- **Challenge:** The student feels disappointed when they don't succeed on the first try and find it hard to stay motivated to try again.
  Tip: Emphasize that the goal is not a perfect solution, but rather to explore different approaches.
- **Challenge:** Students often automatically choose the "ask for help" option.
  Tip: It's important to actively encourage the use of other challenges too, for example by prompting students to try independently first.
- **Challenge:** Fast-finishing students may become underchallenged if they complete the task too quickly.
  Tip: For these students, you can assign an extra challenge - solving the task using a different strategy - to further develop cognitive flexibility.

Difficulty level tailoring

The Challenge Cube activity can be flexibly adapted to students' levels of cognitive flexibility, age, and prior learning experience. Differentiation can be achieved by adjusting task complexity, the nature of the challenges on the cube, and the pedagogical role of rolling the cube in response to a teacher signal.

- **Beginners (6-7 years old):** – Learners with low flexibility: For students with low flexibility, particularly younger or less experienced learners, simpler and shorter tasks with clearly structured challenges are recommended. Rolling the cube after a teacher signal should be predictable and clearly announced in advance, emphasizing that changing strategies is valuable even when the student is progressing in the right direction. The labels on the cube can be adapted to students' abilities and the subject content, while the teacher provides active support in interpreting and applying the challenges. At this level, the activity is best implemented in individual or pair work.
- **Advanced learners (8-9 years old):** – Learners with moderate flexibility: At the level of moderate flexibility, more complex, multi-step tasks can be introduced. Rolling the cube in response to a teacher signal serves to practice consciously interrupting an already functioning solution process and trying an alternative strategy. The cube's labels may vary by subject or task type. In pair or group work, students work on a shared task while experimenting with different problem-solving strategies and sharing the effects of these strategies with one another, thereby deepening the development of cognitive flexibility.

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- **Experts (9–10 years old):** – Learners with high flexibility: Students with high flexibility can engage with complex, multi-step problems in individual or group settings. Rolling the cube after a teacher signal is used to deliberately reorganize thinking, even when the solution process is progressing successfully. In group work, students intentionally apply different strategies to the same problem, then compare their effectiveness and reflect on how strategy switching contributed to understanding and problem-solving.

Debriefing and Reflection questions

- Which challenge was the most difficult, and why?
- What new solutions did you try that hadn't occurred to you before?
- How did your thinking change during the activity?
- How did you feel when you had to change your problem-solving strategy?
- How can you apply what you've learned in other situations?

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3.6.2 Abracadabra – Object Magic

Brief description, and rules of the implementation of the learning activity

During the activity, children use their imagination and creativity to transform an everyday object (e.g., a pencil) into something completely new and different. After saying the magic words ("Abracadabra, this pencil is no longer a pencil, but a..."), they present it as a new object and demonstrate how it can be used and how it works. In doing so, they try to convince the other pupils to see the object in the same new way.

This process especially focuses on situations where another pupil does not yet see the new idea. The aim is to help that pupil shift their perspective, showing that they can flexibly adjust their thinking and adopt a new way of seeing the object.

Skill focus

Primary Skill Focus

- Flexibility

Complementary/Secondary Skill Focus

- Creativity
- Curiosity, sense of wonder and openness

Age group	Student number	Duration
6 + years old	whole class	15 minutes

Proposed step by step implementation of the learning activity

1. **Circle setup:** The children sit in a circle, and the teacher joins the circle as well.
2. **Introduction of the object:** The teacher presents a simple object (for example, a pencil) and says: "Abracadabra, this pencil is no longer a pencil, but a..."
3. **Transforming the object:** A randomly chosen student finishes the sentence and presents the object as something completely new (e.g., "a sword") and acts out how it could be used.
4. **Passing the object:** The student then passes the object to another randomly chosen child, who again says the magic words, names a new transformation, and acts out its function.
5. **Flexible thinking phase:** If a child does not yet see a new idea or cannot think of one, they may pass their turn.
   - The teacher gently invites them to stay open and flexible, encouraging them to join later when a new idea starts to form.
   - The goal of this moment is to help pupils shift their perspective: by watching other children's ideas, they gradually learn to adapt their thinking and become more flexible in imagining new possibilities.
   - Often, another child's creative transformation sparks the imagination of those who initially

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struggled.

6. **Supportive guidance:** The teacher encourages participation without pressure, making sure pupils feel safe to explore, experiment, and return to the activity when ready.
7. **Ending the activity:** The activity continues until the teacher decides to end it (ideally within 10 minutes). To close, the teacher "transforms" the object back by saying: "Abracadabra, this pencil is a pencil again."

It is worth using more than one object at the same time to encourage those children who have no ideas for the first object to engage in creative thinking.

Indoor/Outdoor Classroom layout notes

The students sit in a circle (optionally with a small table in the centre of the classroom).
It can also be done outdoors/in nature, in which case objects found in nature can be used. Or vice versa: objects can be searched for in nature in order to perform a given activity.

How does this learning activity develop this particular skill?

This activity develops students' cognitive and emotional flexibility by:

- develops divergent and lateral thinking, which helps children find a variety of original solutions to a situation and enables them to discover new, unexpected logical connections and apply unconventional approaches.
- it helps develop flexible/creative thinking, enabling them to cope effectively with unpredictable situations.
- repeatedly requiring them to reinterpret a familiar object, giving it new roles and meanings, which activates cognitive flexibility;
- helps them to move away from their routine functions and be open to unusual ideas;
- allowing them to pass and return to the game later, helping them realize that their thinking can change and evolve;
- teaching them to accept and use others' ideas as inspiration, thereby improving their adaptability and cooperation skills;
- encourages multi-sensory thinking and creative connections
- a safe and playful environment provides a secure framework for self-exploration and free change of perspective, which is the key to flexibility.

What do we want to achieve regarding primary skill development (student understanding and/or behaviour)?

The aim of this activity is to help children think flexibly and quickly shift perspectives in a given situation. As a result of completing this task, students will:

- be able to detach from the concrete form and typical use of an object, thereby developing their associative abilities,
- become more open to unusual or initially "strange" ideas,
- be able to avoid rigidly clinging to their first thought and instead seek alternatives,
- understand that there is no single best solution;
- be able to accept that the same thing can be seen and understand in many different ways;

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- be able to gain confidence in their ability to see things creatively and in many different ways;
- be aware that their thinking can change over time (for example, if they initially pass but later decide to participate),
- become more confident in presenting their own ideas in front of the group, thereby inspiring others.

At the behavioural level, the goal is for children to be less afraid of making mistakes, dare to be creative, listen openly to their peers' ideas, and adapt to the evolving group situation.

Suggested use, and practical subject-related examples

This activity can be integrated into the learning environment anytime when we want to warm up and stimulate the children's thinking. It is especially useful in the following situations:

- during lessons aimed at developing creative thinking (e.g., literature, drama, visual arts);
- developing vocabulary during language lessons
- using a piece of artwork as a starting point during the art lessons
- during the science lesson in nature - find an object that is suitable for making music.
- for social and group dynamic purposes, when we want to strengthen acceptance and openness within the community.

At first, the activity may take longer because children are still getting familiar with the situation and role-play style thinking. However, experience shows that as they gain practice, their participation becomes smoother and more natural.

Materials and tools needed for implementation

An everyday object, for example: a pencil, stick, hoop, or hat.

Guiding questions

- What else could you imagine this object to be?
- If you continued another child's idea, what would you transform the object into?
- Could you use it in a completely different way than you showed just now?
- Imagine you are in another world. What could this object be there?
- What if this object suddenly came to life? What would it do?
- What if this object had magical powers? How would you use it?

Tips and Tricks for dealing with challenges

- **Challenge:** The child freezes up, feels anxious, and can't think of anything when they receive the object.
  Tip: Allow them to pass it on without putting pressure on them. Introduce the phrase "I'm still thinking." When the circle has gone all the way around, the teacher should return to the child in a friendly manner. We can also help with a physical prompt: *"If you were to put it on your head, what could it be?"* or *"If it were very heavy, how would you lift it up?"*

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- **Challenge**: The children repeat the previous ideas (e.g., four children have already said that the pencil is a sword or a magic wand).
- **Tip**: Gently guide them toward flexible thinking. Introduce a magic rule: "What's already been said disappears in the magic hat!" If someone does repeat an idea, ask a narrowing question: "A super sword! And if this sword were to turn into something you could eat, what would it be?"
- **Challenge**: Over-excitement. The activity (e.g., shooting, slapping) becomes too intense; the children stand up, run around the room, or accidentally hit someone with the object.
- **Tip**: Set up a "magic stage" (a small carpet or a square marked off with tape) in the middle of the circle. Only the person who has the object can step onto it, and the presentation must remain within the stage. As a basic rule, establish: "The magic is broken immediately if you touch someone with the object."
- **Challenge**: The child can only imagine the pencil as a "writing tool" and the hat as "winter clothing"; they cannot break away from the original function (cognitive rigidity).
- **Tip**: Add more objects with completely different textures and shapes to the circle (e.g., a scarf, a sponge, or an empty paper roll) . Ask the child to close their eyes, feel the object, and describe how it feels (e.g., soft, round, cold). Focusing on the senses helps break away from the original, ingrained function.

Difficulty level tailoring

Teachers can tailor this learning activity to three difficulty levels to meet students' needs.

- **Beginners (6-7 years old):** – Learners with low flexibility: Use simple and familiar objects (e.g., a pencil, a hat) so children can easily come up with new ideas. Work in one large circle, allowing children to get inspiration from one another. Keep the task open and simple, without extra constraints.
- **Advanced learners (8-9 years old):** – Learners with moderate flexibility: Introduce more complex objects (e.g., a glove, a key) that require more imagination. Let children work in smaller groups to increase participation and interaction. Add a thematic constraint, such as "in the forest," "at school," or "in space," to increase the challenge.
- **Experts (9–10 years old):** – Learners with high flexibility: Allow children to bring their own object and provide time for exploration and brainstorming. Combine several challenges, such as a theme + movement requirement (e.g., "the object must be something that can fly in space"). Encourage pupils to develop their ideas further, for example in a short scene or duo presentation. Have groups reflect on each other's flexibility and creativity, explaining how they adapted their ideas.

Debriefing and Reflection questions

- What was the most memorable idea you heard? Why did you like it?
- How did it feel to take part in this activity?
- Were you surprised by anything you hadn't expected beforehand?
- How did your thinking change during or after the activity?
- What did you learn from others in this group?

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3.6.3 Secret instruction

Brief description, and rules of the implementation of the learning activity

Secret Instruction is an activity that develops children's cognitive flexibility, and it works as follows:

At the beginning of the lesson or session, each student (or some of the students, depending on their age and the time available) receives a small piece of paper with a two-sentence instruction written just for them, which does not fit into the normal routine of the lesson. One sentence contains a condition, the other an instruction. When the condition is met, the student must execute the instruction on the piece of paper (sing a funny song). Students must, of course, carry out their normal classroom activities, pay attention to the teacher, answer questions, work in groups, etc., but they must also execute the assigned task (written in her/his paper) at the appropriate time.

This is an attention-building activity in which each student receives a one-sentence instruction written just for them on a small piece of paper. During the lesson or session, while participating in the regular classroom activities, they must also keep this instruction in mind and carry it out at the appropriate time, according to the condition stated.

Skill focus

Primary Skill Focus

- Flexibility

Complementary/Secondary Skill Focus

- Emotional awareness (emotional regulation and communication)
- Curiosity, sense of wonder and openness
- Resilience

Age group	Student number	Duration
9 + years old	class size	variable (throughout a lesson)

Proposed step by step implementation of the learning activity

1. The appropriate number of instructions should be prepared in advance – each student receives one.
2. It is advisable to plan the instructions in a logical sequence so that one action triggers the next.
3. It is useful to record the planned sequence, but this should not be shared with the students.
4. Each selected student receives a separate, unnumbered instruction that begins with "if ..." and ends with "then ...," which only they know.
5. The activity starts upon a predetermined signal or event.
6. The signal triggers a chain reaction: students respond to each other’s actions.
7. The process should be monitored to detect any interruptions.
8. A group discussion at the end helps to process the experience and deepen learning.

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Indoor/Outdoor Classroom layout notes

Indoor activity does not require room rearrangement.

How does this learning activity develop this particular skill?

The Secret Instruction is an activity that develops children's cognitive flexibility and improves the brain's ability to be flexible by requiring the children to perform seemingly unrelated tasks and activities that do not fit into the normal daily classroom/lesson routine. Adapting to this apparent "chaos" (creating by Secret Instruction) helps the children adapt to changing rules, which is an important requirement for flexible behaviour.

Routines are very important for children of this age, and teachers pay special attention to this. However, over-dependence on routines makes it difficult to deal with unexpected changes. Instead of always following the same sequence, it is necessary to change a few things from time to time. So, the teachers need to create opportunities for flexible thinking, reward it with praise and positive feedback. It is important that teachers introduce regular collaborative thinking about alternative solutions to develop cognitive flexibility, and that they incorporate fun activities into their lessons to practice flexible thinking.

This activity develops students' flexibility by:

- They must adapt to unexpected situations while primarily carrying out their own classroom tasks,
- having to time and carry out their own task,
- fostering cognitive and emotional adaptability, since they do not know exactly when and how their turn will come,
- needing to stay open, react quickly, and manage uncertainty,
- learning to adjust their behaviour flexibly according to external circumstances, which forms the basis for adapting to unexpected situations.

What do we want to achieve regarding primary skill development (student understanding and/or behaviour)?

As a result of completing this task, students will:

- become capable of quickly adapting to unexpected or changing situations.
- be able more attentive to their peers and better adapt to group/class dynamics.
- be more confident in handling unknown or unexpected situations grows.

Suggested use, and practical subject-related examples

The Secret Instruction is great for use in the classroom in any lesson, developing students' cognitive flexibility and brain flexibility in a playful way. The teacher's creative planning is required to design actions that fit the lesson content, subject, and classroom environment. This approach also encourages students to think flexibly.

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An example for a class of 24 students:

1.	When the teacher claps three times and says 'start', take a white sheet of paper and, while standing, tear it into 4 pieces!
2.	If someone stands up and tears a white sheet of paper, go to the black magnetic board and move the sun magnet to the white magnetic board!
3.	If someone moves the sun magnet from the board, turn off the light!
4.	If someone turns off the light, say loudly: ‘Wow, it’s so dark!’.
5.	If someone says ‘Wow, it’s so dark!’, draw a sun on the digital board!
6.	If someone draws a sun on the digital board, wait 2 minutes and then draw a cloud next to it!
7.	If someone draws a cloud, say loudly: ‘Could it be a sheep cloud?!
8.	If someone mentions a sheep cloud, start singing: ‘Where have you been, little lamb…!’
9.	If someone starts singing about the little lamb, take the recorder from the shelf by the door and hand it to the teacher!
10.	If the teacher plays the recorder, take the thickest storybook from the shelf and sit on the small bench by the board!
11.	If a student sits on the small bench by the board, sit next to them and say, ‘I’m here too!’
12.	If someone says, ‘I’m here too!’, sit down next to them and say loudly, ‘I am the third!’.
13.	If someone says, ‘I am the third!’, stand up and say, ‘Three is the Hungarian truth!’
14.	If someone loudly says, ‘Three is the Hungarian truth!’, respond with: ‘No-no-no! And one is the extra!’
15.	If someone says, “No-no-no! And one is the extra!”, they should start loudly counting: “101, 102, 103.” (Do not continue counting!)
16.	If someone says “103,” ask the teacher, “Is it math class now?”
17.	If someone loudly asks the teacher, “Is it math class?”, then go to the board and write: “Class 4.c.”
18.	If someone writes “Class 4.c” on the board, then take a chair next to the big trash bin!
19.	If someone takes a chair next to the trash bin, then take the robot down from the top of the cupboard!

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20.	If someone takes the robot down from the top of the cupboard, then go there, ask for it, and put it on the green round table!
21.	If someone puts the robot on the green round table, then loudly ask, 'Did the sevens bring back the breakfast box?'.
22.	If someone asks whether the sevens took the breakfast box, then stand up on your chair and raise your red pencil high!
23.	When someone stands up on their chair and raises a red pencil, go to the window, open it, and say, 'Is it raining?'.
24.	If someone says, 'Is it raining?', then find an umbrella in the room and open it!

Materials and tools needed for implementation

Paper, pencil – possibly a computer (printer) for writing the pre-planned, chain-reaction style instructions. These are the tools that appear in the instructions.

Guiding questions

The key to the success of the whole class is that everyone carries out their individual tasks. Basically, you don't need to help the process because the task is simple. Cases where teacher support may be needed can be found in the Tips and Tricks section.

Tips and Tricks for dealing with challenges:

- **Challenge:** The process gets stuck because someone does not react or forgets what is on their paper.
  Tip: The teacher should know the activity order of the students so that they know who needs to "disrupt" the traditional classroom routine and when. The teacher can gently help non-verbally or restart the chain with their own actions.
- **Challenge:** The students remain in "flow" and are unable to return to the lesson activity.
  Tip: The teacher should monitor the students' activities and, if this is noticed, interrupt the "flow" process, for example with another learning activity technique: "Pause for Reflection" - This is a simple technique, asking the students to stop a bit, listen to the teacher and then (after waiting a bit!) ask students to review their notes and ask questions on what they've written so far.
- **Challenge:** Someone gets confused or blocked.
  Tip: It is important to avoid negative feedback. In this case, say that it's okay and give your paper to your peer.
- **Challenge:** The children don't want to stop the Secret Instructions task.
  Tip: Start a short discussion of the reflection questions.

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Difficulty level tailoring

Teachers can tailor this learning activity to three difficulty levels to meet students' needs.

- **Beginners (6-7 years old):** – Learners with low cognitive flexibility: Aim of the activity: to practise divided attention, acceptance of unexpected situations, and simple behaviour changes. The instructions should be short and clear (e.g. "If the teacher puts down the chalk, clap twice."). The chain should be short, involving 4–6 students, so that it remains easy for the children to follow. Events should occur at a slower pace, giving students enough time to observe and respond. The signals should be obvious and easy to notice (e.g. a loud word or a clearly visible movement). The teacher may gently support the process, for example by discussing the instruction with the child in advance or by guiding attention from the background ("Something just happened, watch what comes next!"). After completing the task, students should always receive positive, specific feedback (e.g. "You paid great attention and reacted very well to the signal!").
- **Advanced learners (8-9 years old):** – Learners with normal cognitive flexibility: Aim of the activity: to develop attention shifting, tracking parallel processes, and quick reactions. The instructions may be more complex and include multiple steps (e.g. "If someone laughs, stand up and say: That was funny!"). The chain can be longer, involving approximately 8–12 students. The signals are not always very noticeable, so students need to pay attention not only to the main classroom task but also to unexpected events. The pace can be gradually increased to support the development of divided attention and flexible responding. The teacher provides limited support and mainly guides reflection after the activity with questions such as "What helped you notice when it was your turn?" or "What was the most unexpected moment?"
- **Experts (9–10 years old):** – Learners with advanced cognitive flexibility: Aim of the activity: to develop self-regulation, rapid situation assessment, and adaptive behaviour in complex and unpredictable situations. The instructions may include absurd or multi-step elements (e.g. "If someone who is not your desk partner touches your desk, look to the side, say 'Wow!', and spin around once."). The chain can be long (involving the whole class) and may run on multiple threads, for example with two parallel chains or optional continuation paths. The signals can be more subtle or delayed, requiring students to respond flexibly. Feedback loops can be introduced (e.g. the process returns to a previous participant at some point), increasing the level of concentration. Instructions requiring cooperation may also be included (e.g. "If someone starts singing, clap three times and then ask your desk partner to continue."). The teacher acts mainly as an observer; students manage the chain reaction independently and then reflect together, for example: "What helped you stay calm when something unexpected happened?"

Debriefing and Reflection questions

- What happened when someone first stood up and "disturbed your concentration"?
- How were you able to pay attention to both tasks?
- How were you able to help yourself adapt to the new situation?
- Was it difficult to divide your attention between the lesson and the secret instructions?
- Did you wait for your turn?
- How did you deal with the uncertainty of not knowing what was going to happen?
- How were you able to return to your task?
- How did you feel during the lesson?

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3.6.4 Writing an encyclopaedia entry

Brief description, and rules of the implementation of the learning activity

This learning activity focuses on developing students' ability to adjust their thoughts, emotions, and personal attitudes toward a given topic to meet new demands or circumstances, while being able to adopt others' ideas in whole or in parts.
How we implement it:
Each group writes an entry (definition) for a given word. After reading the entries aloud, all teams vote on which definition they believe is the correct one.

Skill focus

Primary Skill Focus

- Flexibility

Complementary/Secondary Skill Focus

- Emotional awareness (emotional regulation and communication)
- Creativity
- Problem solving
- Critical thinking
- Curiosity, sense of wonder, and openness

Age group	Student number	Duration
7 + years old	groups of 3 to 6 students, whole class	20-40 minutes

Proposed step by step implementation of the learning activity

- Words selected from a dictionary. Each group writes an alternative entry that is identical in form and meaning to the word selected by the teacher.
- All completed entries, together with the official dictionary definition, are collected and mixed.
- Each group selects one sheet and reads the text on it.
- After reading, each group explains why the received entry can be accepted and which parts of it are agreed with, either in whole or in part. Learners are not required to accept definitions that are completely incorrect.
- The essence of the activity is that students must accept and justify their peers' opinions.

Indoor/Outdoor Classroom layout notes

Indoor activity, with children seated in groups around tables.

How does this learning activity develop this particular skill?

- This activity develops students' cognitive and emotional flexibility by:
- encouraging them to think about a word's meaning from multiple perspectives, without clinging to a single "correct" answer;

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- enabling creative adaptation when they formulate their own dictionary entry to convincingly resemble an authentic one—even if the information isn't entirely accurate;
- teaching them to accept different interpretations from others and learn from feedback, thus promoting emotional resilience;
- providing practice in quick situational awareness and adaptability while listening to and evaluating other groups' entries.

What do we want to achieve regarding primary skill development (student understanding and/or behaviour)?

The aim of this activity is to develop cognitive and communicative flexibility – that is, the ability of students to think flexibly, consider multiple perspectives, and remain open to different interpretations. By writing their own definitions for a given word and then listening to and analysing the entries of other groups, students learn that there can be multiple valid descriptions of the same concept.

As a result of completing this activity, students will:

- be able to adapt flexibly to new information,
- understand different ways of thinking,
- be able to be tolerant of others' viewpoints,
- be able to approach their own and others' solutions with critical thinking and openness.

This skill also enhances comprehension: students become more aware of the diversity of language and understand that meaning is not always fixed but can be subject to interpretation.

Suggested use, and practical subject-related examples

The explanation of the selected word must be believable and should appear professional. It should follow the style and structure of a dictionary entry.

- During the learning process, students are introduced to the skills of creating concise, focused texts.
- Analysing the definitions written by peers helps students recognize deviations from genre conventions and identify inaccurate or misleading information.

Materials and tools needed for implementation

Paper sheets, writing tools, specialized dictionary of foreign words and expressions in the target language can be used for this activity.

Guiding questions

- Could you imagine different definitions for this word?
- Why did you choose this particular wording? What other options did you consider?
- How do you think another age group or a specialist might interpret this word?
- What did you like about this definition, even if it's not the official one?
- Why might that team have thought the word could be described this way?
- Was there any version that gave you a new perspective on the meaning of the word?
- What would happen if this was the official dictionary entry? How would it affect understanding?
- What do you think is important to highlight when deciding which version is the most convincing?

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Tips and Tricks for dealing with challenges

- **Challenge:** Students find it difficult to let go of the "correct" answer.
  Tip: It's helpful to emphasize that the goal of the activity is not only to find the exact definition but to encourage flexible thinking, creativity, and understanding different perspectives.
- **Challenge:** Students have difficulty accepting solutions from other groups.
  Tip: It can be useful to ask each group to highlight at least one positive aspect from another group's text, which helps foster a more accepting attitude.
- **Challenge:** Some students struggle with participating in creative writing.
  Tip: Providing guiding questions can support their thinking process (e.g., "What does this thing do?", "When do we use it?", "What could it mean in another context?").
- **Challenge:** Texts can be recognized by their style.
  Tip: Encourage groups to phrase their definitions as "dictionary-like" as possible, so it's harder to identify the author.

Difficulty level tailoring

This activity develops students' flexibility in adjusting their thinking, emotions, and personal attitudes toward a given topic, while considering and adopting others' ideas in whole or in part. Teachers can tailor this learning activity to three difficulty levels to meet students' needs.

- **Beginners (6-7 years old):** – Learners with low flexibility: Students with low flexibility may struggle to accept alternative definitions or ideas from their peers. At this level: Groups should work on simple, concrete words or terms. The teacher provides structured guidance, modelling how to evaluate and discuss different entries. Teams are encouraged to identify parts of entries they can accept, even if they cannot accept the whole definition. The teacher may limit the number of alternative entries to reduce confusion and stress. Reflection and justification can be scaffolded with sentence starters (e.g., "I agree with this part because…").
- **Advanced learners (8-9 years old):** – Learners with moderate flexibility: Students with moderate flexibility can handle more complex words and multiple alternative entries. At this level: Groups work independently to create entries that are consistent in form and meaning. Students can compare several entries and discuss which parts they agree with. The teacher provides prompts to support justification but encourages students to make their own decisions. Peer discussion and explanation help students practice partial acceptance and thoughtful evaluation. Teams can explore why certain entries are more acceptable than others, strengthening reasoning skills.
- **Experts (9–10 years old):** – Learners with high flexibility: Students with high flexibility can work with abstract or challenging words and a larger number of alternative entries. At this level: Groups can independently write and evaluate entries, justifying acceptance of others' ideas in whole or in part. Students can reflect critically on subtle differences between entries and explain their reasoning to the class. The teacher's role is minimal, mainly facilitating discussion and ensuring respectful communication. Teams can debate and negotiate the acceptance of entries, further developing cognitive, emotional, and social flexibility.

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Debriefing and Reflection questions

- How easy or difficult was it to think differently from how a word is defined in a dictionary?
- What was it like to accept others' different formulations?
- Did your opinion about a particular word change during the game? How?
- How was your group able to cooperate in creating the dictionary entry?
- Was there a moment when differing opinions arose? How did you manage to reach a consensus?
- What made a dictionary entry convincing or credible?
- What language tools did you use when forming the definition?
- Where do you think you can apply this kind of thinking in the future?

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3.6.5 Flipbook

Brief description, and rules of the implementation of the learning activity

Students have to complete the task from the initial question to the final question by finding the correct answer before they can move on to the next question.

The tool for this activity is a book with one question/task and four answers on each page, including only one correct answer. The answers are written on four window-like panels (like an advent calendar book), which, when opened by the child, contain further instructions (if the answer is correct, there is another exercise; if the answer is not correct, there is supportive feedback and a guided question).
Explaining by an example:

- The first page contains the first task, which has four answers on separate, fold-up tabs.
- There are several types of feedback under the incorrect answers: No problem, try again! Don't stress, try to figure out the solution in a different way! You're very close to the right answer, use a resource! (For example, in a math lesson way - using sticks to find the solution!). It is important that the feedback for incorrect answers be positive and supportive, and that mistakes and errors are not a problem, because they are opportunities to learn, and help is available and can be requested.
- The correct answer can be followed by the following text: Congratulations, your solution is correct, turn to the next question; Well done! Turn to the next question!
- A flipbook consists of 4-8 exercises that are appropriate for the age of the children and the lesson.

Skill focus

Primary Skill Focus

- Flexibility

Complementary/Secondary Skill Focus

- Problem solving
- Critical thinking
- Emotional awareness, regulation and communication

Age group	Student number	Duration
7 + years old	whole classroom / individual work	4-8 minutes

Proposed step by step implementation of the learning activity

1. LA begins with the exercise on page 1. For example: I had 8 apples. I gave 3 apples to my friend. How many apples do I have left? The children work out the answer.

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2. There are 4 answers to the question, each on a flip-up tab, one of which is correct and the others are incorrect. For example, the possible answers for the previous task are
    a. I have 4 apples left.
    b. I have 5 apples left.
    c. I have 6 apples left.
    d. I have 7 apples left.
3. After opening the incorrect answer tab, students must work through the exercise again. They receive positive and supportive feedback for this
4. The correct answer tab displays the message "Well done!" Continue with the flipbook by answering exercise 2. Please turn the page. The next question is on the next page, where there are also four possible answers.
5. The activity continues until the children give the correct answer to the last question. Under the correct answer to the last question, the text Congratulations, you did very well! You solved all the tasks!

Indoor/Outdoor Classroom layout notes

It is an indoor activity, no classroom setup required.

How does this learning activity develop this particular skill?

This activity develops students' cognitive and behavioural flexibility by:

- helping students learn to view mistakes non-negatively and to experience that mistakes are part of learning, not failure,
- helping students to think flexible and change strategies when their first solution does not work,
- developing their flexibility in problem solving and thinking, as after incorrect answers they have to rethink the exercise and try a different approach,
- strengthens their emotional control, as positive and supportive feedback helps them stay motivated and deal with frustration during their attempts (the supportive feedback is essential part of this activity),
- it supports the development of a growth mindset, as students experience that they can learn from their mistakes and accept feedback as constructive criticism.
- develops their flexibility and decision-making skills when they have to choose from different response options and evaluate feedback,
- helps students deal with new, unexpected, or uncertain situations with more confidence, recognizing that they can find the right solution on their own.

What do we want to achieve regarding primary skill development (student understanding and/or behaviour)?

As a result of frequent use of the activity, students:

- be able to respond to their mistakes in a calm and conscious manner, and control their emotion,
- understand that flexible adaptation to varying tasks and expectations is important for success,
- understand that to achieve the correct answer, they need to rethink the task and try different approaches

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- be able to change their thinking and problem-solving strategies flexibly when their first attempt is unsuccessful,
- understand that mistakes are a natural and useful part of learning, not a failure, but an opportunity to rethink and improve.

Suggested use, and practical subject-related examples

The activity can be used in many types of lessons, including:

- In math lessons, for practicing simple text-based exercises, basic arithmetical operations, or problems requiring logical thinking.
- In language lessons, for vocabulary development, practicing spelling rules, or reinforcing grammatical recognition.
- In natural science or environmental studies lessons, to test understanding of concepts, relationships, and processes in a playful way.
- In learning methodology or development lessons, to develop attitudes towards mistakes, attention shifting, perseverance, and self-monitoring.

Materials and tools needed for implementation

A flipbook with one question or problem on each page with 3-4 answers options, one of which is correct and the rest are incorrect. Positive and supportive written feedback.

Guiding questions

- What would happen if you tried a different approach?
- Why do you think this wasn't the right answer? Where do you think you went wrong?
- Would you like me to help you rethink it? What can you do differently now?
- How can I help you rethink it?
- What tools could you use?
- What did you learn from this attempt that you can use for the next question?

Tips and Tricks for dealing with challenges

- **Challenge:** Students find it difficult to accept mistakes, which can lead to a loss of motivation.
  Tip: It is worth emphasizing that making mistakes is a natural part of the learning process and that persistent effort is the key to progress.
- **Challenge:** Students often rush and choose without thinking so that they can move on as quickly as possible
  Tip: It can be helpful to ask students to briefly explain their choices, as this promotes conscious thinking and reflective learning.
- **Challenge:** Students find it difficult to change strategies and tend to repeat the same solution.
  Tip: It is advisable to help them and give them tips on trying new approaches (e.g., drawing, using aids, changing the order).
- **Challenge:** Some students become uncertain and find it more difficult to try again if they have made a mistake before.
  Tip: It is important to reinforce that every new attempt is part of the learning process and that perseverance should be recognized, not just the correct solution.

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- **Challenge:** Students progress at different rates, which can cause tension within the group.
  Tip: The activity can also be used in a differentiated form, so that each student can work at their own pace and the teacher can provide personalized support.

Difficulty level tailoring

Teachers can tailor this learning activity to three difficulty levels to meet students' needs.

- **Beginners (6-7 years old):** – Learners with low flexibility: The aim of the activity: to reduce anxiety about making mistakes and to make retrying a positive experience. Tasks should be short, clear, explicit and contain limited information. The feedback under the answer tabs should be very supportive and specific (e.g., "Don't give up! Count the sticks again!", "Think it through step by step!"). It is also a good idea for the teacher to provide verbal reinforcement from time to time. After finding the correct answer, there can be a short discussion about what helped in solving the problem. The number of tasks can be reduced (e.g., 4 questions) so as not to cause excessive stress.
- **Advanced learners (8-9 years old):** – Learners with moderate flexibility: The aim of the activity: to develop strategy change and independent use of aids. The complexity of the tasks can be increased (e.g., they require multi-step thinking). Reflective questions can also be included under the incorrect answer tabs (e.g., "What would happen if you tried something different?", "Would a drawing or calculation help?"). The teacher can gradually withdraw from providing support so that the student can discover the solutions on their own. Feedback should remain positive but encourage independent thinking. The flipbook can consist of 6-8 exercises, and at the end it is worth asking for a short self-reflection: "Which exercise required you to think differently?"
- **Experts (9–10 years old):** – Learners with high flexibility: The aim of the activity: to reinforce flexible thinking and practice adapting to new situations. The tasks should be varied (text-based, logical, visual, practical) so that students can switch between different thinking strategies. There are no specific instructions under the incorrect answer tabs, but rather self-reflective prompts (e.g., "Why do you think this answer might be correct?", "Can you think of another way to approach this question?"). The teacher provides help upon request, and the student can decide when to turn the page, thus increasing self-regulation. At the end of the page, students can discuss their own strategies: what helped them adapt quickly, what was challenging.

Debriefing and Reflection questions

- What helped you not to give up when you couldn't solve the problem at first?
- Was there a moment when you had to think differently than you did at first? How did you change your approach to solving the problem?
- What did you learn from trying again before you found the right answer?
- How did you feel when you had to start a task again? What helped you to calmly continue?

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3.7 CURIOSITY, SENSE OF WONDER AND OPENNESS

3.7.1 Time and Space Adventures

Brief description, and rules of the implementation of the learning activity

Students choose a historical period (e.g., Ancient Egypt, the Middle Ages) or a distant, exotic place (e.g., rainforest, desert, North Pole). They then take an imaginary journey there and describe, draw, or narrate what they would see and experience.

Skill focus

Primary Skill Focus

- Curiosity, sense of wonder and openness

Complementary/ Secondary Skill Focus

- Flexibility
- Creativity

Age group	Student number	Duration
6 -10 years old	whole class working in pairs or small groups	whole lesson

Proposed step by step implementation of the learning activity

1. Introduction and Engagement (10–15 min): The teacher introduces 3–4 historical periods (e.g., Ancient Egypt, medieval Europe, early 20th century) or exotic locations (e.g., jungle, desert, polar region, deep sea) using multimedia tools (images, music, short videos, or audio clips). The aim is to help students connect visually and emotionally with these unfamiliar worlds.
2. Selection (5–10 min): Students choose one period or place that particularly captures their interest or with which they can connect. The choice may be made individually or through a brief discussion in pairs, but it must be based on personal interest.
3. Planning the time and space adventure (5–10 min): The teacher supports the students' imagination with guiding questions (e.g., "What kind of vehicle would you use?", "How do people dress there?", "What sounds do you hear around you?", "What smells do you notice?").
4. Creation – Drawing or Short Writing (15–20 min): Students can choose between: drawing what they saw during the journey (e.g., cities, people, animals, buildings, natural environment), or writing a short composition (approx. 5–7 sentences) narrating their experiences: who they saw, what they felt, what adventures they had.

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5. Presentation and Reflection (10–15 min): Students present their drawings or read aloud their compositions to each other. The teacher and peers provide positive feedback and ask questions. This step also fosters language and presentation skills, empathy, and attentive listening.
6. Conclusion (5 min): The teacher summarizes what students have learned about different cultures and time periods and how it felt to imagine themselves in another world. Reflection questions deepen the understanding (e.g., "What was the most exciting part for you?", "Would you like to visit there for real?", "What did you learn about your imaginary self?").

Indoor/Outdoor Classroom layout notes

Flexible classroom seating is ideal to support pair or group work.

How does this learning activity develop this particular skill?

The "*Time and Space Adventures"* activity primarily fosters curiosity, a sense of wonder, and openness. By allowing students to choose a historical period or exotic place based on personal interest, the activity stimulates their intrinsic motivation and encourages them to explore unfamiliar times and cultures with openness and fascination. As they describe what they see, hear, smell in their imagined journey, students deepen their curiosity and broaden their perspective on different ways of life. Sharing their work with peers and reflecting on each other's ideas further strengthens their openness, attentive listening, and respect for diverse viewpoints. As a result, the activity nurtures a mindset of exploration and discovery, grounded in curiosity and wonder.

What do we want to achieve regarding primary skill development (student understanding and/or behaviour)?

As a result of this activity, students will be able to explore unfamiliar cultures, eras, and environments with openness and curiosity.

- They will understand how to observe details, ask exploratory questions, and imagine alternative ways of living.
- They will be able to describe what they "experience" in another time or place, make connections to real-world knowledge, and express curiosity through drawing, storytelling, or discussion.

Suggested use, and practical subject-related examples

This activity can be integrated into regular lessons as a project (e.g., in language arts, environmental studies, visual arts, or history), or as part of a thematic day/week (e.g., "Time Travel", "Around the World Adventures", "Globetrotter Day"). The teacher may preselect a few eras (e.g., Ancient Egypt, medieval castles, future cities, space travel) or locations (e.g., Amazon rainforest, Arctic, Japan during cherry blossom season), and present them using images, sounds, music, short videos, or stories. This helps spark curiosity, draw attention, and emotionally engage students. Then, students individually or in pairs select a period/place and imagine what it would be like to live there or visit as a traveller: What would they see (buildings, people, nature)?; What smells, sounds, or tastes would they experience?; Who would they meet, and what conversations might happen?; What activities would they take part in? They document their imaginary journey through drawings, short stories, journal entries, postcards, or mini models made from natural or recycled materials.

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Example: A 9-year-old chooses Ancient Greece. Inspired by the teacher's images of the Acropolis, they draw themselves walking in the marketplace. In their story, they meet Socrates, who asks them questions about truth and courage. The student describes how interesting it was to be in a world where people discussed philosophy and how they felt being part of that "other world."

Materials and tools needed for implementation

- Drawing paper,
- Pencils, coloured pencils
- Writing tools
- Pictures, maps
- Audio materials
- Videos (optional)

Guiding questions

For pair/small group discussions:

- Where would you go if you could travel anywhere in time or space?
- What would you see there? Who lives there? What are the buildings and nature like?
- What smells or sounds would you notice? What would you wear?
- What customs would there be? What's different from today?

For full-class discussions:

- Why did you choose this time/place?
- How is this world different from today's? What would it feel like to live there?
- What did you learn from this journey? What was the most interesting part?
- If you were really there, what would you bring with you?

Tips and Tricks for dealing with challenges

- **Challenge:** Limited prior knowledge of history/geography
  Tip: Provide visual prompts (maps, costumes, landmarks) and short videos to activate background knowledge. Allow students to choose more familiar locations first, then gradually introduce more complex ones.
- **Challenge:** Difficulty imagining unseen worlds
  Tip: Use sensory questions ("What do you smell? hear? feel?") to scaffold imaginative thinking. Let students close their eyes during a guided imagery activity to boost curiosity.
- **Challenge:** Uneven engagement between drawing and writing tasks
  Tip: Allow both options so students can choose their preferred expression style. Pair strong writers with strong visual thinkers so they inspire each other.
- **Challenge:** Time management during creation phase
  Tip: Display a timer and divide tasks into small steps. Use checkpoints (e.g., "Finish background first", "Add characters next").
- **Challenge:** Presentation anxiety
  Tip: Let students present in pairs or use a gallery walk format. Teachers can read aloud a child's story if they prefer not to present.

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Difficulty level tailoring

Teachers can adapt this activity to three levels based on student needs:

- **Beginners (6-7 years old):** Simple drawing or 1–2 sentence description
- **Advanced learners (8-9 years old):** More detailed (3–4 sentences), with imaginative elements
- **Experts (9–10 years old):** Well-developed story or complex image, with dialogue or events

Debriefing and Reflection questions

On curiosity and openness:

- What made you the most curious during your imaginary journey?
- Which detail made you wonder the most about the place or time you chose?
- How did imagining another world change the way you think about your own?

On imaginative exploration:

- Which idea or visual element came to you unexpectedly?
- How did your imagination help you explore the place more deeply?
- What new questions did this journey raise for you?

On perspective-taking:

- How did hearing your classmates' journeys open your mind to new ideas?
- What surprised you about how others imagined the same time/place?

On applying newfound curiosity:

- How could this curiosity help you in history, geography, or reading tasks?
- When might it be useful to imagine something that you have never seen before?

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3.7.2 Nature-Inspired Art

Brief description, and rules of the implementation of the learning activity

Students, accompanied by the teacher, go outside near the school (to a park, courtyard, or forest edge) to collect natural materials such as leaves, stones, branches, and seeds. Upon returning to school (or staying outdoors), they create pictures, small sculptures, land art installations, or other compositions from these materials. They then present their works to each other and discuss their experiences and impressions from the creative process.

Skill focus

Primary Skill Focus

- Curiosity, sense of wonder and openness

Complementary/ Secondary Skill Focus

- Connectedness
- Creativity

Age group	Student number	Duration
8 years old	whole class working in small groups	90 minutes

Proposed step by step implementation of the learning activity

The activity consists of three interrelated phases. Each phase plays a crucial role in helping students connect with nature through experiential learning and create original artistic expressions.

1. **Preparation – Getting in the Mood and Setting Rules** (15 min): The teacher initiates a conversation with the students: What counts as a natural material? What can we find in nature? (leaves, branches, stones, seeds, etc.). The students brainstorm together what they could make from these items. They discuss ethical collection rules, e.g.: Do not pick living plants; Only collect what has already fallen; Avoid disturbing living creatures (insects, snails); Don't collect sharp or dangerous objects (e.g., broken glass). Each student receives a small bag or folder for collecting. The teacher shows some inspirational images (projected or printed) to spark creativity.
2. **Material Collection – Nature Walk and Gathering** (30 min): Students go out with the teacher and, if possible, another adult, to the schoolyard, nearby park, or forest edge. Their task: collect interesting, beautiful, or uniquely shaped natural materials — ideally a variety (leaves, seeds, branches, stones, flower petals, moss, pinecones, etc.). The teacher walks among them and asks questions like, "What did you find? What could you make from it?" to encourage creative thinking. Important: the activity should not feel rushed, but like a joyful discovery through observation and wonder.
3. **Creation – Making Compositions from Natural Materials** (40 min): The class returns to the classroom or stays outside at a suitable spot (e.g., benches, blankets).

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4. **Students work individually or in small groups of 2–4**. Creative options: Postcard or mandala made from leaves and petals glued onto cardboard; Sculpture or installation built from branches, stones, and seeds; Storytelling picture: a nature scene (e.g., forest, lakeside, animals); The teacher provides materials for assembly (glue, string, scissors), and supports students as needed. Students can freely experiment or ask for thematic suggestions.

Indoor/Outdoor Classroom layout notes

Flexible classroom seating is ideal to support pair or group work.

How does this learning activity develop this particular skill?

The “Nature-Inspired Art” learning activity primarily nurtures students’ curiosity by inviting them to explore the natural environment with a sense of wonder and discovery. As they search for leaves, stones, and other natural materials, students engage in open-ended investigation observing shapes, textures, colours, and patterns that spark new questions and ideas. This exploratory phase encourages them to look more closely at nature, deepening their interest in the world around them and strengthening their observational awareness. During the creative process, students experiment with unfamiliar materials, try out spontaneous combinations, and follow their own imaginative impulses. This freedom promotes creative risk-taking and flexible, curiosity-driven problem-solving. Collaborative collecting, group creation, and peer sharing further expand their curiosity as they encounter different perspectives and unexpected interpretations from classmates. Overall, the experiential and tactile nature of this activity cultivates a deep emotional connection to nature, inspires continuous inquiry, and fosters respect and appreciation for the natural world grounding creativity in a mindset of curiosity and openness.

What do we want to achieve regarding primary skill development (student understanding and/or behaviour)?

As a result of this activity, students will be able to explore natural environments with curiosity, observe small details with a sense of wonder, and use natural materials to express their ideas creatively.

- They will understand how curiosity supports discovery and how careful observation helps them notice textures, colours, shapes, and patterns in nature.
- They will be able to transform natural materials into artistic creations, ask exploratory questions, and articulate what caught their interest during the process. Through hands-on experience, they will connect emotionally with nature and appreciate it as a source of inspiration.

Suggested use, and practical subject-related examples

This activity can be integrated into a wide variety of school events and programs throughout the year. It not only enhances creativity but also connects to environmental studies, education for sustainability, and visual expression.
Examples:

- Mandala from autumn leaves. Method: Students collect leaves of different colours and shapes and arrange them in circular, symmetrical designs on cardboard. Development focus: Hand-eye coordination, shape recognition, composition, patience.

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Differentiation: Younger children make simple designs, older students try complex symmetries. Extension: Create a classroom exhibit, add seasonal quotes.

- Pebble shapes or animal figures. Method: Students use different-sized and coloured pebbles to form animals, landscapes, or abstract patterns. Technique: Arrange figures on a flat surface, optionally fix them (glue, tray). Development: Fine motor skills, spatial thinking, symbolic representation. Idea: Invent stories for the figures, integrating language arts.
- Mini sculptures or totem poles from branches and seeds. Method: Combine sticks, acorns, cones, nutshells, and willow twigs creatively with glue or string. Theme: Free or directed (e.g., "Guardian of the Forest," "Fairy Creature"). Purpose: Spatial thinking, storytelling, using natural forms for artistic goals. Variation: Group totem pole with each child contributing a "level" to create a joint piece.
- Why use it? Nature-inspired art is an interdisciplinary activity combining natural sciences, visual arts, creative writing, and environmental awareness. It is child-friendly, motivating, and provides a tangible experience. It's easily adaptable to each child's pace and ideas, and cost-effective — nature provides the materials.

Materials and tools needed for implementation

- Natural materials: leaves, branches, stones, seeds, etc.
- Cardboard, boxes, wooden bases
- Glue, tape
- Scissors, string
- Wet wipes (for hand cleaning)
- Collection bags/folders

Guiding questions

In pairs/small groups:

- What made you curious about this material?
- What was the first thing you noticed when you picked it up?
- What questions came to mind as you looked at it more closely?
- How did working together help you discover something new?
- What surprising detail did you find during creation?

With the whole class:

- What new things did we discover about nature while collecting materials?
- How did curiosity influence the choices you made in your artwork?
- How did it feel to create something using objects found outdoors?
- In what ways is this artwork different from what you would normally draw on paper, and why might that spark new ideas?

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Tips and Tricks for dealing with challenges

- **Challenge:** Unpredictable weather
  Tip: Prepare a pre-collected indoor kit of natural materials. Provide themed trays (shapes, colours) so students can still explore materials with curiosity, even indoors.
- **Challenge:** Safety and responsible behaviour outdoors
  Tip: Give a clear rule briefing (no picking living plants, respect animals). Assign a "safety or material supervisor" in each group to monitor responsible collecting.
- **Challenge:** Some students collect too few or too similar materials
  Tip: Encourage them to look for textures, patterns, and unusual shapes. Have them pick at least one item that sparks a question ("What tree might this come from?").
- **Challenge:** Material shortage or uneven distribution
  Tip: Create a shared "raw material basket" for all groups. Provide extra natural objects collected in advance.
- **Challenge:** Students struggle to transform materials into ideas
  Tip: Show sample images (mandalas, pebble animals, leaf creatures). Use prompt questions: "What could this leaf become? A wing? A boat? A mountain?"

Difficulty level tailoring

Teachers can adapt the activity to three levels depending on students' curiosity, confidence, and experience:

- **Beginners (6-7 years old):** Students create a simple composition using one type of natural material (e.g., leaf collage). They explore the material with guided questions that encourage curiosity such as noticing shape, texture, or colour. Material collection is supported by the teacher, and the theme is structured to help students begin observing nature with interest.
- **Advanced learners (8-9 years old):** Students combine several types of natural materials and create a small scene. Curiosity is fostered through group exploration, where students compare findings and discuss unexpected discoveries. A brief oral reflection allows them to share what surprised them and what new details they noticed.
- **Experts (9–10 years old):** Students design a more complex creation that expresses a personal idea, symbolic meaning, or abstract concept (e.g., representing a season or mood). They independently plan their work, guided by curiosity-driven inquiry—asking deeper questions about materials, their qualities, and how they can communicate meaning. Exploration and self-directed investigation are central at this level.

Debriefing and Reflection questions

These reflection questions help students recognise, label, and discuss how their curiosity, sense of wonder, and observational awareness developed during the activity.

Individual or pair sharing:

- What made you curious during the nature walk? What did you notice first?
- Which material sparked the most questions in your mind? Why?
- How did your curiosity influence the artwork you created?
- What new detail did you observe today that you had never noticed in nature before?
- When you faced a difficulty, how did curiosity help you find a solution?

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Whole-class discussion (teacher-led):

- What helped you stay open and curious while working with natural materials?
- How did observing small details (colour, texture, shape) support your creativity? How did your classmates' ideas inspire new questions or discoveries for you?
- Why is curiosity important when exploring nature or creating art?
- How can this sense of wonder help you in other subjects (science, art, storytelling)?

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3.7.3 Sound Exploration

Brief description, and rules of the implementation of the learning activity

The students sit in a quiet environment with their eyes closed and listen to various sounds (e.g., birdsong, rain, train, laughter, dog barking, whispering, door slamming). Afterwards, they express what sound they heard and what emotions it evoked in them – either verbally or through drawing. There is also an opportunity for creative associations and storytelling.

Skill focus

Primary Skill Focus

- Curiosity, sense of wonder and openness

Complementary/ Secondary Skill Focus

- Emotional awareness, regulation and communication

Age group	Student number	Duration
6-10 years old	whole class working in small groups	40 minutes

Proposed step by step implementation of the learning activity

1. **Preparation** – Teacher's Tasks Before the Activity: Creating the sound material: The teacher selects 6–10 different sounds in advance. These may include from nature: birdsong, wind, raindrops, waves; from everyday life: zipping a zipper, door closing, clinking glasses, buzzing hair dryer; musical sounds: sounds of instruments (xylophone, piano keys), musical excerpts; Self-made sounds: clapping, crumpling paper, footsteps, jingling keys. Providing tools: speaker or smartphone to play the audio, paper, drawing tools, or a worksheet for reflections. Preparing the space: students sit comfortably at their desks or in a circle on the floor. Minimize external noise if possible so that attention is truly focused on the sounds.
2. **Starting the Activity** – Getting in the Mood: The teacher briefly explains the rules: students close their eyes, do not speak, and just listen. They may explain that there are no "right" or "wrong" answers — the goal is to observe what they feel, what images or memories come to mind when hearing the sounds.
3. **Listening to the Sounds** – One by One, with Conscious Attention: The teacher plays or produces each sound live (lasting about 10–20 seconds). After each sound, there is a short pause (1–2 minutes) so students can write down or draw: What feeling did the sound evoke in them? What memory or story did it remind them of? What image did they visualize during the sound? Drawing is also an allowed option for those who still find written expression chafing.
4. **Sharing and Processing** – Experience Exchange, Reflection: Small group discussion (3–4 students per group): How did they react to the same sound? Were their emotions similar or different? Which sound was the most interesting for them, and why? Whole-class discussion (moderated by the teacher): Which sounds evoked shared different? Are there any noticeable

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differences between boys and girls, or based on age? Which sounds were easily recognizable, and which were more mysterious?

5. **Conclusion** – Systematization, Emotional Summary: At the end of the session, the teacher collects responses from the group together: Which sound was: the most calming? the happiest or funniest? the scariest or most surprising?

Indoor/Outdoor Classroom layout notes

Flexible classroom seating is ideal to support pair or group work.

How does this learning activity develop this particular skill?

The “Sound Exploration” learning activity primarily fosters students’ curiosity by inviting them to listen to a variety of sounds with a sense of wonder and openness. With their eyes closed, students become attentive explorers, noticing subtle details, contrasts, and unexpected qualities in both familiar and unfamiliar sounds. This exploratory listening encourages them to ask questions: What could this be? Why does it sound this way? What does it remind me of? and sparks an intrinsic desire to understand the world through auditory discovery. The immersive process of listening, followed by creative expression such as drawing, storytelling, or free associations, further deepens their curiosity by encouraging them to translate sensory impressions into imaginative ideas. Group sharing provides an opportunity for students to compare diverse interpretations, learn from each other’s perspectives, and remain open to surprising viewpoints. Altogether, the activity cultivates a mindset of curiosity, wonder, and sensory openness toward the world of sounds.

What do we want to achieve regarding primary skill development (student understanding and/or behaviour)?

As a result of this activity, students will be able to explore sounds with curiosity, listen with focused attention, and describe what they notice using imaginative and open-minded thinking.

- They will understand how curiosity helps them ask questions about what they hear, notice subtle differences, and form personal interpretations.
- They will be able to express their sensory impressions through drawings, words, or creative associations, and reflect on how sounds evoke ideas, images, or questions.
- Through shared reflection, they will practice being open to others’ perspectives and staying curious about diverse interpretations.

Suggested use, and practical subject-related examples

As a Warm-up Activity: Ideal at the beginning of a music or drama class to attune students to listening, inner attention, and emotional awareness. It also functions as an “emotional entry point,” helping children slow down and shift into a different rhythm of learning.
As a Cool-down or Calming Activity: Used after more active, noisy, or structured tasks (e.g., after P.E. or a math lesson), it supports a soothing, relaxed transition and promotes self-regulation. It can also be used in after school or pre-bedtime programs as a kind of "sound meditation."

Examples of Sounds and Their Possible Processing Methods

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- Natural sounds: birdsong, rustling leaves, babbling brook, sound of raindrops. Reflection questions: “What feeling did it evoke in you?”; “What place did you imagine?”; “Have you ever been to a place like that?”; “What colours come to mind when you hear this sound?”
- Everyday artificial sounds: vacuum cleaner, elevator noise, traffic, kettle boiling, typewriter. Reflection: “Was it disturbing or calming?”; “What time of day or activity did it remind you of?”; “Do you like this sound in real life?”
- Musical excerpts, mood-evoking melodies: slow piano music, cheerful flute phrases, drum solo, soft string sounds. Creative processing: “What kind of story did you imagine?”; “Who could be the main character?”; “What colour scheme would your story have?”
- Abstract or mysterious sounds: reversed audio, glass chime, electric noise, rumbling. Questions: “What could it be?”; “Could you invent a story or a new world where this sound is heard?”
- Playful Extension Possibilities: "Sound Match Drawing": Children try to draw the object that produced the sound, then compare with others’ interpretations. "Emotion Scale": After each sound, students place a sticker on a shared poster to represent the emotion they felt (e.g., joy, calm, fear, curiosity). "I Can Make That Sound!": Students try to imitate or recreate the given sound using their own tools, instruments, or everyday objects.

Materials and tools needed for implementation

- Speaker or smartphone/voice recorder
- Pre-recorded sound clips (or live sounds)
- Paper
- Coloured pencils (for emotion drawings)
- Emotion picture cards (to support verbal expression)

Guiding questions

For pair/small group discussions:

- Which sound did you like the most? Why?
- Was there a sound that scared you or made you feel calm?
- What image did you see in your mind while hearing the sound?

For whole class discussion:

- What differences did you notice in how people felt about the same sound?
- What did you learn about the connection between sounds and emotions?
- Why do you think it’s useful to pay attention to sounds in everyday life?

Tips and Tricks for dealing with challenges

- **Challenge:** Difficulty expressing emotions or impressions verbally
  Tip: Use emotion cards, sound cards, colour cards as scaffolds. Offer metaphor prompts: “If this sound were a texture/colour/weather, what would it be?”
- **Challenge:** Difficulty concentrating in silence
  Tip: Begin with micro-sounds (1–2 seconds), then gradually increase listening time. Use simple breathing or grounding routines (e.g., “turning on listening ears”)

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- **Challenge:** Sound sensitivity or overwhelm
  Tip: Pre-screen potentially triggering sounds; ask for student feedback. Trick: Allow "step-out options" (listening corner, shorter participation).
- **Challenge:** Feeling self-conscious during sharing
  Tip: Offer multiple expression modes (drawing, gestures, movement). Trick: Encourage pair-sharing before whole-class discussion.
- **Challenge:** Some children rely only on identifying the sound—not exploring it
  Tip: Ask curiosity-based questions ("What surprised you? What did you wonder about?"). Hide the identity of certain sounds to trigger deeper exploration.
- **Challenge:** Surface-level thinking (literal only)
  Tip: Model deeper associations ("This sound makes me imagine a hidden forest..."). Invite children to build micro-stories based on a single sound.

Difficulty level tailoring

Teachers can adapt the activity to three difficulty levels based on students' curiosity, readiness, and ability to explore sounds in increasingly complex ways:

- **Beginners (6-7 years old):** Students listen to a small number of familiar sounds (e.g., 2–3). The focus is on awakening curiosity by noticing simple differences—loud vs. soft, high vs. low, smooth vs. rough—and connecting these sounds to basic impressions or images. Visual aids such as emotion or sound cards may support exploration. The goal is to spark initial wonder and attentive listening.
- **Advanced learners (8-9 years old):** Students explore a wider variety of sounds (e.g., 5–6), including unfamiliar or abstract ones. They reflect on what the sounds made them imagine or question, expressing their ideas through drawing or short verbal descriptions. Curiosity becomes more active as students form personal associations, identify surprising elements, and describe what caught their attention.
- **Experts (9–10 years old):** Students investigate numerous sounds (8 or more) and engage in deeper, curiosity-driven interpretation. They may create short stories, imaginative soundscapes, or group discussions based on what they heard. At this level, students compare interpretations, examine how the same sound can evoke different ideas, and articulate the inner images sparked by listening. The aim is to cultivate sustained curiosity, openness, and creative inquiry into the auditory world.

Debriefing and Reflection questions

On curiosity and wonder:

- What sound made you the most curious, and why?
- What new question came to your mind while listening?
- Which sound surprised you the most?
- *On attentive listening*:
- What helped you notice small details in the sounds?
- How did closing your eyes change the way you experienced the sound?

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On imaginative interpretation:

- What image or story popped into your mind?
- How did your ideas change after hearing others' interpretations?

On openness to other perspectives:

- Did someone imagine the same sound very differently? What did that teach you?
- How can different interpretations help us stay open and curious?

On transferring the skill:

- How could curiosity about sounds help you in music, storytelling, or science?
- When in everyday life might you need to stop and truly listen?

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3.7.4 I have, who has?

Brief description, and rules of the implementation of the learning activity

This learning activity expands the traditional "I have, who has?" format into a creative reasoning and association-building task. Instead of simply matching cards in a sequence, students explore multiple possible connections, invent new links between concepts, and create their own cards and chains. The activity emphasises *flexible thinking, curiosity, originality and connecting ideas*, while strengthening communication and collaboration.

Skill focus

Primary Skill Focus

- Creativity

Complementary/ Secondary Skill Focus

- Problem-solving
- Curiosity, sense of wonder and openness

Age group	Student number	Duration
6-10 years old	Whole class working in pairs or small groups	45-60 minutes

Proposed step by step implementation of the learning activity

1. **Warm-up:** Introduction to creative linking. The teacher shows a few example cards (words, pictures, numbers, objects). Students brainstorm different ways two cards could be connected, how one concept can lead to another in unexpected ways.
2. **Exploration phase:** Discovering multiple connections. Students examine their cards individually or in pairs. They look for: unusual or imaginative links, personal associations, patterns that others might not notice. The teacher prompts curiosity: "How many different connections can you find?"; "What is a surprising way these two cards could fit together?"
3. **Guided activity:** Creative chaining. Instead of the traditional linear chain, students create branching chains: Each "I have…" card must connect to at least two "Who has…?" possibilities. Students explain the creative reasoning behind each choice. This expands the original structure into a higher-order thinking process.
4. **Main activity:** Whole-class creative chain. Students sit in a circle. The chain begins with one student reading their "I have…" card and choosing a creative "Who has…?" connection. Multiple answers are accepted if justified. Teacher prompts: "Convince us! Why does your card connect?" "Who has a different but also valid connection?" This makes the activity a collaborative creativity task, not a race.

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5. **Student-generated cards:** Students create their own cards using vocabulary from the unit, pictures, mathematical symbols, science categories. They design connections that are funny, abstract, symbolic or imaginative.
6. **Whole-class reflection:** Students share which connection they found the most surprising, enjoyable or meaningful.

Indoor/Outdoor Classroom layout notes

The activity can be implemented both indoors and outdoors. A flexible classroom layout is recommended, allowing students to move freely, collaborate in pairs or small groups, and arrange materials in a way that supports exploration and creativity. Indoors, desks can be grouped or pushed aside to create an open working area; outdoors, students may gather around a central space or move between stations. The layout should encourage visibility of materials, smooth transitions between activity phases, and a safe, spacious environment for creative interaction.

How does this learning activity develop this particular skill?

This activity fosters creativity by encouraging students to generate multiple ideas, explore diverse associations, and justify imaginative connections. They practise divergent thinking (many possibilities), flexible thinking (shifting between ideas), originality (unexpected links), creative communication (explaining their reasoning). By valuing not one correct answer, but many possible answers, the activity strengthens confidence in creative expression.

What do we want to achieve regarding primary skill development (student understanding and/or behaviour)?

As a result of this activity, students will be able to generate original associations, explore multiple creative connections between concepts, and explain their thinking in flexible and imaginative ways.

- They will understand that creativity involves building unexpected links and staying open to different interpretations.
- They will be able to communicate their ideas clearly and value the creative contributions of others.

Suggested use, and practical subject-related examples

This learning activity can be meaningfully integrated into different subjects by adapting the card sets and the types of creative connections students are encouraged to make.

Language Arts / English

- Vocabulary development (nouns, adjectives, verbs, categories)
- Story-building: cards become story elements, characters, settings
- Exploring synonyms, antonyms, rhyme associations
- Creative dialogue: “I have… a forest. Who has… something that could appear in my story?”

Mathematics

- Number sequences: “I have 12. Who has… something divisible by 3?”
- Shapes and geometry associations
- Fractions, patterns, or measurement vocabulary

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- Logical reasoning: cards connected through rules or features
- Science
- Animal classifications, habitats, food chains
- Weather types, materials, states of matter
- Energy sources or environmental concepts
- Creative analogies (e.g., “Who has something that could produce light?”)

Environmental Studies / Social Studies

- Categories related to community roles, feelings, fairness, responsibility
- Ethical connections: “I have kindness. Who has a situation where kindness is needed?”
- Exploring values and relationships

Arts

- Symbolic connections between images and emotions
- Using cards as inspiration for drawings, collages, or story illustrations
- Exploring colour associations and sensory links
- Creative transitions: “Who has a card that matches the mood of my card?”

Materials and tools needed for implementation

- “I have, who has?” cards (words, pictures, numbers, categories)
- Blank cards for student-generated additions
- Markers / pens
- Table or group working space
- Optional: thematic card sets (animals, adjectives, science concepts)

Guiding questions

Pair / small group:

- What made you connect these two cards?
- Can you find a second or third possible connection?
- What is the most unusual link you discovered?

Whole class:

- Did someone find a different connection than you expected?
- How did your idea change after hearing from others?

Tips and Tricks for dealing with challenges

- **Challenge:** Students make only one, obvious connection.
  Tip: Ask for three different associations. Give prompts such as “Think of a story connection… a shape connection… a sound connection…”
- **Challenge:** Some students hesitate to speak.
  Tip: Allow pair-sharing before whole-class sharing. Trick: Provide sentence starters (“I chose this because…”).
- **Challenge:** Students treat it as a speed game.
  Tip: Remove competitive elements; emphasise creativity points. Reward “most original connection” each round.

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- **Challenge:** Creative fatigue or repeated answers.
  Tip: Offer category prompts (colour, emotion, habitat). Let students invent one completely new card to refresh the chain.

Difficulty level tailoring

Teachers can adapt the activity to three difficulty levels based on students' curiosity, readiness, and ability:

- **Beginner learner (6-7 years old):** Simple picture or noun cards. One required connection + short explanation. Teacher provides scaffolded prompts.
- **Advanced learners (8-9 years old):** Abstract or multi-meaning words. At least two different creative connections per card. Students create their own cards.
- **Experts (9–10 years old):** Complex categories (e.g., empathy, fairness, energy). Students generate full connection webs, not linear chains. Students justify and compare interpretations.

Debriefing and Reflection questions

Creativity

- Which connection did you invent that you felt most proud of?
- Did someone else's idea inspire your next one? How?

Flexibility

- Did you change your mind at any point? Why?
- How did you adapt when someone offered a new idea?

Curiosity and Openness

- Which card made you the most curious?
- What new question or idea came to your mind today?

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3.7.5 Mix and Match (Mash-up)

Brief description, and rules of the implementation of the learning activity

Mix and Match is a creative learning activity in which students combine two unrelated concepts - animals, objects, places, characters, materials, or abstract ideas - to invent something entirely new. The task encourages divergent thinking, flexible imagination, playful experimentation and creative explanation. Instead of simply matching words, students explore *why* and *how* two ideas can fit together, what the new mash-up could look like, and what purpose or meaning it could have. The aim is not a "funny creature," but a creativity-driven reasoning process: invent, justify, compare, refine.

Skill focus

Primary Skill Focus

- Creativity

Complementary/ Secondary Skill Focus

- Problem solving
- Curiosity, sense of wonder and openness

Age group	Student number	Duration
6-10 years old	Whole class working in pairs or small groups	45-60 minutes

Proposed step by step implementation of the learning activity

1. **Warm-up:** Getting ideas flowing. The teacher shows two simple cards (e.g., elephant + helicopter) and models an imaginative mash-up: What could it look like? What could it do? What problem could it solve? Students share quick ideas in pairs.
2. **Exploration phase:** Noticing possibilities. In pairs, start study a set of cards and brainstorm: What surprising connections can we find? How many different ideas can we generate with the same paper? What if we change one word? What if we replaced one word? What if the mash-up lived in the ocean / in space / in the forest / in the city? The teacher encourages curiosity and flexibility.
3. The teacher prompts curiosity and flexibility.
4. **Guided activity:** Creating and describing mashups. Each pair randomly selects two cards (living things, places, objects, emotions, inventions, etc.) and develops a creative mash-up: They must: describe its appearance; explain its abilities or purpose; decide where it lives; identify what challenge it faces; invent how it solves the challenge. Students draw or write short notes.
5. **Main activity:** Building the Mash-Up Gallery. Each pair creates a visual representation (drawing, collage, labelled sketch). Then the whole class participates in a gallery walk. At each station, students: guess the mash-up's functions; ask questions; add "What if...?" suggestions, appreciate original ideas. The creators then explain their design and thinking process.

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6. **Creative extension:** Pairs may: create a backstory; write a short comic scene; act out how their mash-up moves or communicates.
7. **Whole-class closing reflection:** Students share what surprised them, what idea inspired them, and how their creativity developed.

Indoor/Outdoor Classroom layout notes

The activity can be implemented indoors or outdoors. A flexible layout supports creative exploration: desks grouped for pair/group collaboration; free movement between stations; visible access to drawing and card materials; outdoors: use picnic tables or ground spots with enough space for creating and presenting. The space should encourage interaction, curiosity, and safe creative expression.

How does this learning activity develop this particular skill?

This activity builds creativity by allowing students to: generate many different ideas from few inputs (divergent thinking); see beyond the obvious and explore unexpected possibilities; blend unrelated concepts into meaningful new combinations; justify their choices through storytelling or explanation; stay open to others' interpretations and co-create; strengthen problem-solving through creative challenges. The playful format reduces fear of mistakes, encourages risk-taking, and builds resilience through iteration ("Try again — make it stranger, smarter, clearer, funnier!").

What do we want to achieve regarding primary skill development (student understanding and/or behaviour)?

As a result of this activity, students will be able to generate original mash-up ideas, explore multiple creative connections between unrelated concepts, and express their thinking through imaginative explanations and drawings.

- They will understand that creativity grows from curiosity, flexible thinking, and valuing diverse viewpoints.
- They will be able to justify creative decisions, rethink ideas based on feedback, and collaborate to improve their mash-up.

Suggested use, and practical subject-related examples

Language Arts

- Create a mash-up character for a story
- Write a comic strip or short tale about the creature
- Combine an emotion + a weather type to inspire poetry

Mathematics

- Mix shapes to create a new geometric form
- Create "pattern creatures" using repeating structures
- Combine numbers with objects (e.g. triangle + tree) to inspire symbolic meaning

Science

- Mix an animal + an ecosystem → explore adaptations
- Combine a machine + natural element to solve a real problem
- Invent a creature that can survive climate extremes

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Social Studies

- Mix two cultures → explore food, celebrations, homes, clothing
- Mash-up historical periods (e.g., "Viking astronaut")
- Reflect on diversity and valuing different ideas

Art

- Create mash-up illustrations, collages, or sculptures
- Explore textures, colours, and materials through hybrid designs

Materials and tools needed for implementation

- Word cards, picture cards, or category cards
- Blank papers / drawing sheets
- Coloured pencils, markers, crayons
- Optional: recycled materials for 3D mashups
- Scissors, glue, craft supplies

Guiding questions

Pair / small group:

- What was the first idea that came to your mind? Why?
- Can you imagine a second or third version of this mash-up?
- How would this creature/object solve a problem?
- Which part of your idea changed as you worked on it?

Whole class:

- What surprised you about your classmates' mashups?
- Did someone's idea help you develop your own further?
- What made you curious about another group's design?

Tips and Tricks for dealing with challenges

- **Challenge:** Students create only literal or simple combinations.
- **Tip:** Ask: "Make it stranger!" or "Add a special ability!" Provide prompts (e.g. emotion + object, weather + animal).
- **Challenge:** Students struggle to visualise the mash-up.
- **Tip:** Use silhouettes, shapes, or mix-and-match images for support. Let them sculpt it with recycled materials.
- **Challenge:** Some students hesitate to share ideas.
- **Tip:** Allow pair-sharing first. Provide sentence starters: "Our mash-up can… Because…"
- **Challenge:** Groups get stuck after one idea.
- **Tip:** Encourage "3 versions rule", generate three different interpretations. Trick: Add constraints: time travel, underwater, robot mode, etc.
- **Challenge:** Creativity drops due to perfectionism.
- **Tip:** Celebrate "weird," "funny," or "impossible" ideas. Emphasise process over product.

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Difficulty level tailoring

Teachers can adapt the activity to three difficulty levels based on students' curiosity, readiness, and ability:

- **Beginner learner (6-7 years old):**
  - Use clear, simple picture cards (animals, foods, toys).
  - Provide templates: *This is a* ____ + ____ = ____. *It can...*
  - Focus on drawing and 1–2 sentence descriptions.
- **Advanced learner (8-9 years old):**
  - Allow abstract or unusual combinations
  - Require 2–3 creative explanations
  - Let students write a short story or comic
  - Encourage presentation skills
- **Expert learner (9–10 years old):**
  - Students choose themes (e.g. environmental problems, helping a community)
  - Mash-up must serve a purpose
  - Students design illustrated books, posters, or mini-performances
  - Include reflection on societal or ecological connections

Debriefing and Reflection questions

Creativity

- What made your mash-up original?
- Which idea changed the most during the process?
- What creative risks did you take?

Flexibility

- How did your idea evolve when your partner suggested something new?
- Did you change direction at any point? Why?

Curiosity and Openness

- What detail made you most curious about another group's design?
- What new question came to your mind?

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3.8 EMPATHY

3.8.1 Empathy Circle of Stories

Brief description, and rules of the implementation of the learning activity

Children sit in a circle and share real or imagined stories about times they felt certain emotions, while the rest of the group practices listening and responding empathetically.

Skill focus

Primary Skill Focus

- Empathy

Complementary/Secondary Skill Focus

- Emotional awareness, regulation and communication
- Curiosity, sense of wonder and openness
- Valuing people and nature

Age group	Student number	Duration
6-10 years old	8-20	30-40 minutes

Proposed step by step implementation of the learning activity

This activity is designed to help children explore emotions through storytelling and practice empathy by listening and responding with care.

1. **Preparation by the teacher:** The teacher chooses one core emotion to focus on for the session — for example: fear, joy, sadness, anger, or pride. This emotion will guide the stories shared and the responses practiced. The teacher introduces the session by saying something like:

   "Today we're going to focus on one emotion and tell real stories about when we felt that way. After each story, we'll practice listening with care and showing that we understand and support each other."

2. **Setting the tone:** To create a safe and respectful atmosphere, the teacher reminds the class of a few key rules:
   - One person speaks at a time.
   - We listen with full attention.
   - No teasing or judgment.
   - It's okay to pass if someone doesn't want to share.

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3. **Sharing stories (individual turn):** One child volunteers (or is gently invited) to tell a short true story about a time they felt the chosen emotion. For example: "I felt scared when I got lost in the supermarket for a moment and couldn't find my dad." The teacher or another child can help by gently prompting: "What happened next?" "Where did you feel the emotion in your body?" "What did you do about it?"
4. **Practicing empathetic responses (group activity)**

   After the story, the group practices empathetic reactions by responding with:

   - A caring question, like: "How did that make you feel?"
   - A supportive comment, like: "That must have been really hard. I would've felt scared too."
   - A personal connection, like: "Something similar happened to me when..."

   The teacher models these types of responses if needed and encourages others to try.

5. **Rotating speakers:** The activity continues with 2–4 more children, depending on the time and group size. Each child shares a story, and the group responds empathetically. If some children prefer not to speak, they can still participate in the response part.
6. **Group reflection and wrap-up:** At the end, the class reflects together:
   - "What did it feel like to share something personal?"
   - "What helped you feel understood?"
   - "How can we use this kind of listening in other parts of our day?"

Indoor/Outdoor Classroom layout notes

Indoor: children sit in a circle on the carpet or on chairs arranged equidistantly to encourage a sense of equality and attention.
Outdoor: gather under a tree or in a quiet garden corner; sit in a circle on blankets or mats. Make sure the environment is calm and distraction-free to support deep listening.

How does this learning activity develop this particular skill?

This activity develops empathy through shared storytelling in a respectful listening environment. Children take turns sharing short personal stories related to an emotional prompt, while others listen attentively and then reflect on the feelings involved.

The activity supports:

- Deep listening without judgment or interruption,
- Recognition of shared emotional experiences,
- Emotional resonance and perspective-taking.

The circle format emphasizes equity and belonging. Each voice matters, and each emotion is welcomed. This builds group trust and nurtures the ability to imagine others' internal experiences.

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What do we want to achieve regarding primary skill development (student understanding and/or behaviour)?

As a result of this activity, students will:

- have developed emotional vocabulary
- be able to actively listen and understand their classmates
- have better empathy by connecting personal experiences with others' feelings
- be able to use emotional expression in a safe space

Suggested use, and practical subject-related examples

This activity works best during quiet moments of the day, such as after break or at the end of the morning, when children are more open to reflection. It can be used weekly to build emotional vocabulary and peer connection, or more occasionally to explore a theme (e.g., "feeling left out", "celebrating others", "handling frustration").

For example, a teacher might open with:
"Today we're talking about times when we felt really proud. Who has a story to share?"
A child may say: *"I felt proud when I helped my brother tie his shoes."*
Another may add: *"I felt proud when I read aloud even though I was nervous."*
This invites empathy and recognition of everyday courage.

Over time, students begin to listen more attentively, ask thoughtful questions ("How did that make you feel?"), and relate their experiences to others. The activity creates a safe emotional culture where children learn that emotions are shared, and that listening is a powerful way to care.

Materials and tools needed for implementation

- Emotion cards to select the focus emotion
- Optional talking object (like a soft ball) to pass around

Guiding questions

- How did it feel to tell your story?
- How did it feel to hear someone else's story?
- What does it mean to really listen with empathy?
- How can we show our friends we care?

Tips and Tricks for dealing with challenges

- **Challenge:** Some children might feel shy or uncomfortable sharing personal stories, especially if they're not used to talking about emotions.
  Tip: To encourage participation, the teacher should model the process first by telling a simple, honest story of their own — showing vulnerability, using clear language to describe feelings, and even admitting uncertainty or fear. This sets the tone and shows that it's safe to open up.

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- **Challenge:** Other children might react impulsively or dismissively, especially if they don't yet have strong listening skills.
  Tip: That's why it's important to establish clear group norms at the start: all stories are valid, there are no right or wrong emotions, and everyone deserves to be listened to with attention and care. The teacher can remind children what active listening looks like (facing the speaker, not interrupting, reacting kindly) and gently intervene when necessary to redirect unhelpful behaviour.
- **Challenge:** In some cases, children might not know how to respond empathetically.
  Tip: The teacher can offer sentence starters such as:
  - "That sounds really..."
  - "I can imagine feeling..."
  - "Thanks for sharing that..."

This scaffolding helps children develop emotional vocabulary and respectful ways of connecting with others. Finally, allowing opt-out options (like "you can just listen today") ensures that children feel in control of how much they share, while still benefiting from hearing others.

Difficulty level tailoring

Teachers can adapt the activity to three difficulty levels based on students' ability and learning needs:

- **Beginner learner (6-7 years old):** the teacher can invite students to draw the emotion instead of just telling a story.
- **Advanced learners (8-9 years old):** students can describe not only how they felt but what someone else did to help them.
- **Experts (9–10 years old):** you can introduce partner story exchanges before sharing with the whole group.

Debriefing and Reflection questions

- What helped you feel safe when sharing your story?
- What did you notice in your body while listening to someone else?
- Did you feel connected to someone else's experience today?
- How did it feel when someone showed they understood you?
- What makes a good listener in your opinion?

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3.8.2 Empathy Role-Play Trail (outdoor)

Brief description, and rules of the implementation of the learning activity

In an outdoor role-play trail, children encounter stations with scenarios where someone needs empathy. They take turns acting out the role of helper, learning how to recognize emotions and offer support.

Skill focus

Primary Skill Focus

- Empathy

Complementary/Secondary Skill Focus

- Emotional awareness, regulation and communication
- Curiosity, sense wonder and openness

Age group	Student number	Duration
6-10 years old	10-25	40 minutes

Proposed step by step implementation of the learning activity

1. **Preparing the activity:** The teacher sets up 4 or 5 stations along a safe route (in the courtyard, garden, or gym). At each station, there is a card with a simple and age-appropriate scenario.

   Each card includes:

   - a short description of the situation
   - the name of the character involved
   - an emotion to identify
   - a prompt question such as: “What could you say or do to help?”

   Optionally, you can place small props (like a ball, a backpack, a chair) at each station to make the situation more immersive.

2. **Instructions to give the children:** The teacher introduces the activity by saying: “Today we’re going on an Empathy Trail. Along the way, you’ll meet characters who are going through something difficult. Your job is to figure out how they feel and think of a way to help them.”

   “At each station, one of you will play the character. The others will watch closely, try to guess how the character feels, and say or do something to help.”
   “There’s no single right answer. We’re practicing how to put ourselves in someone else’s shoes and be caring and attentive friends.”

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3. **Running the activity – what happens at each station**

1. Children divide into small groups (ideally 3–5 per group) and move from one station to the next.
2. At each station, one child takes the role of the **character in the scenario**. They read the scenario card aloud (or the teacher reads it for younger children).
3. The "character" expresses the emotion through body language and facial expression, without speaking.
4. The other children observe and take turns saying:

   - what emotion they think the character is feeling
   - what they would do or say to offer help or support

   Example:

   - Station 1 – "Luca is sitting alone because no one picked him for their team."
   - The child playing Luca sits down and pretends to look sad.
   - The others say things like:
   - "I think he feels left out. I would ask him if he wants to play with me."
   - "I would sit next to him and tell him he's my friend."
   - After everyone has participated, the group moves on to the next station, taking turns playing the different roles at each stop.

4. **Closing the activity:** At the end of the trail, the class gathers together for a brief reflection. The teacher leads the conversation with questions such as:
   - "Which emotions were easiest to recognize?"
   - "What helped you understand how the character felt?"
   - "Was there a moment when you felt especially connected to the character?"

This final moment is essential to consolidate what was learned and to help children reflect on how they can bring empathy into their everyday lives.

Indoor/Outdoor Classroom layout notes

Arrange 4–5 clearly marked stations along a safe and quiet path (school yard, garden, gym courtyard). Each station should be distanced enough to allow a small group to gather and act without being distracted by others. Use cones or natural elements (trees, benches) as fixed points. Ensure visual signage and props are visible to draw children's attention and maintain immersion.

How does this learning activity develop this particular skill?

This activity develops empathy by placing children in simulated real-life situations where they are required to recognize emotions and respond in supportive ways. As they walk through the trail and encounter different scenarios, children are encouraged to step into someone else's shoes — both literally and figuratively.

The structure of the role-play fosters emotional perspective-taking by:

- Encouraging observation of non-verbal emotional cues (posture, expression),
- Practicing verbal or physical responses that show care and understanding,
- Promoting group discussion where children hear different interpretations and emotional reactions.

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By cycling through multiple stations and switching roles, each child has repeated opportunities to explore how emotions manifest and how supportive behaviour can look different depending on context. The post-activity reflection reinforces learning by making space to talk about emotional cues, empathetic responses, and how to carry these experiences into real-life peer relationships. This experiential, movement-based format supports not only the development of empathy but also emotional awareness and social bonding within the group.

What do we want to achieve regarding primary skill development (student understanding and/or behaviour)?

As a result of this activity, students will:

- able to recognize emotions in peers
- able to offer comfort and support
- has confidence in helping others
- be aware of how support feels

Suggested use, and practical subject-related examples

Scenario 1

"Sara is standing quietly near the classroom door, holding a drawing she made."
She looks down and seems unsure whether to show it.
The child playing Sara holds the drawing close and avoids eye contact.
The others might say:
"She might feel shy or scared that others won't like her picture."
"I would tell her I'd love to see it and that it's okay to feel nervous."

Scenario 2

"Leo is pacing before the school play, holding his costume."
He breathes fast and wrings his hands.
The child playing Leo mimics nervous energy.
The others might say:
"He's probably worried about performing. I'd remind him how well he practiced."
"I'd offer to help him practice his lines one more time or do a breathing exercise with him."

Scenario 3

"Amina just came back from lunch and finds her favourite pencil broken."
She looks upset and holds the pencil sadly.
The child playing Amina might frown and look disappointed.
The others say things like:
"She might feel sad or frustrated. I'd help her find some tape or offer to share mine."
"I'd ask if she wants to talk about it."

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Materials and tools needed for implementation

- Scenario cards for each station
- Emotion cards for younger children
- Cones or markers to define the trail

Guiding questions

- How did you know how your partner was feeling?
- What kind of help felt the best?
- When was a time you needed a friend's help?
- Why is it important to notice how others feel?
- How can we become more aware of our friends' feelings every day?

Tips and Tricks for dealing with challenges:

- **Challenge:** Some children might focus on solutions instead of feelings.
  Tip: The teacher should guide them back to naming the emotion first before problem-solving.
- **Challenge:** Some children might find it hard to comfort others verbally.
  Tip: The teacher can suggest non-verbal actions, like sitting close or offering a hand to hold.

Difficulty level tailoring

- **Beginner learner (6-7 years old):** keep scenarios simple (losing a toy) and model empathetic responses before the activity starts.
- **Advanced learners (8-9 years old):** include more social scenarios (feeling left out). Ask them to reflect on a time they needed empathy.
- **Experts (9–10 years old):** challenge them to identify subtle emotions (disappointment vs. frustration) and practice asking open-ended questions to show empathy.

Debriefing and Reflection questions

- What did you feel while watching your friends act out emotions?
- Was it easier to understand some emotions more than others? Why?
- What helped you choose how to support the character?
- Did anything remind you of something you've felt before?
- How can we use what we learned today in our class or with friends?

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3.8.3 Empathy Think-Pair-Share

Brief description, and rules of the implementation of the learning activity

This Think-Pair-Share adaptation focuses on seeing situations from someone else's perspective, helping children practice stepping outside their own point of view.

Skill focus

Primary Skill Focus

- Empathy

Complementary/Secondary Skill Focus

- Curiosity, sense of wonder and openness

Age group	Student number	Duration
8-10 years old	10-25	30 minutes

Proposed step by step implementation of the learning activity

The teacher introduces a short, age-appropriate social situation or dilemma related to empathy, such as: "A new student joins your class but doesn't speak your language."

This scenario sets the stage for perspective-taking and emotional reflection.

Step 1 – Think (Individual reflection): Each child takes a moment to quietly imagine how the student might feel—perhaps nervous, confused, or left out—and what that student might need (e.g., a smile, a buddy, or a picture-based explanation). They can jot down a few thoughts or draw a simple image to express their idea.

Step 2 – Pair (Partner discussion): Children form pairs to share their interpretations. They compare feelings and ideas, noticing where they agree or differ. The teacher encourages active listening and prompts them to ask each other:

- "What would you do if you were in their shoes?"
- "How could we help them feel welcome?"

Step 3 – Share (Class-wide sharing): Each pair presents one key insight or idea to the class. The teacher writes these on the board or a poster. As students hear a range of answers, they begin to recognize that people experience the same situation differently—and that empathy grows when we listen to those perspectives.

Optional extension: The class brainstorms an "Empathy Action Plan" with simple actions they could take to support someone in a similar real-life situation.

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Indoor/Outdoor Classroom layout notes

Indoor: Students sit at their desks in pairs or move to sit face-to-face in pairs on the carpet. Arrange the classroom so that each pair has enough privacy to talk without distractions. Leave space at the front for whole-class sharing.
Outdoor (optional): If done outside, students can sit in pairs on picnic blankets or benches in a shaded area, with enough space between groups to allow concentration.

How does this learning activity develop this particular skill?

This variation of Think-Pair-Share centres empathy by asking students to respond to emotionally charged scenarios. First, they think individually about how they or another person might feel, then share with a partner, and finally with the group.

The activity:

- Encourages emotional reasoning and reflection,
- Provides space for multiple viewpoints and validation,
- Builds courage to share personal or sensitive thoughts in a safe setting.

As students listen to each other's reflections, they deepen their understanding of emotional diversity and become more open to different reactions and coping strategies.

What do we want to achieve regarding primary skill development (student understanding and/or behaviour)?

As a result of this activity, students will:

- understand cognitive empathy
- be able to use perspective-switching
- be aware that different perspectives are valid

Suggested use, and practical subject-related examples

This activity works well at different moments of the school day, especially after a story, a conflict, or a collaborative task. It encourages children to reflect not only on their own point of view but also on others'. For example, after reading a story where a character feels excluded, the teacher might ask:

"What do you think the character felt? Can you think of a moment when you felt like that?"

In a Think phase, each student reflects quietly and individually. During Pair, they share with a partner, often discovering different emotional reactions to the same situation. In the Share phase, children hear the range of experiences and feelings in the class, realising that emotions are varied and valid.

This routine can also be used reactively — after a disagreement on the playground, the teacher can guide students to explore what each person might have felt, creating a bridge between emotional recognition and conflict resolution. Repetition of this method strengthens perspective-taking and emotional vocabulary over time.

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Materials and tools needed for implementation

- Scenario cards
- Optional whiteboard for brainstorming

Guiding questions

- Was it hard to imagine someone else's feelings?
- Did your partner see the situation differently?
- Why is it important to consider different perspectives?

Tips and Tricks for dealing with challenges

- **Challenge:** Some children may insist that there's only one correct answer or emotion for the situation.
  Tip: To guide them toward more flexible thinking, the teacher can emphasize that empathy is about understanding different perspectives, not finding the "right" response.
  - A helpful reminder might be:
  - "Different people feel differently—even in the same situation. That's what makes empathy so important."

- **Challenge:** If pairs struggle to take another person's point of view.
  Tip: The teacher can model the process by thinking aloud or asking open-ended guiding questions such as:
  - "How would you feel if no one understood your words?"
  - "What might help you feel more at ease in a new place?"
  - It can also help to encourage role-play or drawing as alternative ways to explore emotions for children who find verbal discussion difficult.

- **Challenge:** Finally, if one child dominates the conversation in a pair.
  Tip: The teacher can gently encourage turn-taking, saying:
  - "Let's hear from your partner too—everyone has valuable ideas."
  - These strategies help ensure that all children feel heard, respected, and engaged in building empathy together.

Difficulty level tailoring

- **Beginner learner (6-7 years old):** focus on broad, easily recognised emotions.
- **Advanced learners (8-9 years old):** include more nuanced feelings like embarrassment.
- **Expert learners (9–10 years old):** introduce emotion combinations (nervous-excited).

Debriefing and Reflection questions

- What did you learn by listening to someone else's idea?
- Did someone else's perspective surprise you?
- How does thinking like someone else help us work better as a group?
- Can you remember a time when you misunderstood someone's feelings? What helped you understand them better?
- Why is it important to know that more than one feeling can be "right" in the same situation?

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3.8.4 Empathy through Literature

Brief description, and rules of the implementation of the learning activity

Using classic children's books, the teacher leads discussions and activities that explore the emotions, thoughts, and motivations of the characters, helping children step into the characters' shoes and reflect on how they would feel in similar situations.

Skill focus

Primary Skill Focus

- Empathy (emotional and cognitive)

Complementary/Secondary Skill Focus

- Emotional awareness, regulation and communication

Age group	Student number	Duration
6-10 years old	Whole class	45-60 minutes

Proposed step by step implementation of the learning activity

1. **Prepare the Material:** The teacher selects one or more passages from classic or age-appropriate children's literature, focusing on scenes where characters experience strong emotions or face moral dilemmas. The passage can be a full scene or short excerpts depending on time and age.
2. **Read Aloud:** The teacher reads the chosen text aloud to the class, using expressive tone and pacing. They pause at key moments—such as a character making a tough decision, experiencing a loss, or expressing joy or anger.
3. **Guided Reflection Questions:** After each pause, the teacher asks questions like:
   - What is the character feeling right now?
   - What made them feel that way?
   - Have you ever felt something similar?
   - If you were in their shoes, how would you react?
   - What could the character do next?
4. **Pair or Small Group Activities:** Children break into pairs or small groups to:
   - Act out short scenes, experimenting with different emotional responses or outcomes.
   - Create "emotion maps" showing how the character's feelings evolve through the story, using drawings, symbols, or colour coding (e.g., red for anger, blue for sadness, yellow for joy).

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5. **Sharing and Class Discussion:** Groups share their interpretations or creative outputs with the class. The teacher facilitates a closing discussion, comparing different emotional journeys and encouraging students to reflect on how stories help us understand others' feelings.

Indoor/Outdoor Classroom layout notes

Indoor: Arrange students in a semi-circle around the teacher during read-aloud to encourage focus and facial expression observation. For pair or group activities, use floor mats or tables where children can act out scenes or create drawings together in a calm, shared space.
Outdoor (optional): If the weather allows, reading sessions can be held under a tree or in a quiet corner of the school yard. Children can sit on mats while listening, then move to small groups spread out for discussion and drawing.

How does this learning activity develop this particular skill?

Reading or listening to stories that highlight characters' emotions provides a rich context for children to practice emotional perspective-taking. This activity encourages children to notice and name how characters feel, why they might feel that way, and what might help them.

Through guided questions and class discussion, the activity helps children:

- Identify emotional cues in the text or illustrations,
- Reflect on how they themselves might feel in similar situations,
- Explore appropriate and supportive responses.

By discussing literature together, students also develop emotional vocabulary and learn that emotions are complex, valid, and often influenced by context. The shared experience of the story opens a safe space for connection and empathy.

What do we want to achieve regarding primary skill development (student understanding and/or behaviour)?

As a result of this activity, students will:

- be able to recognize emotions in others
- be able to use perspective-taking through fiction
- be able to connect fictional scenarios to personal experiences
- be able to discuss about emotions and actions

Suggested use, and practical subject-related examples

- After reading The Tale of Peter Rabbit (ages 6-7), children discuss how Peter felt when he disobeyed his mother and was chased by Mr. McGregor.
- After Charlotte’s Web (ages 8-9), they explore Wilbur’s feelings of loneliness and Charlotte’s compassion.
- After Matilda (ages 9-10), they discuss how Matilda felt misunderstood and how Miss Honey showed empathy.

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Suggested Books

- 6-7 years old: The Tale of Peter Rabbit (Beatrix Potter), Frog and Toad Are Friends (Arnold Lobel)
- 8-9 years old: Charlotte's Web (E.B. White), Pippi Longstocking (Astrid Lindgren)
- 10 years old: Matilda (Roald Dahl), The Hundred Dresses (Eleanor Estes)

Materials and tools needed for implementation

- Copies of the books (or selected passages)
- Paper for emotion maps
- Art supplies for drawing character emotions

Guiding questions

- How did the character's feelings change during the story?
- Have you ever felt like one of the characters?
- How would you have felt in that situation?
- How did other characters show empathy?
- What does this story teach us about understanding others?

Tips and Tricks for dealing with challenges

- **Challenge:** Some children may focus only on the plot and struggle to identify feelings.
  Tip: The teacher should model emotional interpretation, saying, "I think Peter might feel scared because..." to demonstrate the link between actions and emotions.
- **Challenge:** If children give simplistic answers ("He's sad"),
  Tip: the teacher can prompt deeper exploration with questions like, "Is he sad or frustrated? How are those different?" The teacher should also validate all emotional interpretations, encouraging children to see multiple perspectives (e.g., how Mr. McGregor might feel).

Difficulty level tailoring

- **Beginner learner (6-7 years old):** focus on naming basic emotions and acting out scenes with exaggerated body language to reinforce feelings.
- **Advanced learners (8-9 years old):** introduce character perspective journaling, where they write diary entries from the character's point of view.
- **Experts (9–10 years old):** encourage debate-style discussions, asking whether characters made the right choices and how empathy could have changed the outcome.

Debriefing and Reflection questions

- How did the character's feelings change during the story?
- Have you ever felt like one of the characters?
- What helped the characters feel better or more understood?
- What could another character have done differently to show empathy?
- What does this story teach us about recognising and respecting emotions?

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3.8.5 "Walk in My Shoes" – A Think-Pair-Share Adaptation for Empathy Development

Brief description, and rules of the implementation of the learning activity

In this empathy-focused adaptation of Think-Pair-Share, children are invited to step into the shoes of others. They first reflect individually on an assigned scenario, then discuss in pairs how they would feel and what they would need if they were in that situation. Finally, they share their partner's thoughts with the whole class, practising both perspective-taking and listening to understand.

Skill focus

Primary Skill Focus

- Empathy

Complementary/Secondary Skill Focus

- Emotional awareness, regulation and communication
- Valuing people and nature

Age group	Student number	Duration
6-10 years old	Whole class (ideally 12 to 25 children), working in pairs and small groups	30-45 minutes

Proposed step by step implementation of the learning activity

The teacher presents a selection of age-appropriate scenarios involving situations where someone might experience strong emotions (e.g., feeling left out, losing a beloved object, arriving at a new school). Each child receives a different scenario, or they all work on the same one, depending on the class size and time available.

Step 1 - Think: Each child takes a few minutes to imagine being in that situation and thinks about:

- How would I feel?
- What would I need from others to feel better?

Step 2 - Pair: Children pair up and exchange their reflections, with a focus on listening to understand, rather than giving advice or solutions. They are encouraged to ask clarifying questions like:

- "Why would you feel that way?"
- "Has something like this ever happened to you?"
- "What could someone do to help you?"

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Step 3 - Share: Each child then introduces their partner's story and feelings to the class (not their own). This helps children experience empathy through retelling someone else's emotions and perspectives, reinforcing the idea of stepping into someone else's shoes.

Indoor/Outdoor Classroom layout notes

Indoor: Arrange students in a circle on the carpet or with chairs so they can easily make eye contact in pairs. Leave space for open movement if the activity includes brief role-play scenes. Provide quiet zones nearby for small group sharing or reflection if needed.
Outdoor: Use a shaded area or enclosed space like a courtyard or garden corner. Children can sit in pairs on mats or benches, distanced enough for private conversation but within the teacher's range. The natural setting can promote calmness and deeper engagement with emotional sharing.

How does this learning activity develop this particular skill?

In this outdoor or classroom-based activity, children encounter brief stories or situations presented as footprints or stepping stones. Each step invites them to imagine how someone else feels and what kind of support or response might help.
It supports empathy by:

- Encouraging cognitive perspective-taking,
- Fostering curiosity about others' experiences,
- Connecting walking with reflective emotional engagement.

The symbolic act of "walking in someone's shoes" becomes literal, creating a memorable anchor for the abstract concept of empathy.

What do we want to achieve regarding primary skill development (student understanding and/or behaviour)?

As a result of this activity, students will:

- be able to see situations from another person's perspective
- be able to listen focused on understanding others' feelings
- be able to recognise and name emotions
- be more confident to reflect on how actions impact others' feelings
- be able to communicate more supportive and empathetic way with peers

Suggested use, and practical subject-related examples

Scenario 1: You just moved to a new school, and it's your first day in a class where you know no one.

- Child A might say, "I would feel nervous and lonely. I'd want someone to sit with me at lunch."
- Child B listens and then introduces this story to the class, saying: "My partner said they would feel nervous on their first day at a new school and would like someone to sit with them."

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Scenario 2: You were really excited to show your drawing to the class, but someone laughed at it.

- Child C reflects: "I would feel embarrassed and hurt. I'd want someone to say something nice about my drawing."
- Child D presents to the class: "My partner said they would feel embarrassed if someone laughed at their drawing and would feel better if a friend gave them a compliment."

Materials and tools needed for implementation

- Printable scenario cards or slips of paper with written situations (adjusted to age group)
- Paper and pencils (optional for children to jot down their partner's responses)
- Emotion wheel or emotion cards (optional support for younger children)

Guiding questions

- How did it feel to hear someone else describe how you would feel?
- Was it easy or hard to imagine how someone else would feel in these situations?
- Did anything your partner said surprise you?
- How did you show your partner you were really listening?
- Why do you think it's important to try and understand how someone else feels?
- What would change at school if we all tried to be more empathetic?

Tips and Tricks for dealing with challenges

- **Challenge:** Some children may struggle to articulate how they would feel, particularly if they have never experienced the scenario themselves.
  Tip: The teacher's role is to gently scaffold with open-ended questions like: "Have you ever felt something similar, even in a different situation?" or "What would you say to a friend who felt this way?"
- **Challenge:** Some children may focus too much on problem-solving instead of understanding their partner's emotions.
  Tip: In this case, the teacher can remind them that this is about understanding feelings first, not immediately fixing the situation.
- **Challenge:** If a child downplays their partner's feelings during the share phase.
  Tip: The teacher can gently step in and model how to validate someone's emotions: "Even if we wouldn't feel the same way, it's important to recognize that it's real for them."
- **Challenge:** With shy or reluctant children, the teacher can offer an alternative, like letting them whisper their partner's story to the teacher, who can then share it with the class.
  Tip: The teacher's attitude should be warm, encouraging, and explicitly model empathy throughout, by acknowledging all emotions as valid, praising good listening, and showing curiosity toward each child's perspective.

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Difficulty level tailoring

- **Beginner learners (6-7 years old):** It's important to keep the scenarios very simple and relatable to their everyday life (losing a toy, wanting a turn on the swing, missing a parent at school). Visual aids like emoji cards or pictures can help them name their emotions. The teacher should model how to listen closely and repeat back what the partner said in simple language.
- **Advanced learners (8-9 years old):** the scenarios can include more complex social situations, like feeling left out of a game or arguing with a friend. The teacher can encourage children to link emotions to possible causes and to think about how emotions change when someone offers support.
- **Expert learners (9–10 years old):** the scenarios can be even more nuanced, including themes like jealousy, embarrassment, or feeling misunderstood. This age group is also capable of handling scenarios that involve group dynamics, like what happens when someone in a group gets teased. The teacher can challenge them to think not only about how they would feel, but also about how different people might feel differently in the same situation.

Debriefing and Reflection questions

- How did it feel to speak on behalf of your partner?
- What did you notice about the way your partner felt in their scenario?
- Was it easier or harder to understand someone else's feelings when you had to explain them to the group?
- What can we do in our class to help each other feel more seen and understood?
- How do you think empathy can change the way people treat one another.

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3.9 VALUING PEOPLE AND NATURE

3.9.1 Stations rotation

Brief description, and rules of the implementation of the learning activity

Station Rotation is a blended-learning model in which the class is divided into several "stations." Students move from one station to the next on a set timetable. Because many elementary teachers already organize their classrooms into learning "centres," Station Rotation fits naturally into their routine. It lets teachers give targeted support to small groups while the rest of the class engages in meaningful, self-paced work.

It can be used across subjects—especially in polythematic teaching and multidisciplinary STEAM, where a theme (e.g., water, food, energy, biodiversity, community wellbeing) is explored through science, social studies, language.

Skill focus

Primary Skill Focus

- Valuing People and Nature

Complementary/Secondary Skill Focus

- Connectedness

Age group	Student number	Duration
6-10 years old	Whole class (in small groups)	40-60 minutes (5–10 minutes per station + synthesis)

Proposed step by step implementation of the learning activity

1. **Prepare the Stations (teacher):** The teacher designs a number of stations e.g. 4–6 stations that each address aspects of the topic that the teacher wants the students to know more about. Stations are arranged so small groups rotate on a timetable. Each station includes a clear task brief, materials, and a prompt
   - Choose a theme from current lessons (e.g., water, waste, food systems, school garden, local biodiversity, energy use, community wellbeing).
   - Design 4–6 stations that mix hands-on, discussion.
   - Each station includes:
     - a clear task brief (short and visual),
     - materials ready-to-go,
     - a quick product (1–3 sentences, a sketch, a card sort result, a plan).

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2. **Introduce the topic (2–3 minutes)**
3. **Explain the rotation rules (1–2 minutes)**
   - Groups start at different stations.
   - When the timer sounds, rotate clockwise(or numerical order).
   - Roles: speaker, recorder, materials helper, timekeeper (rotate roles each station).
   - Respectful talk and listening are part of the skill.

   Instructions to give the students: "We're going to move through stations that explore how people and nature depend on and support each other. At each stop you'll do a quick activity—observe, talk, plan, or reflect—then rotate.

4. **Run the rotations (5–10 minutes per station):** Example station elements:
   - Physical station with observation cards (e.g., "Inspect the school garden: Who uses its produce? What helps the plants thrive?") plus a quick sketch or note.
   - Discussion station where students interview each other using question cards about how their family uses local natural resources and what it means to care for both people and place.
   - Stewardship planning station with materials to draft a small action (e.g., signage, mini-pledges, inclusive care ideas).
   - Reflection station where students record what they've learned about interdependence and commit to one small step.
   - Inclusion check station where assess whether their ideas have taken into account the needs of different people (e.g. residents of the local community).

   Running the activity – what happens at each rotation:
   Groups start at different stations. At each:

   - They read the prompt, engage in the task (observe, discuss, prototype, answer digital questions).
   - They record or submit a concise insight.
   - A facilitator or peer quick-check ensures inclusivity ("Who did we think about? Who might be missing?").
   - After the allotted time, a signal cues rotation.
5. **Closing synthesis (8–12 minutes):** After all rotations, the class reconvenes. The teacher facilitates a synthesis: clusters recurring themes, highlights balanced ideas, and leads selection of one or two collective actions. Students share what station influenced them most and finalize personal or group commitments. This consolidates understanding of interdependence and moves learners toward responsibility.

Indoor/Outdoor Classroom layout notes

Indoor: stations around the room with clear walking lanes; one "teacher support table"; visual rotation chart and timer visible to all.

Outdoor: stations set up in safe, clearly marked zones (garden, yard, shaded corner). Clipboards help with writing/sketching outdoors.

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How does this learning activity develop this particular skill?

Station Rotation is a consciously structured active learning approach based on teamwork , where each station is a repeated practice of a particular thinking routine. it boosts engagement and differentiation by combining teacher-led instruction, collaborative projects, and independent digital work, allowing for personalized, flexible learning

This activity develops both connectedness and valuing people because:

1. Developing Connectedness
   - Stronger teacher-student relationships: small teacher-led stations (4-8 students) allow for personalised attention and direct dialogue, so students feel seen and known.
   - Interdependence: in each station, students have to work face-to-face to solve problems, which naturally builds trust and stronger friendships.
   - A sense of belonging: because everyone has to participate in a small-group environment, students quickly realise that their contribution is essential to the success of the team.
2. Developing the Ability to "Value People"
   - Appreciation of different strengths: In multi-skilled groups, students learn to recognise, respect and rely on the unique abilities of their peers that they bring to the project.
   - Practising understanding others: when the teacher is busy leading another station, students need to patiently help, teach and support each other in completing tasks
   - Active listening: working together requires taking turns to talk, compromise and ensure that everyone's ideas are given a fair hearing.

In short, by moving from a teacher-centred lecture space to a decentralised, student-centred community, the alternation of stations naturally weaves empathy, teamwork and mutual respect into the daily routine.

What do we want to achieve regarding primary skill development (student understanding and/or behaviour)?

As a result of this activity, students will be able to:

- understand that people are interconnected and affect each other
- communicate respectfully and show care for diverse people’s needs
- practice responsibility through small, realistic commitments (individual or group).

Suggested use, and practical subject-related examples

Choose 4–6 stations. Each station is a mini learning activity based on lesson content. Below are examples “Value Stations” (adapt to your theme).

- Station 1: Observation & Mapping: Students examine a shared outdoor space or classroom resource, note who benefits from it and what environmental conditions sustain it, and map those connections.
- Station 2: Peer Interview: Using question cards, students ask classmates about how their families use local resources and what caring for those resources would mean for people in different situations.

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- Station 3: Action Design: Small groups draft inclusive stewardship ideas (e.g., a shared reuse corner, multi-user garden plan) that explicitly state benefits for people and nature and note potential challenges.
- Station 4: Inclusion Check: Students evaluate draft ideas with a checklist: “Whose voices are included?” “What environmental impacts are addressed?” and suggest one tweak to improve balance.
- Station 5: Reflection & Commitment: Students individually or in pairs reflect in writing or digitally on what they learned and record a personal next step (pledge or mini-plan).

General curriculum connection examples

- Science: Students rotate between stations such as a hands-on experiment table (e.g., sorting objects by material or testing magnetism), an observation and drawing centre (e.g., of leaves or bugs), a video or interactive simulation on tablets, and a teacher-led discussion station.
- Math: Learners move between math games with manipulatives, a worksheet or puzzle station, a tablet-based practice app that gives instant feedback, and a teacher station where small groups get help with tricky concepts.
- Language Arts: Children rotate through a reading corner, a writing station, an audio listening centre (stories or phonics games on tablets), and a guided reading group with the teacher focused on decoding or comprehension.
- History/Social Studies: Stations include activities such as sorting images of “then and now,” building timelines with classmates, exploring an interactive digital map or story, and discussing community helpers or past events with the teacher.
- Environmental Studies/Geography: Students rotate through stations to complete a “map skills” game, build a model of landforms, watch a short video about weather or habitats, and talk with the teacher about local places and how we care for them.

Materials and tools needed for implementation

- Station labels/signs
- Rotation schedule/chart (visual timetable)
- Timer/clock/stopwatch
- Task/instruction cards for each station
- Offline materials for stations (worksheets, scenario cards, manipulatives, clipboards)
- Paper, pencils, markers, sticky notes
- Optional for outdoor: teacher device + hotspot
- Group assignment & tracking sheets (paper or digital)
- Formative check tools (quick quizzes, exit tickets, self-check prompts)
- Teacher small-group facilitation area (seating, guide/prompts)
- Display space (whiteboard/flipchart) with instructions or progress
- Storage bins/containers + cleaning wipes/sanitiser

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Guiding questions

- Who are the people connected to this situation? Who benefits? Who might be affected?
- Who hasn't had a chance to share—how are you inviting them in right now?
- Are you listening fully before adding your idea?
- Is everyone in your group involved—what can you do right now to include someone?

Tips and Tricks for dealing with challenges

- **Challenge:** Students rush through stations like a race.
  Tip: Use a must-do exit check at every station: Only rotate after the recorder shows all three.
- **Challenge:** Students focus only on people or only on nature, without linking both.
  Tip: Place sentence stems at every station and model one example aloud before starting.
- **Challenge:** One student dominates; others disengage.
  Tip: Assign rotating roles and require "one idea from each person" before submitting the group response.
- **Challenge:** Students propose unrealistic actions.
  Tip: Add a "Doable this week?" filter and provide a menu of small-step actions.
- **Challenge:** Confusion about expectations / directions
  Tip: Make instructions very clear, visual, and consistent at each station (use icons, step-by-step cards, or short pictorial "how-to" posters). Model one rotation as a class before launching. Use simple checklists or "I'm done" cards so students self-monitor.
- **Challenge:** Chaotic or slow transitions
  Tip: Establish and practice a predictable signal (chime, countdown, hand signal) for moving. Display a visible rotation chart/timer so students know when and where to go. Build in a brief "buffer" transition time and rehearse transitions with small groups first.
- **Challenge:** Noise and off-task behaviour
  Tip: Set and rehearse noise-level norms (use visual noise meters or coloured signal cards). Teach and practice what good collaboration looks/sounds like. Positive reinforcement (praise, class points) for on-task behaviour helps reinforce expectations.
- **Challenge:** Teacher time pressure for monitoring multiple stations
  Tip: Use quick formative checks (thumbs up/down, mini whiteboard responses) and rotate your attention systematically (e.g., a brief 1-minute pulse check per group). Train student helpers or peer buddies to handle simple station routines.
- **Challenge:** Resource constraints
  Tip: Reuse materials across rotations, have students prepare or manage some materials (e.g., rotating manipulatives in labelled tubs), and design low-prep stations that rely on discussion or reflection rather than consumables.
- **Challenge:** Engagement dropping in repetitive cycles
  Tip: Refresh station tasks periodically, incorporate movement, choice, or gamified elements (e.g., "mystery mission" at a station). Vary modalities—some stations can be hands-on, some verbal, some digital.
- **Challenge:** Tracking learning and follow-up
  Tip: Use simple tracking sheets or stickers to note who completed what and any observation notes. Collect a quick artifact from each student (photo, short reflection, exit ticket) to inform next steps.

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Communicate the structure to students with a "rotation map" they can refer to and briefly debrief at the end, so learners reflect on what they did and why it mattered—reinforcing understanding of valuing people and nature or whatever the targeted skill is.

Difficulty level tailoring

Teachers can tailor Station Rotation to three difficulty levels to meet learners' needs, adjusting guidance, complexity, and feedback while keeping the core structure (multiple stations, targeted small-group support, and self-paced work) consistent.

- **Beginner learner (6-7 years old):**
  - fewer stations (3–4), highly concrete tasks (observe/sort/draw).
  - picture prompts + sentence starters.
  - teacher-directed actions;
  - scripted collaboration;
  - guided reflection.
- **Advanced learners (8-9 years old):**
  - add trade-off thinking ("If we do X, what might happen to Y?").
  - strengthen inclusion checks ("Who is missing?").
  - adaptive/branching feedback;
  - small-group discussion with coaching;
  - group-planned short interventions; basic self-assessment.
  - require one improvement to an idea after feedback.
- **Expert learners (9-10 years old):**
  - high learner ownership;
  - rich feedback loops (dashboards, goal-setting, peer review);
  - student-led collaboration and multi-step actions;
  - metacognitive reflection and adjustment.

Debriefing and Reflection questions

Awareness / Understanding

- What did you notice today about how people and nature need care?
- What's one new thing you learned about why people or nature are important?
- Which station helped you understand valuing others or the environment most, and why?
- Did anything surprise you about how our actions affect people or nature?

Collaboration / Relationships

- How did you work with your group to show respect or help each other?
- Did you listen to someone's idea that changed how you thought? Tell us about it.
- Who in your group helped you understand something better? What did they do?
- What could your group do next time to include everyone and care for the environment better?

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Action / Responsibility

- What is one thing you (or your group) did today to show you value people or nature?
- What is one thing you will do soon to keep showing care—at school or at home?
- If you could make a class promise about valuing people and nature, what would it be?

Self-assessment (can be a simple checklist or emoji scale)

- I showed respect to others: 😊 / 😐 / 😕
- I helped take care of nature: 😊 / 😐 / 😕
- I listened to my teammates: 😊 / 😐 / 😕
- I can explain one way my actions matter to people or nature. (Yes / Not yet)

Peer feedback (pair/share)

- Tell a partner something they did well today related to valuing people or nature.
- Suggest one small thing your partner could try next time to show even more care.

Teacher facilitation prompts

- “What connections do you see between how we treated each other and how we treated the environment?”
- “What would make our next activity even better at showing care?

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3.9.2 Snowball in action

Brief description, and rules of the implementation of the learning activity

The snowball technique is a structured, cumulative peer-learning activity that builds understanding and consensus step by step: individuals first generate ideas alone, then merge them in progressively larger teams, and finally bring the consolidated thinking to the whole class. Each stage "rolls up" prior contributions like a snowball, refining and expanding them through dialogue. It encourages collaboration, active listening, participation, valuing others' ideas, and critical thinking, making it a powerful tool for exploring complex ideas.

Skill focus

Primary Skill Focus

- Valuing People and Nature

Complementary/Secondary Skill Focus

- Connectedness

Age group	Student number	Duration
6-10 years old	Whole class (individual → pairs → groups of 4 → whole class)	30-45 minutes

Proposed step by step implementation of the learning activity

Step 1 – Teacher prepares a "prompt": The teacher prepares a central, open-ended prompt related to any topic of any lesson. The classroom space (physical or virtual) is organized so students can work individually, then in progressively larger groups (pairs → small groups → whole class). Provide each student/group with a response sheet or digital slide to record and "roll up" ideas.

Instructions to give students: "Today we're using the Snowball to explore how we can value both people and nature. First, you'll think on your own and write down your idea(s). Then you'll pair up, share and combine your ideas, and keep doing that—rolling them together like a snowball—until the whole class has one richer set of ideas. At each stage, listen for how your ideas connect people and the planet, and be ready to explain why what you suggest shows respect and care for both."

Running the activity – step-by-step at each stage:

Step 2 – Individual idea generation (2–3 minutes): Each student responds privately to the prompt. Students can write or draw.

Step 3 – Pair merging (4–5 minutes): Students work in pairs. They share their individual ideas and merge them into one improved response. They record the merged idea on a pair sheet. The basic rule is to always listen and understand what the other person is saying and thinking.

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Step 4 – Small group consolidation (5–7 minutes): Two pairs join to form a group of 4 (or a suitable size). Each pair shares their merged response. The group discusses and creates one stronger consolidated idea.

Step 5 – Whole-class synthesis (8–12 minutes): Each group shares their consolidated idea. The teacher facilitates a collective map on the board The class identifies common themes, highlights balanced ideas, and selects 1–2 actions to try as a class.

Optional extension – Commitment/Action planning (3–5 minutes): Students choose one small action and write a pledge:

"I will... because it helps people by... and helps nature by...".

Indoor/Outdoor Classroom layout notes

Indoor: Students begin individually at desks, then form pairs, then groups of 4. Whole-class sharing happens in a circle/carpet area with a visible board for mapping ideas.

Outdoor (optional): Students can complete the individual and pair stages outdoors (clipboards), then return indoors for group consolidation and whole-class synthesis.

How does this learning activity develop this particular skill?

As ideas "snowball," students refine their thinking through dialogue and learn how communities build shared decisions that can honour people. This activity develops Valuing People & Nature because the structure repeatedly requires students to:

- Exposure to another perspective prompts re-evaluation and enrichment; articulating the rationale reinforces understanding of the dual value and begins social negotiation of shared values.
- Providing low-risk socialisation. For 6-year-olds, getting into a class-wide debate can be scary, which can lead to them feeling isolated if they are too shy to speak up. The snowball method creates a safe, risk-free learning environment (no need to respond immediately and no need to talk in front of everyone) in which each child feels seen and heard by at least one peer, which lays the foundation for connection.
- Encourages deeper collaboration, recognition of diverse viewpoints, and consensus-building around sustainable, equitable solutions—strengthening both conceptual and procedural dimensions.
- Public sharing and seeing the network of ideas highlight interconnectedness at scale, builds a sense of collective responsibility, and models how community-level decisions can honour member of the community.
- The ideas of the group growth, students must listen to each other. It organically trains 6- to 10-year-olds to stop talking and focus on their peers.
- It requires everyone to start with their own idea, and then requires pairs to merge those ideas, every single child's initial thought becomes part of the final, larger discussion. They learn that every person's input is a necessary building block.
- It teaches respect for other people's opinions, ideas and values, and that together we are more than alone.

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- Respecting and dealing with differences: as the "snowball" gets bigger, students will necessarily meet ideas that are different from their own. Since the goal is synthesis rather than argument, children will learn how to appreciate a different point of view and figure out how it fits alongside their own, rather than simply rejecting it.

What do we want to achieve regarding primary skill development (student understanding and/or behaviour)?

As a result of this activity, students will be able to:

- understand that people are connected and influence each other
- recognise that the views and ideas of others are valuable even if they are different
- listen respectfully, appreciate others' contributions, and co-build ideas
- practise responsibility by making a personal or class commitment
- be able to make compromises to reach a common view.

Suggested use, and practical subject-related examples

Use Snowball after a lesson, story, experiment, local observation, or discussion about a real-world theme.

General curriculum connection examples

- Science: Students start by drawing or writing one thing they know about animals or plants, then combine ideas in pairs and small groups to build a class chart showing how living things grow, change, or need care.
- Math: Learners each solve a simple math puzzle (like showing ways to make 10), then share strategies in pairs, small groups, and finally compare all approaches on the board to explore different ways of thinking.
- Language Arts: Children brainstorm describing words for a character or setting on their own, then merge lists in growing groups to create rich, detailed word banks for writing a group story.
- History/Social Studies: Students begin by drawing or describing a rule they think is fair, then combine ideas in teams to make a "Classroom Bill of Rights," discussing fairness and working together.
- Environmental Studies/Geography: Each student shares one way to help the planet (e.g., recycle, save water), then snowball their ideas in groups to build a poster of class eco-actions for the school or community.

Examples for environment science/valuing nature theme:

Suggestion for central prompts:

- Water issue: "How can we use water fairly at school while also protecting nature?"
- Waste issue: "What can we change in our class so less waste is made and everyone can take part?"
- Biodiversity issue: "How can we care for the schoolyard so students and insects/plants both benefit?"
- Community spaces: "How can we keep shared spaces welcoming for people and healthy for nature?" or "How can we create a community garden that nourishes both the environment and the people who use it?"

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Practical progression of scenarios:

- **Stage 1 (Individual):** A student thinks of one idea, e.g., "Start a swap shelf so families can share resources instead of buying new things," noting that it reduces waste and supports community equity.
- **Stage 2 (Pair):** Two students combine ideas: "Create a shared tool library and host monthly 'care for garden' days where volunteers teach others—this saves materials and builds community connections."
- **Stage 3 (Small group):** Groups integrate multiple pair ideas into a broader initiative: "Launch a 'Green & Good' campaign where students gather usable items, redistribute them fairly, and plant native species that provide both ecological benefits and community spaces."
- **Stage 4 (Whole class):** Class selects one action (e.g., a school-wide seed-and-swap event) and outlines how it values people (accessibility, participation) and nature (native planting, reuse).

Materials and tools needed for implementation

Minimal starter bundle

- Sticky notes or index cards + pens
- Prompt question
- Large paper for merging
- Timer
- Simple reflection slip

Individual idea generation

- Small papers/index cards or sticky notes
- Pens/pencils
- Prompt sheet (question or issue to respond to)

Pair/group merging phases

- Larger paper (A3/chart paper) or shared space to combine ideas
- Coloured markers for grouping/connecting
- Adhesive (tape/stickers) or means to "roll up" prior notes
- Merge templates (e.g., "Combined Ideas" sheet)

Whole-class consolidation

- Poster paper or digital collaborative board (Jamboard/Miro/etc.) (optional)
- Display area (wall, board) for the evolving "snowball"
- Voting dots/stickers or highlighting tools to surface key themes

Facilitation and pacing

- Timer/stopwatch (for each stage)
- Instructions/phase cue cards
- Norms reminder (e.g., respectful listening, building on others)

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Reflection and feedback

- Quick reflection prompt cards or slips
- Peer-feedback notes

Guiding questions

Stage 1: individual work

- "What is the absolute best idea that pops into your brain right now?"
- "If you could only pick one thing to draw/write, what would it be?"

Stage 2: in pairs

- "Who wants to share their snowflake first? Decide who is Partner A and Partner B."
- "How are your two ideas the same? How are they different?"
- "Can you mash your two ideas together to make one new, bigger idea?"
- "If you have to pick just one idea to share with the next group, which one do you both agree on?"

Stage 3: working in fours

- "Pairs, take turns introducing your best idea to the new pair. Who will be the brave speaker for your pair?"
- "Did any pair bring the exact same idea to the group?"
- "What is the most surprising thing you just heard from the other pair?"
- "Now that you have four brains working together, what are the top two ideas you want to keep?"

Stage 4: Whole Class

- "Which group wants to share an idea that everyone in their group agreed on?"
- "Did anyone change their mind today because they heard a great idea from a friend?"
- "Look at all these ideas on the board! How did working together make our ideas better than when we were just single snowflakes?"

Tips and Tricks for dealing with challenges

- **Challenge:** Students do not understand the process
  Tip: Explain the process by a physical metaphor they understand. “Right now, you are each a single, quiet snowflake. But soon, we are going to roll our ideas together to make a giant snowman!"
- **Challenge:** Students struggle to generate the first idea.
  Tip: Give only a little time (1-2 minutes) and ask for something very specific and simple. Ask them to write down a single word or draw a quick picture so that they have something tangible to talk about.
- **Challenge:** Students struggle to merge ideas and agree.
  Tip: Require “one idea from each person” before choosing what to combine. Use simple roles (speaker/recorder).
- **Challenge:** Students struggle to listen each other.
  Tip: Ask them to sit "knee-to-knee and eye-to-eye." This physical cue helps little ones focus on active listening.

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- **Challenge:** A group of four may be too big for the little ones (especially 6-7 year olds) and they may not be able to concentrate on the task.
  Tip: Give them a very clear task as soon as they sit down. And use the guiding questions from the previous point
- **Challenge:** Actions are too big or unrealistic.
  Tip: Add a "Doable this week?" check and offer a small-action menu.
- **Challenge:** Students repeat ideas without improving them.
  Tip: Require one upgrade at every stage (add fairness, include a missing perspective, or make the action more practical).

Difficulty level tailoring

Teachers can tailor the Snowball Technique to three difficulty levels to develop Connectedness and Valuing People and Nature.

- **Beginner learner (6-7 years old):** At Level 1 (Foundational), use very concrete, familiar examples (e.g., sharing school garden produce or reducing snack waste) and keep the progression simple (individual → pair → whole class); provide strong scaffolds like teacher modelling, sentence stems, and visuals linking people and nature, and assign clear roles so every child can contribute safely.
- **Advanced learners (8-9 years old):** At this level 2, introduce relatable but broader scenarios (e.g., cleaning the playground while protecting wildlife), run the full snowball (individual → pair → small group → whole class), require pairs to name the "bridge" between human and environmental benefits, use two-column merge sheets and guiding questions, and prompt groups to tweak ideas to be more inclusive.
- **Expert learners (9–10 years old):** At the expert learners level, surface mild trade-offs (e.g., building a path versus preserving plants), expect students to compare or defend integrated ideas, include concrete mini-actions and structured peer feedback, and give learners more autonomy in selecting, refining, and balancing solutions while reflecting on how they honoured both people's needs and nature'.

Debriefing and Reflection questions

1. Reflection on Valuing People:
   - How did your ideas change or evolve throughout the activity?
   - Did any new perspectives emerge as you worked with others?
   - How did those perspectives challenge or reinforce your own ideas?
2. On Collaboration and Group Work:
   - How did collaborating with others help you refine your ideas?
   - What challenges did you face when working in pairs or groups, and how did you overcome them?
   - What benefits do you see in discussing complex topics with others, as opposed to reflecting alone?

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3. General

- “What did you notice changed about your idea as it rolled from individual to whole class?”
- “Was there a time when your group left out a voice or assumption?
- Did anyone change their mind today because they heard a great idea from a friend?
- Look at all these ideas on the board! How did working together make our ideas better than when we were just single snowflakes?"

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3.9.3 Classroom transformation

Brief description, and rules of the implementation of the learning activity

Gallery Walk is an active learning method where students walking around the classroom stations by station (posters, drawings, tasks) placed in different parts of the room. While walking, they observe their peers' work and leave feedback and reflections on them. This technique is good for getting 6-10 year old children out of their desks, forcing to connect and speak each other, and teaching them to value others' work/ideas in a visual, playful way.

Skill focus

Primary Skill Focus

- Valuing People and Nature

Complementary/Secondary Skill Focus

- Connectedness
- Critical thinking
- Emotional regulation

Age group	Student number	Duration
6-10 years old students	Whole class in 3-4 small groups	25-30 minutes

Proposed step by step implementation of the learning activity

1. **Preparation (teacher):** Create five - six questions or prompts about the current topic of study and write each one on a piece of chart paper/create a poster. Give the posters to the small groups and ask them to answer the question on the poster, or fill/draw on the poster according to the question.
2. **Creation:** Students create a piece of work in small groups of 3-4 based on the teacher's prompt (e.g., a story illustration, a short environmental study poster). Hang or place the posters made by the students in various places around the classroom to create the stations. Images, or quotes may also be used.
3. **Walk:** Students start walking in groups of 3-4. They spend 3-5 minutes at each station.
4. **Group discussion and Feedback:** Students read or look at the work of the other groups, read the feedback from previous groups, discuss it, and leave their reflection on a post-it (depending on age and writing skills, this can also be a drawing, or using pictures/icons). Any student can have their own separate opinion. In this process, besides listening to each other and forming a common opinion, it is an important "civic" skill to understand, accept, and respect another person's opinion. It is also important for children to learn that they can have a different opinion and that they can share it safely.

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5. **Return:** Everyone goes back to their own work and reads the feedback they received.
6. **Whole-class discussion and debriefing:** Discussing the experiences based on the debriefing questions.

Rules in primary school:

- We talk quietly in the "gallery," whispering to each other in our small groups, like in a real museum.
- Inside the group, we pay attention to each other's thoughts and try to understand what is meaning.
- We approach every displayed piece of work with respect.
- It would be great if we are able to agree together on what we want to leave as feedback as a group. But is it not a must.
- Everyone in the group can have a separate opinion, which the other members of the group must respect. This separate opinion is also placed on the poster as feedback.
- We move forward in the given direction when the teacher gives the signal.

Indoor/Outdoor Classroom layout notes

It is useful to move the desks to the centre of the room (forming a large island or U-shape) to create a wide, clear "walking corridor" along the walls. Secure the 5-6 stations (posters) at a safe distance from each other on the walls, so the groups of 3-4 students can stand around them comfortably and talk quietly without disturbing the children working at the next station.

How does this learning activity develop this particular skill?

The method develops connectedness by giving children physical space and time to interact with each other during lessons (which accounts for the majority of school time), not just during breaks. They do not just sit at their own desks but see and feel that they are part of a larger community.

Valuing people is built in most effectively through the rule that they must listen to each other within the group, agree on a common message, and at the same time, respect separate opinions. respect differing opinions. When they see that a different idea can also be legitimately included on the poster without causing any harm, they learn that difference is not a defect, but a value.

The Gallery Walk organically teaches children the basics of democratic participation, which is a very important part of the valuing people skill, and vice versa. Since every group's or individual's work is displayed equally in the room, children experience equality. Everyone has the right to their own opinion, to "vote" (stick a post-it), and to express their thoughts. They learn that every voice matters in a community, decisions (feedback) must be made together, but the minority opinion (separate opinion) also has a right to exist and a visible place in the system.

For a 6-7 year old child (first or second grader), speaking in front of the whole class is often scary, which makes shy children stay quiet. However, the "walking" micro-community of 3-4 students gives them a safe, low-risk safety environment. In this close, private space, even the shyest child is braver to share their ideas with their peers. If the group accepts and jointly posts their idea on the poster, it gives them confidence for speaking in larger communities later on.

In summary, the technique clearly develops mainly the valuing people skill but also the connectedness.

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What do we want to achieve regarding primary skill development (student understanding and/or behaviour)?

1. Understanding level: By using the technique regularly and consciously, we want to achieve that:
   - they consider their classmates' thoughts valuable.
   - children think and act in a way that learn that approach different from their own should not be rejected but rather viewed as a source of inspiration.
   - understand to react constructively to others' thoughts and actions without causing hurt.
   - understand that there can be several correct answers, feelings, or thoughts regarding a problem (or the topic of a poster)
   - they understand that a difference of opinion is a natural thing.
2. Behaviour level:
   - they learn to listen patiently to another person without interrupting.
   - they dare to stand up for their own opinion, even if it differs from the majority.
   - they are able to react to their peers' work in a constructive, encouraging, and respectful way.

Suggested use, and practical subject-related examples

1. Mathematics:
   - Topic: Solving a more complex verb-based exercise or representing a number (e.g., 12) in as many different ways as possible (using a drawing, addition, multiplication, or sticks).
   - Gallery Walk: The walking groups examine the reasoning behind the others' work. They can write a solution on a Post-it note that is missing from the original poster, or mark a star next to the mathematical step they consider the cleverest.
2. Science:
   - Topic: Designing a simple experiment (e.g., what happens when we put a bean in the dark?) or drawing and comparing the life cycles of a flower, tree, or animal.
   - Gallery walk: The children examine the others' hypotheses (assumptions) or drawings. On the sticky notes, they can leave a "Did you know?" fact about the topic or ask the creators a scientific question.
3. Environmental Studies:
   - Topic: Sustainability and environmental protection. Creating posters about how we can conserve water or what we can do to reduce waste at school.
   - Gallery walk: Students can make "pledges" on others' posters. If they see a good idea (e.g., using a water bottle instead of a plastic bottle), they can draw a tick on a post-it notes to indicate that they are committing to it as well.
4. Language and literacy:
   - Topic: Making up an alternative ending to a story read together, or drawing a "mind map" of a main character.
   - Gallery Walk: The students read the others' story endings. As feedback, they can write down which part was the funniest or most exciting, or suggest a new character for the story.

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5. Visual and arts:
    - Topic: A "real" exhibition of artwork made with a specific technique (e.g., watercolour, collage).
    - Gallery Walk: Classic art critique tailored for children. The rule is that they have to find a specific detail they like. For example: "You mixed a very nice blue colour for the sky!" or "The shape you drew there is great!".
6. Health and physical education:
    - Topic: The groups have to plan a short, 3-station obstacle course or a morning warmup exercise on paper.
    - Gallery Walk: The walking groups go through the others' courses "in their minds". They can write (or draw with a stick figure) an extra challenge or a new warmup exercise on the post-it to add to it.
7. Tinkering:
    - Topic: Building an object, bridge, or toy from recycled materials (e.g., paper rolls, boxes). The built 3D prototypes (models) themselves are placed at the stations.
    - Gallery Walk: Students walk around and examine the others' structures. The feedback focuses on improvement: "I think your bridge would be even stronger if you put a... under it" or "It would look even better if you coloured the...".
8. Class teacher's lesson:
    - Topic: Emotion regulation. There is the name of an emotion at each station (Anger, Sadness, Joy, Fear).
    - Gallery Walk: The small groups have to discuss and write/draw on a note: "What helps you calm down when you feel this?". (This is a great place for separate opinions to show up and be respected).

Materials and tools needed for implementation

- A3 or A4 paper for the artwork.
- Post-it (sticky) note pads in different colours.
- Pencils, coloured markers.
- Blu-tack for attaching to the walls.
- Specific materials needed for the subject activities (e.g., printed math problems, short texts, experiment tools).

Guiding questions

- What's the most interesting thing you found at this station?
- Has everyone in your group shared what came to mind when they saw the poster?
- Is there anyone who sees this issue differently than the others? How can we display his or her thoughts so that they are clearly visible?
- What positive message or symbol could you leave on this project that would make you happy?

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Tips and Tricks for dealing with challenges

- **Challenge:** There are too much pushing and chaos during the walk.
  Tip: Set up a strict one-way route, and introduce an agreed quiet signal (e.g., a small bell, or the teacher raises their hand).
- **Challenge:** The noise level rises in the room, small group whispering turns into shouting.
  Tip: Use background music! Tell them the rule: "People speak quietly in a museum. If you can no longer hear the soft music over your own voices, it means you are too loud".
- **Challenge:** Children leave negative, hurtful, or teasing messages for each other.
  Tip: Introduce the "Only leave what you would be happy to get" rule. Prepare approved positive symbols in advance (e.g., heart = I really like it, star = nice colours).
- **Challenge:** A louder student in the group dominates the others, and only their opinion gets on the note.
  Tip: Assign roles within the groups! Have someone be the "Questioner" whose job is to ask before moving on: "Peter, you haven't spoken yet, what do you think about this?".
- **Challenge:** Students are afraid to share their separate opinion because they are worried about their group mates' reaction.
  Tip: Introduce the concept of the "Separate Opinion Note" (e.g., the pink post-it). Tell them that a group is really clever if they can stick a pink note too, because it means they can think in many different ways. Praise those who stand up for their own idea.
- **Challenge:** Arriving at a station, students feel the groups before them have already written everything down and they have no new ideas.
  Tip: Allow them not to write a new one in this case, but to find one of the existing post-its they strongly agree with and draw a star or a checkmark next to it. This also lets them practice valuing others' thoughts.
- **Challenge:** Hanging up the work takes too much time away from the lesson.
  Tip: Make it part of the task: children should find an empty spot in the room and secure their own work with the blue-tack provided).

Difficulty level tailoring

Teachers can tailor the Gallery Walks to three difficulty levels to meet students' needs.

- **Beginner learners (6-7 years old):** (Grades 1-2): The children can barely read or write yet. They mainly draw on the posters. The groups do not write text feedback, but stick tiny, pre-cut symbols (e.g., smiley face, lightbulb for a smart idea). A separate opinion means if someone in the 3-person group wants to stick a different kind of sticker than the available pre-cut symbols or draw something else next to the poster.
- **Advanced learners (8-9 years old):** (Grade 3): Students express themselves with shorter sentences. They can write a shared, agreed-upon compliment phrase (1-2 words) next to the poster. The group is able to handle sticking two different post-its at the station: one they agreed on, and one with a team member's separate opinion.
- **Expert learners (9–10 years old):** (Grade 4): The children can read and understand the feedback left by previous groups. They can debate and argue within the small group. They can explain their separate opinion in text form (e.g., "We think differently because...") and also leave questions for the original creators of the poster.

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Debriefing and Reflection questions

1. On connectedness:
    - How did you feel when you saw that all the class's work is out on the wall together?
    - What did it feel like to return to your own station (poster) and see how much the others added to it?
    - Did you feel during the walk that even though you were in small groups, the whole class was still working together, and everyone's mark is on the walls?
    - Did you feel like you are part of a big team?
2. On valuing people:
    - What did you learn today from your peers' work and opinions?
    - Was there a situation in your small group when someone had a different opinion, and how did you handle that?
    - How did you manage to discuss this peacefully and write it on the note?
    - What good or surprising idea did you learn today from a classmate that you wouldn't have thought of yourself?

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3.9.4 Equity-in-Cooperative-Learning-Groups

Brief description, and rules of the implementation of the learning activity

Cooperative-Learning-Groups is a complex active learning method based on high-level group work that creates equal opportunities, eliminates status differences within the group, and focuses on mutual respect. It combines the practices of Stanford University and the Hungarian Complex Instruction Program. It allows for the dismantling of status differences (knowledge, ability, and social hierarchies) within the classroom and the integration of disadvantaged or marginalized students.

Skill focus

Primary Skill Focus

- Valuing People and Nature

Complementary/Secondary Skill Focus

- Connectedness
- Critical thinking
- Empathy
- Problem-solving
- Creativity
- Flexibility

Age group	Student number	Duration
6-10 years old students	Whole class in 3-4 small groups	25-30 minutes / activity

Proposed step by step implementation of the learning activity

The teacher transforms traditional individual lesson exercises into open-ended group exercises organized around a central theme of the lesson. The open-ended group exercise should be designed so that

- solving them require diverse knowledge, experience, and skills. (these diversity is what complexity means in this active learning technique).
- no single student can solve them alone, but everyone can contribute to the solution and success.
- because the task is open-ended, there is no one best correct solution.

The essence of carrying out the task is not about who is the best, but rather about cooperation based on the group's diversity.

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Suggested step-by-step implementation of the learning activity:

1. **Planning and task design:** The teacher designs an open-ended task around a "big idea" (major topic of the actual lesson) that ensures mutual dependence within the group but also individual accountability.
2. **Group formation:** The teacher consciously creates heterogeneous groups of 4 (based on ability, background, and status).
3. **Role assignment:** Four roles are assigned within the group for the 6-10 age group: The „Little Teacher" (keeps the group on task), The „Materials Manager" (handles the materials), The „Harmonizer" (ensures everyone gets a chance to speak), and The „Spokesperson" (presents the work of the group).
4. **Introduction of "Multiple Abilities":** The teacher states the basic principle: "This is a complex task. No one is good at everything, but everyone is good at something. Today we need creative thinkers, skilled craftsmen, precise finisher and active listeners."
5. **Group work, Tasks Delegation and Empowerment:** The students work. The teacher steps back from directing, that is the Little Teacher's role. The teacher observes status issues, group dynamics, and collaboration, and intervenes when necessary to "assign competence to a specific child" (e.g., by publicly praising a quiet student's unique contribution or skill).
6. **Reporting:** The Spokespersons present the group's creative solutions to the class.
7. **Role rotation:** Next time, the roles change, allowing low-status students to become leaders and dominant ones to become supporters.

Rules in primary school:

- **Rule 1:** Tasks must be open-ended (multiple good solutions are possible) and require "multiple abilities" (e.g., reading, drawing, calculating, spatial awareness, organizing).
- **Rule 2:** Every member has a specific role in group work (Little Teacher, Materials Manager, Harmonizer, Spokesperson – in the case of students grade 4 more roles could be added) which changes with each new task (in the next lesson task, or next lesson) to ensure equal opportunities. Thus, roles are not permanent, and everyone will predictably act in every group role.
- **Rule 3:** The teacher delegates control to the groups.
- **Rule 4:** The activity must relate to a central theme of the given subject/lesson.

Indoor/Outdoor Classroom layout notes

This is essentially an indoor method, but of course it can also be used when the class takes place outdoors. In the case of classroom implementation, keep the following in mind:

- Desks must be arranged into "islands" of 4, ensuring students sit „face-to-face" and be able to make eye contact.
- Materials (papers, scissors, books) must be placed on a central table, from where only the Materials Managers can take them, reducing classroom chaos.

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How does this learning activity develop this particular skill?

The Equity-in-Cooperative-Learning-Groups method was originally created specifically to handle hidden classroom dynamics, hierarchies, and social differences. Therefore, developing Connectedness and Valuing people is not just a "byproduct" of the activity, but the main pedagogical goal of the method.

Developing Valuing people:

The development of the Valuing people skill is based on that students recognizing and respecting the values inherent in others, understanding that diversity is an advantage, and being able to overcome prejudices and social/academic hierarchies. This is ensured by group work, open-endedness, and the diversity of required knowledge, experience, and skills (complexity):

- **Role rotation:** A ranking (status hierarchy) forms in every class. The ideas of good students or dominant, (noisy)students are automatically accepted, while the ideas of weaker or disadvantaged students are often ignored. The assigned and continuously rotated roles break this ranking. When the "passive/low status student" becomes the Little Teacher and the "good student's" task is to quietly provide materials (Materials Manager), children are forced to look at each other with respect from a new perspective. They learn to value the other person in a position they have never seen them in before.
- **The principle of "Diversity of Abilities":** The implementation of the tasks used by this method do not require the knowledge of only one thing (good at numbering), but rather demand spatial awareness, drawing skills, empathy, problem solving and critical thinking, organizational skills, manual dexterity. The teacher makes the group aware of this in advance: "No one is good at everything, but everyone is good at something." When the group gets stuck and the task is solved, for example, by a student with dyscalculia who has excellent spatial awareness or drawing skills, the other students learn to recognize and value the different kind of talent within that student.
- **Assigning Competence:** When the teacher notices that a "low status" or often marginalized student has a good idea, and praises this loudly and specifically in front of the group ("Notice how cleverly Laci grouped these data, this is a huge help for the task!"), it immediately changes the group's value judgment. The peers get the message that this student is valuable and smart. By doing this, students learn how to look for and value the positive in every single person, instead of focusing on their shortcomings.

Developing Connectedness:

The development of Connectedness with this method is based on students feeling part of a supportive community, experiencing a sense of belonging, and being able to build a network of trust with their peers.

- Positive interdependence through open-ended tasks: In traditional education, students work next to each other, but isolated (or competing with each other). In this method, tasks are complex so that they must be solved together. The successful joint completion of the task psychologically unites the group. They experience that they are "rowing in the same boat".

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- Delegating control: The teacher consciously steps back, and students are forced to turn to each other for help. If the group gets stuck, the teacher does not solve the problem, but students do it together with their peers.
- Continuous dialogue and joint thinking within the group create deep, real connections. The more the group discusses and talks about the task, the stronger their cohesion and the learning experience.
- Rotation of standard roles: This guarantees that quieter or marginalized children cannot "hide," and dominant children cannot suppress them. When an anxious students' experiences that the group needs their work and their peers listen to them (because the method obliges them to), their attachment to the group and the class drastically increases.

In summary, the technique clearly develops primary the valuing people skill but also the connectedness. This active learning technique is not just about mastering the curriculum. Structured cooperation, the sharing of power (control), and the inclusion of multiple abilities force students to rely on each other and value each other.

What do we want to achieve regarding primary skill development (student understanding and/or behaviour)?

Understanding level: By using the technique regularly and consciously, students understand that:

- the group's success depends on the members' cooperation, not on the performance of a single "smart" student.
- a "good student" is not only one who reads fast or calculates flawlessly, but also highly valuable is the one who draws well, has excellent spatial awareness, is empathetic, or can calm others down.
- it is nature to make mistakes, and joint thinking overrides competition.
- class ranking does not determine a person's true value, and they become more open towards their non-dominant peers.

Behaviour level:

- students are curious and ask for the opinions of their quieter, or marginalized peers (e.g., "What do you think about this, Peter?").
- students voluntarily, loudly praise and acknowledge each other's specific contributions.
- when a low-status student acts as the "Leader", high-status (dominant) students accept their direction, consciously step back, and give them space without dominating the task.

Suggested use, and practical subject-related examples

The method can be applied in connection with any subject. The teacher's task is to transform individual lesson tasks related to the current topic of the lesson into open-ended group tasks in such a way that it requires not the knowledge of a single thing, but a diversity of knowledge and skills. We leave the application of this to the reader).

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Materials and tools needed for implementation

- Open-ended task descriptions (where there is not only one best solution).
- Shared creative tools and crafting materials (large sheets of wrapping paper, coloured pencils, modelling clay, glue, etc.).
- Specific materials needed for the subject activities (e.g., printed math problems, short texts, experiment tools).

Guiding questions

- Little Teacher, how could you divide the work so that the others can also participate?
- Spokesperson, do you understand everything your group is doing right now? If you had to stand up now, could you explain it to the class?
- Did you pay attention so that everyone could share their proposal?
- I hear you have two very good, but completely different ideas. Harmonizer, what method do you suggest to the group for making a decision? Will you vote, or try to merge the two?
- Before you move on, could someone repeat exactly what their peer's proposal was? Are you sure you understood each other?
- What is our next step and who is doing it?
- Are we staying focused or getting distracted? What helps us follow through?

Tips and Tricks for dealing with challenges

- **Challenge:** A high-status, dominant student wants to do everything themselves.
  Tip: Enforce the roles! Ask the Little Teacher why they allow one person to work or introduce the rule that only the Materials Manager can touch the tools until there is a joint decision.
- **Challenge:** A low-status student is passive, or the others ignore them.
  Tip: Notice a good thought from the passive student and praise it loudly: "Look how uniquely Peter arranged the shapes. This is exactly the visual logic the group needs right now!"
- **Challenge:** Students finish too quickly, then get bored.
  Tip: The task was probably not open-ended enough or requiring multiple abilities. Prepare deepening "challenge questions" for early finishers.
- **Challenge:** Students argue loudly and cannot agree.
  Tip: The teacher should not solve the conflict! Support the "Harmonizer" with sentence: “How could we merge the two ideas?” or “Do you think it’s time to vote?” Expect them to do their job.
- **Challenge:** Younger (6-7 years old) children forget their roles.
  Tip: Use large, clear pictures on the role cards. Before starting work, stand up all the Little Teachers, then the Materials Managers, and have them state loudly what their job is that day.
- **Challenge:** The group gets lost in the details and runs out of time.
  Tip: Use a large visual timer and make it the Little Teacher's (or Timekeeper's) job to track it. The teacher should not rush them, but ask a question forcing prioritization (e.g., "What is the single most important step right now so the Spokesperson can stand up?”).

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Difficulty level tailoring

Teachers can tailor the Equity-in-Cooperative-Learning-Groups to three difficulty levels to meet students' needs.

- **Beginner learners (6-7 years old):** Instead of text-centred tasks, focus on hands-on, physical, building, or drawing activities.
- **Advanced learners (8-9 years old):** Groups of 4+, all 4+ roles assigned. The tasks require more reading, interpretation, and multi-step problem solving. They can only ask the teacher for help if all 4 members have the exact same question.
- **Expert learners (9-10 years old):** Completely open-ended project tasks spanning multiple lessons. Students themselves must recognize and praise the special abilities of their peers during reflection. There can be larger groups of 6 with additional roles.

Debriefing and Reflection questions

- How did working together make the task easier or more fun compared to doing it alone?
- Can you share a moment when you felt you were a really strong, cohesive team?
- How were you able to move forward when the group disagreed on something?
- What was a surprising, smart thing that one of your teammates did today?
- We said today's task requires multiple abilities. Whose special ability helped the group the most today, and in what way?
- What did you learn today from your peers' work and opinions?
- What good or surprising idea did you learn today from a classmate that you wouldn't have thought of yourself?

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3.9.5 Debating

Brief description, and rules of the implementation of the learning activity

Introducing debate in elementary school might seem challenging at first, but if we view it as a structured, controlled and coached exchange of opinions, it becomes one of the most effective tools for developing the ability and willingness to understand one another, to take each other's opinions into account, to appreciate each other's thoughts, and, through this, to value one another - in other words, the skill of valuing people. The regulated framework of debate gently but firmly shifts 6-10 year old child's out of this state.

Skill focus

Primary Skill Focus

- Valuing people and nature

Complementary/Secondary Skill Focus

- Emotional awareness, regulation and communication
- Critical thinking,
- Empathy

Age group	Student number	Duration
6-10 years old students	Whole class our in small groups	15-25 minutes

Proposed step by step implementation of the learning activity

This learning activity is debating through effective argumentation, but in a positive, educational sense: students learn to express different viewpoints using reasons and evidence, while listening respectfully. The topic is always chosen to address the actual lesson content directly. As a teaching technique it starts with a clear issue or question that has different perspectives. Students take on roles - proponent (presenting a viewpoint), opponent (questioning or countering), and audience (reflecting/evaluating) in the context of critical discussion. I this context, focus could be placed on respectful listening, and sometimes working toward shared solutions, using forms like critical discussion or persuasion to deepen thinking and communication rather than "win" an argument.

In this activity, in addition to listening to and understanding others' opinions, we rely on reasoning, because In this activity, in addition to listening to and understanding others' opinions, we rely on reasoning, because unfounded opinions can lead to choices and actions that may harm other people, communities, or the environment. In this way, we are also able to strengthen the "valuing people" skill. As part of being respecting and valuing others, the students have a responsibility to do our best to speak and decide using reasons and evidence, not just pride or "because I feel like it." In a safe classroom debate, students practice asking, "What makes this true?" and "Who could be affected?" so their ideas become more thoughtful, fair, and caring.

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Rules:

- We debate to understand and connect, not to hurt or “win at all costs.”
- Every claim must include a reason + evidence (a picture/story/data fact/example).
- Before responding, elementary students must first repeat what the other person said, and before presenting their own argument, they must briefly summarize the other person's point. (E.g.: "I heard you say that you like dogs better because you can run around with them, but I think cats...."). This forces students to pay deep, attentive attention.
- Use evidence, not pride: we can change our mind if someone shows stronger reasons/evidence.
- Use respectful language and turn-taking (token/timer).
- Every group must finish with a common-ground proposal and a small shared action that strengthens belonging/connection.

Running the activity – step-by-step implementation

Step 1 – The teacher chooses a debate question/statement address it to the actual lesson's content (teacher preparation): The teacher picks a clear, issue that taps content of the actual lesson. The room is set up in small triads with role cards: Speaker for one side, Speaker for the other side, and Listener/Audience. Materials include picture-based issue cards, simple evidence prompts (drawings, short stories, photos), sentence starters for making a point or asking a question, a “listening hat” or token, and a poster of respectful rules (“wait your turn,” “say it kindly,” “repeat what you heard before replying”).

Step 2 - Instructions to give the students: “Today your job is to talk, ask, and listen so we all understand each other better—not to win, but to learn to understand your mate ideas and way of thinking. Use your words, say what you think, and try to find something we can do together.”

Step 3 - Students prepare their ideas (Claim–Evidence–Reasoning):

- Claim: “We think…”
- Evidence: “Our evidence is…” (picture/story/fact/data)
- Reason: “This shows… because…”

Each child thinks or draws one reason for their side, using prompts.

Audience kids get a checklist of things to listen for (kind words, a reason, repeating the argument of the mate, respect, etc).

Step 4 - Share and question: The two “speakers” take turns sharing their idea, while they ask each other a polite question Use a simple structure with a timer and a talking token.

1. Opening statement (Proponent): claim + evidence + reason
2. Opening statement (Opponent): claim + evidence + reason
3. Question round: each side asks 1 respectful question: ("Can you tell me more?” or “Why do you think that ....?" or "Can you make it clear, please?”).
4. Repeat-back rule: before answering, students say: “I heard you say…” (accurate listening)
5. Audience feedback pause: Bridge Builders share one observation: “I/we noticed both sides care about…” (common values)

Step 5 - Find something in common / small joint idea: The triad talks briefly to find one small thing they all agree on or a small shared action. They draw or write that together.

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Step 6 - Rotate roles and repeat (optional): Children swap roles so listeners become speakers and vice versa, trying the same question or a new but related one.

Step 7 - Whole-group wrap-up and small action: Pairs/triads share their common idea with the class. Teacher collects examples and helps the class pick one small thing to do together (e.g., a welcome card for new students, a shared story exchange with another class).

Indoor/Outdoor Classroom layout notes

Typically indoors, but not necessarily.

Indoor - Set up as a friendly debate circle:

- one side, opposite side, audience in the middle or around the circle
- norms poster visible
- evidence packs on tables
- timer + turn token

Outdoor (optional): Use clipboards and spaced circles for teams, especially if evidence comes from observing shared outdoor spaces.

How does this learning activity develop this particular skill?

During traditional conversations, children often don't listen to each other; they just wait for their turn to speak their mind. Debate breaks this pattern.

- Because they must briefly summarize the thought of the previous speaker, this forces students into deep, active listening.
- During a debate, children learn that a good question is a sign of attention.
- Fixed time limits and rules for passing the word (e.g., using a "talking object") physically and mentally slow down communication, teaching children quiet attention.
- Based on the separation the Person from the Idea, they experience that they can argue fiercely with someone about a topic while remaining friends. This is the foundation of respect and valuing people.
- During a structured debate, even quieter, more withdrawn children get their own guaranteed time when no one can interrupt them. Dominant, vocal children are forced to listen quietly and evaluate the arguments of their quieter peers.
- In more advanced classes (3rd-4th grade), you can introduce a rule where a student must argue for a position, they actually disagree with (step 6 – optional). When a child has to step into the other party's shoes and find logical arguments to defend the "other side," it radically increases understanding and acceptance of people who think differently.
- Children practice expressing different viewpoints, hearing others, and recognizing shared concerns—building empathy and sense of mutual belonging.
- Moves from recognition to responsibility—making connection actionable.

The activity also strengthens critical thinking by practicing claim–evidence–reasoning, evaluating which evidence fits a claim, and asking clarifying questions. It also strongly strengthens empathy and emotional awareness, regulation and respectful communication.

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What do we want to achieve regarding primary skill development (student understanding and/or behaviour)?

As a result of this activity, students will be:

- Understand that a good question is a sign of attention. When a peer presents an argument, the group's task is not (only) to contradict, but to ask clarifying questions
- Able to separate the person from the idea.
- Understand that "they disagree with my idea" does not equal "they don't like me".
- Want to understand others and be patient in listening to their opinions
- able to use kind language and include others when talking about community.
- able to listen and restate what others said before responding.
- show empathy by trying to understand the other person's idea.
- able to resolve a discussion and come up with a mutual win-win solution
- able to accept that the other person is right.

Suggested use, and practical subject-related examples

General curriculum connection examples

- Science: Students discuss a simple, age-appropriate question like "Should animals live in zoos?" or "Which material is best for keeping things warm?" using hands-on experiences and visuals to support their opinions with reasons.
- Math: Learners explain and compare their thinking on different ways to solve the same problem (e.g., "Is it better to use doubles or make ten for 8 + 7?"), using drawings, manipulatives, or number lines to back up their reasoning.
- Language Arts: Students take on roles to argue about a book-related prompt like "Was the character brave or not?" or "Which ending would be better?" using simple examples from the story and respectful turn-taking.
- History/Social Studies: Children explore questions like "Was it fair?" in scenarios from everyday life or classroom history topics (e.g., rules in the past vs. now), listening to each other and offering simple justifications and alternatives.
- Environmental Studies/Geography: Students argue everyday topics like "Should we have more trees at school?" or "What's the best way to save water?" while learning to listen, build on others' ideas, and suggest solutions

Materials and tools needed for implementation

- Debate question cards (picture-based for younger students)
- Role cards (Proponent, Opponent, Audience/Bridge Builders)
- Respectful debate norms poster
- Turn-taking token + timer
- Evidence packs (pictures, short texts, scenario cards, simple class data)
- Claim–Evidence–Reasoning templates (paper)
- Audience observation checklist
- Sticky notes for common ground + action planning
- Optional (advanced): simple research tools (survey sheet, interview prompts, observation notes).

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Guiding questions

- What is your claim? What is your evidence?
- Where did that evidence come from (pack, survey, observation)?
- Who is affected by this choice? Who might feel left out?
- Can you repeat what you heard before replying?
- What is one kind way to disagree?
- What do both sides care about?
- What is one small action we can do together this week?
- What evidence are you using (picture, story, data, observation)? How does it support your claim?
- Are you disagreeing because of evidence or because of pride/just wanting to win?

Tips and Tricks for dealing with challenges

- **Challenge:** Students debate to “win” and get upset.
  Tip: Make “evidence + repeat-back + common ground” required. Praise bridge-building and respectful listening.
- **Challenge:** Students give opinions without evidence.
  Tip: Use evidence packs for younger children and require them to physically point to the card/fact they’re using.
- **Challenge:** Some students dominate; others stay silent.
  Tip: Use timed turns, role rotation, and give quieter students the Bridge Builder role first (then switch).
- **Challenge:** Evidence is misunderstood or too difficult.
  Tip: Keep evidence age-appropriate (pictures, short stories, class data). For advanced groups, teacher curates 1–2 child-friendly sources.

Difficulty level tailoring

Teachers can tailor the Debating to three difficulty levels to meet students’ needs.

- **Beginner learners (6-7 years old):** Use very simple, familiar questions, give full support with role cards, sentence starters, modelling, and very short exchanges - focus on listening and finding one common thing. Create a safe space to express an opinion and practice taking turns. A great approach is a physical debate or a "this or that" scenario. The teacher can then pass a talking object around, asking each student to provide just one simple reason for their choice using a provided sentence starter. At this stage, there is no back-and-forth arguing; the goal is purely sharing and listening.
- **Advanced learners (8-9 years old):** Around eight to nine years old, the students are ready to respond directly to one another and build slightly more complex thoughts. Introduce slightly broader questions, have children switch roles once, ask them to restate each other’s ideas before replying, and guide them to a shared small plan. This is the perfect time to introduce the echo rule, where a student must summarize what the previous person said before making their own point. Students should be expected to provide a clear opinion with at least two supporting reasons and use transition phrases provided on the board, respectfully acknowledging the other side before stating their own case.

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- **Expert learners (9-10 years old):** Introduce formal team debates with three members on each side, assigning specific roles like introducer, rebutter, and summarizer. Give them a few minutes of preparation time to brainstorm arguments as a team. To truly push their cognitive and empathy skills, you can assign them a stance they might personally disagree with. This role-reversal requires them to rely on logical examples rather than personal feelings, and they must actively take notes while the opposing team speaks so they can prepare thoughtful counter-arguments.

Debriefing and Reflection questions

- What did it feel like to repeat someone's idea before answering?
- How did evidence help you understand the issue better?
- How did you show respect when you disagreed?
- What shared solution did your group create, and how does it strengthen mutual respect?
- Did you change your mind about anything today? What evidence helped you?
- Why is it important to use reasons and evidence (not pride)?

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3.10 CONNECTEDNESS

3.10.1 Classroom Transformation

Brief description, and rules of the implementation of the learning activity

Classroom transformation is a technique and learning activity where the room is temporarily turned into a themed, real-world–like setting that connects directly to the lesson, and students take on roles or do activities tied to that context. It is similar to simulation in that learners get to practice skills in a safe, low-risk environment, but it adds atmosphere, narrative, and sensory elements to boost interest and make the content feel more real. The goal is to weave curriculum content into the immersive experience, so students become active participants, helping them better understand and retain what they are learning

Because transforming a classroom takes time, this learning activity is designed to be used across multiple subjects and themes. Teachers can reuse the same layout in different lessons (language, social studies, science, art/design, digital culture), simply by swapping tasks around while maintaining the connection structure. This makes the investment in resources and atmosphere worthwhile over several lessons or a whole thematic unit.

Skill focus

Primary Skill Focus

- Connectedness

Complementary/Secondary Skill Focus

- Valuing People and Nature

Age group	Student number	Duration
6-10 years old	Whole class	45 - 70 minutes (or split into 2 sessions)

Proposed step by step implementation of the learning activity

The teacher chooses an immersive transformation theme that naturally invites connectedness and layers of belonging—examples: a Community Heroes Headquarters (superhero-style), a Global Pen Pal Post Office (adventure/explorer news vibe), a Welcome Hub for New Friends, or a Connection Café. The space is decorated with props, role badges, ambient music or visuals, and simple “story boards” showing how classroom, school, and community fit together. Kids get clear role cards (e.g., greeter, storyteller, connector, reporter, helper), and there are step posters that guide them: start by connecting with classmates, then reach out to others in the school, think about neighbourhood links, and finally consider someone farther away.

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Materials:

role badges, prompt/question strips, “connection mission” cards (e.g., “Find one thing you and a classmate both like,” “Ask someone from another class what makes them feel welcome,” “Write or draw something to send to a friend in another place”), simple creation tools (poster paper, welcome notes, “hero mission” scrolls), reflection stickers.

Instructions to give the students:

“Today our room becomes a real place where people come, talk, help, and belong. You have a role—maybe a helper, storyteller, or welcome ambassador. First, you’ll connect with someone in our class, then with others in the school, think about our neighbourhood, and even imagine friends far away. Use kind words, listen carefully, and help make someone feel part of the team. We’ll do something together that shows how connected we are.”

Running the activity – step-by-step practical description/instructions

Step 1: Set the scene and begin in the classroom: Teacher introduces the transformed setting (e.g., “Welcome to Hero Headquarters!” or “This is the Welcome Hub”). Children get roles and a quick demo of one interaction, such as greeting a classmate and finding one thing they share.

Step 2: Expand to school-level connection: Students, still in role, reach out to another class or “visitor” (could be a teacher, older student, or a recorded video from another class) to exchange a welcome message, story, or idea. They use prompt cards to ask about what makes that group feel included.

Step 3: Community link task: Children do a mini project within the immersive narrative that ties to the neighbourhood—for example, creating a “Kindness Map” of places people help each other, designing a “Welcome Kit” for a local community helper, or recording a short “newsflash” about something good happening nearby.

Step 4: Global / wider perspective moment: Through story prompts, a “world mailbox,” or a shared video/story from a distant classroom or culture, students compare what they’ve done locally to similar actions elsewhere and identify shared values (e.g., how heroes help in other countries, how welcomes look different but mean the same).

Step 5: Create a shared artifact: Teams collaborate to make something that makes the connection visible “Connection Wall” poster, a collage of “Who We’re Connected To,” a hero mission board listing actions taken, or a class welcome message combining classroom, school, and community notes.

Step 6: Quick reflection and next small step: Still in the transformed space or just beyond it, children answer a simple prompt (draw or say): “Who did I connect with?” and “What will I do next to keep that link?” They place a sticker or write a mini-pledge on the shared artifact.

Indoor/Outdoor Classroom layout notes

Mostly indoor (transformation works best in the classroom), but can include an outdoor “HQ mission” if desired:

Indoor layout options: open circle for HQ briefing; teamwork stations around the room; a central HQ wall/board for the Connection Map.

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Optional outdoor link: a short “community space check” outside (How do we keep shared spaces welcoming for people and living things?) then return to HQ to add one action.

How does this learning activity develop this particular skill?

This simulation develops Connectedness by giving students repeated practice in:

- Creating a sense of belonging (“I am included”)- Starts with safe, immediate belonging—kids notice similarities and begin seeing themselves as part of a group.
- Bridges beyond the classroom, showing that other groups are part of the larger school community and worth learning from.
- Makes the positions students as active participants and contributors of the classroom “life”.
- showing mutual respect (listening, appreciating, fair turn-taking),
- recognizing interdependence (how people and groups support each other),
- taking responsibility for social cohesion (small actions that strengthen community),
- and extending thinking from class → school → community → wider world.

The immersive setting makes social links visible and meaningful, while the shared artifact turns “connections” into something concrete and ongoing.

What do we want to achieve regarding primary skill development (student understanding and/or behaviour)?

As a result of this activity, students will be able to:

- recognise they belong to a classroom and school community
- practice listening, kindness, and inclusion to strengthen relationships
- identify how different people/roles connect a community
- respect similarities and differences across groups and places
- take one small responsibility action that builds social cohesion (and supports caring for shared spaces/nature).

Suggested use, and practical subject-related examples

General curriculum connection examples

- Science: The classroom becomes a “Young Scientists’ Lab” where students wear pretend lab coats, use simple tools to investigate materials, explore animal habitats, or act as weather reporters predicting tomorrow’s forecast.
- Math: The room transforms into a “Math Market” where students role-play as shoppers and cashiers, using real coins or play money to practice counting, addition, and making change through hands-on math tasks.
- History/Social Studies: The space becomes a “Time Travel Museum” or “Explorer’s Camp” where students dress up, handle replicas or images of historical objects, and take on roles like historians, villagers, or community helpers to explore life in the past.

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Dinosaur Conservation Research Station (Jurassic Park–style)

- Narrative: The classroom becomes a mini research outpost where students are palaeontologists and community stewards studying "ancient creatures" to learn how people, habitats, and history connect.
- Classroom: Teams research "local fossils" (could be school artifacts or symbolic "bones") and share stories about who in their class helps each other survive and thrive—mapping relationships like ecosystems.
- School: Students create a "School Species Portal" with profiles of classmates (strengths, things they care about) and display them in a "Habitat Hall," showing how everyone contributes to the school's ecosystem.
- Community: Outreach to a local park/museum or elder to collect "connection stories" (e.g., how older residents remember the area), linking past and present.
- Global: Compare their "ecosystem of care" to people in other places (e.g., pen pals sending pictures of their own community "habitats"), highlighting interdependence across distances.
- Roles: Lead Researcher, Story Collector, Habitat Designer, Community Liaison.
- Props: Field notebooks, "fossil" replicas, maps with connection lines, "research badges."
- Small action: Make a "Connection Fossil" poster that names who in the class has helped whom and why.

Community Heroes Headquarters (Superheroes-inspired)

- Narrative: The room becomes the HQ for everyday heroes who protect and strengthen their world by connecting with others—superpowers are kindness, listening, helping, sharing.
- Classroom: Students identify classroom "hero strengths" (e.g., someone who comforts, someone who shares) and build a "Hero Network" chart showing how their actions support each other.
- School: Teams create "Hero Missions" to support other classes (welcome notes, shared resources), reinforcing that connectedness spreads beyond one group.
- Community: Students interview local helpers (crossed with real roles: librarian, bus driver, family member) and compile a "Hero Wall" showing how those people keep the community strong.
- Global: Explore stories of heroes from other countries (via video, books, or simplified stories) and find common values—"What do helpers everywhere do to make people feel connected?"
- Roles: Mission Planner, Connector, Reporter, Welcome Ambassador.
- Props: Capes/badges, "mission scrolls," hero profile cards, communication wristbands.
- Small action: "Hero High-Five" campaign—students recognize someone's helpful act and add it to the HQ board.

Global Explorer Newsroom (Adventure / travel documentary vibe)

- Narrative: The classroom transforms into a newsroom where young explorers report on how communities are linked through stories, goods, customs, and helping.
- Classroom: Children interview each other about what makes them feel part of the class and produce short "connection reports" (drawings or audio).
- School: Combine reports into a "School Bulletin" that highlights collaborations between classes, clubs, and shared traditions.

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- Community: Students gather mini “field reports” from local businesses, families, or events—what connects the neighbourhood?
- Global: Feature a “World Spotlight” segment where students learn and share a small story from a different country, then compare it to something in their own community.
- Roles: Reporter, Interviewer, Editor, World Correspondent.
- Props: Microphones (fake), map with pins, “news desk,” headline board, postcards.
- Small action: Create a “Connection Newsflash” to share with another class or family about one thing learned.

Materials and tools needed for implementation

Minimal "starter" bundle

- Written scenario/storyline + background cue images (ppt)
- Basic props & backdrops
- Briefing and debriefing templates
- Simple rubric for content + role performance
- Student reflection prompts
- Collaboration aids (shared worksheets, discussion stations)

Theme/storyline/script for context

- Role descriptions and student tasks
- Layout plan (how space will be reconfigured)

Atmosphere and sensory elements

- Props and set pieces (furniture rearrangement, thematic decor)
- Visuals/backdrops (posters, signs, printed "environmental" materials)
- Soundscape (ambient audio, effects, background music)
- Lighting adjustments (lamps, filtered light, coloured accents)
- Costumes or simple wearable role indicators (badges, hats, nameplates)

Narrative and immersion tools

- Character/role cards
- Scenario scripts or prompts
- Fake artifacts/documents (e.g., dossiers, maps, mock reports)

Assessment and feedback

- Rubrics tied to both content mastery and role performance
- Observation checklists for facilitator
- Self-/peer-reflection prompts post-activity

Infrastructure and logistics

- Flexible classroom furniture
- Storage area for props/setup
- Timer/pace management tools

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Guiding questions

- What helps someone feel like they belong?
- How can we include someone who is quiet or left out?
- What did you learn about a classmate that you didn't know before?
- How do different people in our school/community help us stay connected?
- What is one respectful way to speak and listen during missions?
- How can we care for shared spaces, so everyone feels welcome (people and living things)?

Tips and Tricks for dealing with challenges

- **Challenge:** Some students dominate role-play; others withdraw.
  Tip: Assign rotating roles and use a "one voice at a time" rule. Give quiet students a powerful role (Reporter/Mapper) and ensure everyone answers at least one prompt.
- **Challenge:** Kids treat it like pretend play only, not skill practice.
  Tip: Keep missions short with clear outputs (Connection Map links + action statements). Remind: "A hero mission is complete only when we make a real connection."
- **Challenge:** Students struggle to connect beyond their friend group.
  Tip: Use mission cards that require speaking to someone new and provide sentence starters ("Hi, can I ask you…?").
- **Challenge:** Time runs out before whole-class synthesis.
  Tip: Reduce to 3 missions (class + school + artifact). The wider-world moment can be a quick story card.
- **Challenge:** Some children use labels or exclude others.
  Tip: Pause and re-teach respectful language. Use the HQ rule: "We talk about behaviours, not about people."

Difficulty level tailoring

- **Beginner learner (6-7 years old):** At this level, keep the transformed scenario very narrow (e.g., a simple welcome desk), give explicit scripts ("Say your name and one thing you like about school"), provide strong adult modelling, limit the number of layers (focus on classroom → one school connection), and use one quick reflection question.
- **Advanced learners (8-9 years old):** At advanced level, expand the narrative (e.g., hero HQ with school and neighbourhood missions), allow children to choose from a small menu of roles, include structured peer sharing across two layers, and prompt them to name at least one common value and one next action.
- **Expert learners (8-9 years old):** At expert level, learners help co-design the transformation or add their own layers (e.g., suggesting new community partners), take leadership in their roles, link their immersive experience to a follow-up real-world plan (e.g., organizing a mini welcome event or creating a thank-you for a neighbour), and reflect with less adult prompting on how their actions made others feel connected.

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Debriefing and Reflection questions

- Where did you practice Connectedness today? What did it look like?
- Who helped you feel included, and how?
- How did you help someone else feel they belong?
- What did you learn about our school/community connections?
- How can we keep our Connection HQ actions going this week?
- How does caring for shared spaces (and nature) help people feel connected too?

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3.10.2 Concept Mapping

Brief description, and rules of the implementation of the learning activity

In primary education, concept mapping is a visual teaching and learning technique where students draw key ideas as nodes and connect them to show relationships, combining what they already know with new information. These maps help students organize and deepen understanding, spark discussion, and give teachers a quick way to assess how well concepts are connected; there is no single “right” map, which supports individual meaning-making and growth.

Skill focus

Primary Skill Focus

- Connectedness

Complementary/Secondary Skill Focus

- Valuing people and nature
- Critical thinking,
- Creativity

Age group	Student number	Duration
6-10 years old students	Whole class in small groups	15-25 minutes / activity

Proposed step by step implementation of the learning activity

This activity uses one simple symbolic object to help children notice how they are connected and how they can strengthen connection through small actions.

Teachers introduce a central concept, model a simple example, then have children work alone or in small groups to build their own tiny “connection map” using a simple structure called 3–2-1.

3–2–1 rules:

- 3 WHO : name 3 people/groups connected to the object
- 2 HOW: choose 2 ways they are connected (help/share/talk/learn)
- 1 NOW WHAT: choose 1 small action to strengthen connectedness

(Optional supportive link: one way to care for shared materials/nature.)

Suggested step-by-step implementation of the learning activity:

Preparing the activity:

The teacher chooses a central idea that ties to connectedness—something children can relate to locally and beyond (e.g., “How are people in our class connected to kids in other places?”; “What helps people in our town stay healthy and how do other places help us?”; “How do we share ideas, goods, or help with others?”).

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The teacher creates a simple example map on a large poster or digital board, modelling with pictures and words: start with the central concept ("Our Community" or "Helping Each Other") and draw branches to people, places, ways to connect, and actions. Provide blank paper or pre-drawn node templates, markers, stickers, and small icon cards (globe, heart, hands, arrows) to help. Prepare guiding question cards like "Who is part of this?" "How do we help each other?" "What travels between us?" and "What can we do together?"

Instructions to give the students:

"We're going to make a concept map to show how we're all connected. Start with the big idea in the middle. Then add the people, places, and things that link us—like friends, family, the food we share, or messages we send. Use words, pictures, and arrows to show how things are connected. Talk with your partner or group and try to include things close to us and even far away. There is no wrong map—just show what you notice about how we belong and help each other."

Running the activity – step-by-step practical description/instructions

Step 1: Model a map together: Teacher builds a large example with the class. For example, start with "Our School" in the centre, connect to "Friends," "Families," "Kids in other towns," "Sharing books," etc., and add simple arrows showing "send," "help," "learn from." Children suggest ideas and the teacher draws them, naming connections aloud.

Step 2: Individual or pair brainstorming: Children think or talk with peers about things that connect them to others (e.g., "My cousin in another town," "The internet where we share pictures," "Helping a new student"). They use icon cards or write/draw ideas on sticky notes.

Step 3: Build the concept map: Using their notes, children place the central idea in the middle of their own map and add branches: people, places, actions, feelings, and ways they connect. They draw arrows and label how things relate (e.g., "We send letters to pen pals," "Helping makes us feel close," "Learning from others teaches us new games"). Teacher circulates, asks guiding questions, and prompts inclusion of different levels (local/family and farther away).

Step 4: Share with a small group: Children form small groups, show each other their maps, explain one or two connections, and ask a question like "How are you connected to someone far away?" They may combine maps or add to each other's.

Step 5: Class synthesis: Volunteers or groups add key ideas from their maps to a large class map, pointing out shared links and surprising ones. Teacher highlights how small actions or relationships reach beyond the classroom (e.g., sharing snacks means thinking of the farmer who grew the food).

Step 6: Action or reflection tie-in: Children pick one connection from their map and say or draw a small thing they can do to strengthen it (e.g., send a kind note, help a new friend, learn something from another place). They add that as a new node or note.

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Indoor/Outdoor Classroom layout notes

Typically indoors, but not necessarily. A school classroom or a layout suitable for group work. Desks arranged in pairs or small groups; the teacher at the front with an object and a model map.

How does this learning activity develop this particular skill?

- Makes thinking visible, introduces the idea of connections between people and places, and gives a safe template to imitate.
- Activates personal experience of connectedness and starts gathering building blocks for the map.
- Encourages organizing ideas about relationships, complexity of connections, and mutual influence.
- Develops essential skills for forming and maintaining connections: communication, empathy, and understanding others' perspectives—recognizing similarities and new connections.
- Reinforces collective connectedness, showing patterns and how individual maps contribute to a bigger picture.
- Moves from recognition to responsibility—making connection actionable.

What do we want to achieve regarding primary skill development (student understanding and/or behaviour)?

- Students can name people, places, and actions that connect them locally and beyond.
- Learners show how those connections relate (who helps whom, how ideas travel, how caring spreads).
- Students communicate about their maps, asking and answering questions to understand others.
- Children recognize common links with classmates and discover new ones.
- Learners identify at least one small action to make a connection stronger.
- Students use simple language and pictures to explain how they and others are part of a bigger community.

Suggested use, and practical subject-related examples

General curriculum connection examples

- Science: Students create a simple map showing what plants need to grow (sun, water, soil) or the steps of the water cycle using drawings and arrows.
- Math: Children make a map showing how numbers can be added, broken apart (e.g., number bonds), or grouped using visual models.
- Language/Arts: Students create a character map with traits, actions, and feelings using pictures and key words from a story they read.
- History/Social Studies: Children map out changes in transportation over time, using drawings and simple labels to compare "then" and "now."
- Environmental Studies: Students make a weather map showing different types of weather and how to prepare for them, using icons and short descriptions.

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- Class-teacher lessons: “Welcoming New Classmate” Being Friendly.” Branch to “Saying hi,” “Showing someone around,” “Sharing a game,” “Learning their name,” “Feeling safe.” Show how those actions connect to making community stronger.

Materials and tools needed for implementation

- Different size papers (A3, A4, index cards, chart paper)
- Coloured pencils
- Marker pens (various tip sizes)
- Post-its (multiple colours/sizes)
- Stickers (for highlighting, categorizing, etc.)
- Individual whiteboards + dry-erase markers & erasers (optional)
- Images/pictures (printed or cutouts)
- Online platforms/software (optional) (e.g., Google Drawings, Jamboard, CmapTools, collaborative docs)

Guiding questions

- “Who is in your map? Who do we care about?”
- “How does that person or place connect to you?”
- “What can we do to make that connection better?”
- “Is there someone far away we are still connected to? How?”
- “What’s something we both have in common on our maps?”
- “Did you learn a new connection from your friend’s map?”
- “Which part of your map shows people helping each other?”
- “What does your map say about how we belong together?”
- “What small action did you add to your map today?

Tips and Tricks for dealing with challenges

- **Challenge:** students do not know where to start:
  Tip: Give a starter branch or picture (e.g., “Me” → “Family”) and a few example mini-nodes; use sentence or picture prompts.
- **Challenge:** Kids only drawing and not explaining.
  Tip: Ask them to add one word or talk to a partner about “Why is this connected?” before moving on.
- **Challenge:** Some maps missing far connections.
  Tip: Prompt with “Who helps you even if they’re not here?” or show a photo of a distant place and ask, “How might that place connect to us?”
- **Challenge:** Crowded messy maps.
  Tip: Teach simple grouping—use colours or shapes to show “people,” “places,” “actions” so it’s easier to read.
- **Challenge:** Reluctant sharers.
  Tip: Let them show one small part first or pair them with a buddy to describe together.
- **Challenge:** Overwhelm with too many ideas.
  Tip: Have a “top three” step: choose three strongest connections and circle them.
- **Challenge:** Action step forgotten.

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Tip: Provide a small sticky note to add the "I will..." action directly onto their map.

- **Challenge:** Students struggle with HOW words.
  Tip: Use picture icons and a small word bank; allow them to point instead of writing.
- **Challenge:** Actions become unrealistic ("save the whole world").
  Tip: Ask: "Can we do it today or this week?" Guide to small steps.
- **Challenge:** Some students don't participate equally.
  Tip: One child draws, one chooses WHO, one chooses the action—rotate roles.

Difficulty level tailoring

Teachers can tailor the Concept mapping to three difficulty levels to meet students' needs.

- **Beginner learners (6-7 years old):** Give a very clear central idea, model one complete simple map with pictures and words, provide starter branches (like "Family," "Friends"), and use prompts to help children add one or two connections; keep the action step concrete (e.g., "Say hello to someone new")
- **Advanced learners (8-9 years old):** Let children choose a related central topic, encourage pair sharing to add more layers (local and farther connections), require labelling of how things relate (e.g., "helps," "sends," "learns from"), and guide them to pick a shared small action with a partner.
- **Expert learners (9-10 years old):** Students build maps with multiple levels (people, places, actions, feelings), compare and combine maps in small groups, identify overlapping themes, and co-create a class "big map" with shared action nodes; they also reflect on how their own map changed after hearing others.

Debriefing and Reflection questions

- "What new connection did you find today?"
- "Who did you add to your map that you didn't think of before?"
- "What did your friend's map teach you?"
- "Which part of your map makes you feel grateful?"
- "What is one small thing you can do to help someone you're connected to?"
- "Did your map change after talking with others? How?"
- "Was there someone you want to add now that you remembered them?"
- "How does your map show that we belong together?"
- "What will you do with your connection idea this week?"

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3.10.3 The Jigsaw (mosaic) Method

Brief description, and rules of the implementation of the learning activity

The Jigsaw Method was developed by an American social psychologist in 1971 to avoid conflict situations and increase cooperation by strengthening relationships among students. The essence of the method is that the learning content is divided (like a jigsaw puzzle) into as many parts as there are members in each base group (so-called jigsaw group).

Skill focus

Primary Skill Focus

- Connectedness

Complementary/Secondary Skill Focus

- Valuing people and nature
- Empathy

Age group	Student number	Duration
6-10 years old students	Whole class in small groups (3-4-5-6-7-8 students in a group based on their age characteristics)	15-25 minutes

Proposed step by step implementation of the learning activity

Each student receives a "piece of the mosaic" (a fragment of the lesson's content, information, a task related to the lesson, etc.), which they first work on and learn together with the other students who received the same piece (in a so-called expert group). Afterward, the “experts” return to their own mosaic groups and teach their specific section to their peers. The complete big picture (the curriculum) only comes together when everyone contributes their own specific knowledge to the group. The main rule: no one can master the entire material without the active help of the others.

1. **Preparation:** The teacher divides the lesson material assigned for that day into 3–4–5–6 parts (depending on group size) and assigns the material to groups A, B, C, D, E, and F.
2. **Forming mosaic groups:** The students are divided into heterogeneous groups of a given size (max. 4 students for 6-year-olds, max. 8 students for 10-year-olds). Each student is assigned a letter/colour. We assign a section of the curriculum to each letter/colour so that every mosaic group has one person responsible for a given subtopic. This way, each mosaic group can cover the entire lesson material for the day with the cooperation of its members. It is important that each student has access only to the material relevant to their own topic.
3. **Each student reads and processes the subtopic assigned to them.**

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4. **Working in expert group:** Once this is done (Step 3), students temporarily leave the mosaic group and form so-called expert groups, meaning those with the same letter/colour sit at a new table (all "A"s at one table, all "B"s at another, etc.). Together, they discuss their own topic or the lesson segment, and based on their shared knowledge, they structure the “lesson segment” and figure out how they will teach/share it with the others.
5. **Back to the mosaic group:** Each student returns to their original mosaic group. Students report on their own subtopics to the other members of the mosaic group. The other members may ask clarifying questions to ensure they fully understand the given section of the lesson material.
6. **The teacher observes the work of the mosaic groups and intervenes if necessary.** It is even better if the student leading the mosaic group can handle the situation independently.
7. **Group task:** The group receives a task that they can only solve by combining the various pieces of information.
8. **Testing of all students' knowledge of the material.** This is what gives the mosaic group activity its stakes and what makes students really interested in engaging meaningfully and paying attention to their peers.

Indoor/Outdoor Classroom layout notes

This method works best in indoor environments, but it is also suitable for outdoor environments. For indoor/classroom use, easy-to-move chairs and tables are required. Set up dedicated “expert stations” in the corners of the room so that groups do not disturb one another and are clearly separated from their original tables.

How does this learning activity develop this particular skill?

The Jigsaw method structurally requires students to connect with and pay attention to one another. A sense of positive interdependence is developed in both the expert group and the jigsaw group. Through this, students come to understand that they cannot be as successful on their own as they can as a group, and that they need their peers.
In both cases (mosaic group, expert group), a heterogeneous team is formed. In the expert group, even the least academically gifted child must understand the given lesson content, so group members learn to provide responsible assistance to those in need, as well as that anyone can have a good idea regarding a given topic.
When an anxious, marginalized, or less skilled student returns to their group as an “expert,” the others are compelled to pay attention to them and value their knowledge, which radically increases their status and their connection to the group.

What do we want to achieve regarding primary skill development (student understanding and/or behaviour)?

By using the technique regularly and consciously, the students:

- are aware that everyone is important in a community
- are able to listen attentively and encourage one another as they share knowledge.
- understand that they cannot be as successful on their own as they can as a group
- recognize the importance of connections and that they need their peers regardless of status
- are able to voluntarily help those in need,
- understand that anyone can have a good idea on a given topic.

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Suggested use, and practical subject-related examples

This method can be incorporated into any subject. For children aged 6–10, instead of reading, we use pictures, objects, or short texts in capital letters Science: Students create a simple map showing what plants need to grow (sun, water, soil) or the steps of the water cycle using drawings and arrows.

- Reading (Literacy): We divide a story into 4 parts (Beginning, Complication, Turning Point, Conclusion) (for younger children, this can also be 4 pictures). The expert groups understand their own part. In the mosaic group, everyone must tell their own part so that the story comes together, and then they must work together to arrange the pieces of the story into a coherent whole.
- Environmental study: Topic: Parts of a plant. The 4 expert groups: Root, Stem, Leaf, Flower. They learn the function of their part. In the mosaic group, they must reassemble the plant, and everyone explains what their part does to help the plant survive.
- Vocabulary building (Foreign language or native language vocabulary): The group receives 4 new words. Each expert group gets one word; they must learn its pronunciation and meaning and come up with a sentence to illustrate it. In the mosaic group, they teach the word and the gesture to their peers and form a meaningful text from the sentences. The sentences can be modified in the mosaic group.
- Grammar: Topic: Punctuation at the end of sentences. The 4 experts: Period (statement), Question mark (question), Exclamation mark (exclamation, wish). The experts come up with 2 example sentences each. In the home group, they receive a text without punctuation marks, and the experts must tell them where their mark goes.

Materials and tools needed for implementation

- Teaching materials, information, and tasks divided into equal parts.
- Color-coded or numbered tags/cards (so that the children know which expert group they belong to).
- Group worksheet for the final assembly.
- Any other stationery (colour markers, Post-its, etc.)

Guiding questions

- In the expert group: “Is everyone sure they understand our part? How are we going to explain this to the others so that they understand it too?”
- In the mosaic group: “Whose piece is still missing from the complete picture? Who’s next in the explanation?
- During evaluation: “How did your partner help you understand the task today?”

Tips and Tricks for dealing with challenges

- **Challenge:** A student in the expert group does not fully understand the material and therefore teaches the mosaic group incorrectly.
  Tip: The teacher must monitor the expert groups very closely while they are working. Before they return to their home groups, the teacher should conduct a quick check!

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- **Challenge:** Chaos and noise arise during the change of places (from the expert group back to the home group).
  Tip: Use visual or audio signals (e.g., a bell signals that time is up; at the second bell, students must move in silence).
- **Challenge:** Dominant students take over the conversation in the expert group and explain things even on behalf of the quieter "experts."
  Tip: Introduce a "talking stick." In the home group, only the person holding the "stick" may speak; the others must raise their hands if they want to ask a question.
- **Challenge:** The youngest children (ages 6–7) cannot read text independently in the expert group.
  Tip: Use objects and pictures.
- **Challenge:** With younger children, it is more common that as they return to their mosaic group, they forget or do not fully remember everything that was discussed.
  Tip1: Prevent this problem. Ask the students to turn to the classmate sitting next to them in the expert group and tell them the 2–3 sentences they will later share with their home group. Repeating aloud helps solidify the information.
  Tip2: If this is already happening in the mosaic group, then the teacher should monitor the process, and if they see a stall, gently intervene in the mosaic group's work. Don't take over but guide the student's attention; perhaps bring up a moment from the expert table ("Remember, you and Péter were just laughing about how…").

Difficulty level tailoring

- **Beginner learners (6-7 years old):** The information for experts is purely visual (cards, pictures, physical objects). Teaching involves showing and naming their own piece to the group. Do not divide the task or the groups into more than 4 parts.
- **Advanced learners (8-9 years old):** They read and understand short, simple paragraphs. Upon returning to their home group, they must summarize what they have learned in their own words and answer their peers' questions. The task and groups can be divided into groups of up to 6 students
- **Expert learners (9–10 years old):** Longer texts with multiple paragraphs. The task for the expert groups is not only to understand the text but also to prepare a mini-presentation or a visual explanation (e.g., a mind map) to teach their own group. The task and groups can be divided into groups of up to 8 students.

Debriefing and Reflection questions

- How did it feel to know that your group was relying on your knowledge and waiting for your explanation?
- Would the team have been able to solve the final task if you had been the only one working in the group? Why not?
- How did you feel when a classmate in the expert group helped you understand the part you hadn't read?
- How much did working together help you learn the entire lesson?
- How did it help that everyone in the group was assigned a different part of the task at the beginning of the lesson? How did today's class demonstrate that everyone has something valuable to contribute?

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3.10.4 The Yarn Network

Brief description and rules for conducting the learning activity

The "Yarn Network" is a quick energizer (and/or icebreaker) exercise in which the teacher uses a physical object to teach a concept relevant to the lesson. In this exercise, the teacher uses a simple ball of yarn. The students stand in a circle and, by tossing the ball of yarn to one another (while holding the yarn in their hands), create a large, physical web.

Skill focus

Primary Skill Focus

- Connectedness

Secondary Skill Focus

- Valuing people and nature,
- Emotional regulation,
- Flexibility, Curiosity,
- Sense of wonder and openness,
- Creativity

Age group	Student number	Duration
6-10 years old students	whole class	10 – 15 minutes

Proposed step by step implementation of the learning activity:

In this exercise, students use a simple ball of yarn to visualize the connections among themselves, while each one shares their thoughts on the current lesson topic, demonstrates their existing knowledge, or solves the current task.

Rules:

1. Everyone must have a turn (the ball of yarn may only be thrown to someone who has not had it yet).
2. The yarn must be held tightly, but not too tightly.
3. While throwing a ball of yarn, the student must answer a short question that is given by the teacher.

Running the activity:

1. **Setting up the space**: The teacher asks the students to stand in a large, spacious circle (by moving the desks aside).
2. **Presenting the subject/exercise/task:** The teacher gives an open-ended task related to the lesson's topic.

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3. **Starting the net**: The teacher starts by holding the end of the yarn, answers the question, and then throws the ball of yarn to a student on the other side of the circle.
4. **Knitting the net:** The student who catches the ball also grabs the thread (they can wrap it around their finger once), answers the question, and then throws the ball to someone who has not had it yet. This continues until the ball has been caught by everyone, and a large, tangled spiderweb forms in the middle of the circle.
5. **The discussion**: The teacher asks the students to take a small step back so that the web tightens. Then they ask 1–2 students to let go of the thread. The web immediately sags and loses its shape. "See? If someone doesn't participate or is absent, the entire community's network is weakened." What did those two or three students who just let go of the string say, or what clever ideas did they contribute to our work?

Indoor/Outdoor Classroom layout notes

This activity requires a spacious area. Desks and chairs should be pushed to the walls of the classroom so that the entire class can form a single large, unbroken circle. It can also be carried out perfectly outdoors in a schoolyard.

How does this learning activity develop this primary skill?

Connectedness is an invisible, abstract concept that can be difficult for 6- to 10-year-olds to understand. This energizing exercise makes connections visual and physically tangible. The children hold a piece of the community's network in their own hands, figuratively and literally.
They not only visually see but also physically feel the yarn being pulled when their partner moves, our missing. The exercise visually demonstrates that the class is a network, and if someone is not part of it (or lets the yarn go), it affects everyone, while the children also feel how their shared knowledge is built and how valuable it is to connect and help each other.

What do we want to achieve regarding primary skill development (student understanding and/or behaviour)?

As a result of this activity, students will be able to:

- recognize and understand that, as members of a team or class, everyone is responsible for the others.
- Understand that everyone is needed to maintain the "strong network," regardless of their role.
- connect the network metaphor to real-life relationships and choose one caring action
- practice respectful communication and encouragement while working in a group
- understand that actions can affect others because we are connected
- actively pay attention/listen to their peers (so they know who has not been passed the string yet)
- maintain eye contact,
- consciously involve their quieter peers in the game as well.

Suggested use, and practical subject-related examples

The activity can be used as a warm-up before any lesson or group work, or as an energizer during the lesson for 10 minutes.

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- Subject-independent class teacher lesson: The topic could be "What do you bring to this community?"
- Math: A student says a number, and whoever catches the ball must add 3 to it.
- Language Arts: Word chain (students must say a new word starting with the last letter of the previous word, then throw the yarn),
- Literature: collaboratively creating a story where everyone adds a sentence.

Materials and tools needed for implementation:

One large, brightly coloured (e.g., red, or yellow) ball of thick yarn (that does not break easily).

Guiding questions

- "Who hasn't held the yarn ball yet? Look around to see who is left out!"
- "What do you feel on your fingers when someone on the other side of the circle pulls the yarn?"
- "How can we hold the network so that it is nice and taut, but doesn't cut anyone's hands?"

Tips and Tricks for dealing with challenges

- **Challenge**: Students drop the yarn when they throw the ball of yarn. **Tip**: Ask them to loosely wrap the yarn around their index finger once before throwing.
- **Challenge**: The yarn gets too tangled, or the ball falls apart during the throw. **Tip**: Teach the "underhand throw" technique. Ask the students to toss the ball to their partner gently, not with force.
- **Challenge**: The same popular kids always get the yarn, while others are left out. **Tip**: The strictest rule: you may only throw the ball to someone who is not already holding the net, and you must call out their name loudly before throwing.
- **Challenge**: Students pull the net too hard, which can cause it to break or hurt others **Tip**: Make it clear from the beginning that this is a sensitive net. If someone pulls on it, the activity stops.
- **Challenge**: Children freeze up and cannot answer the question when they have the ball of yarn. **Tip**: Keep the question simple and with low stakes (e.g., "What is your favourite colour?"). The focus should be on physically creating the web, not on complicated answers.

Difficulty level tailoring

Teachers can tailor the learning activity to three difficulty levels to meet students' needs.

- **Beginner learners (6-7 years old):** The simplest questions requiring one-word answers (e.g., favourite animal). The focus is on the visual experience of the network.
- **Advanced learners (8-9 years old):** Ask a question that requires them to respond to the previous person (e.g., "Peter likes apples, and I like pears," then throw).
- **Expert learners (9–10 years old):** Once the network is formed, the real challenge begins: the group must unravel the thread backwards without getting tangled up. To do this, they must remember exactly who gave them the ball of yarn and say that student's name when passing it back.

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Debriefing and Reflection questions

- How did it feel to look at the network you created together?
- What did you feel when someone let go of the yarn? What does this mean for our class/group?
- How does this yarn network resemble the way we work together here at school day after day?
- Could this net have been created if we had left even just 3–4 people out of the circle? Why is the presence of every single person important?
- Did you pay attention to someone today to whom you usually pay less attention? How did that feel?

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3.10.5 Object Lesson Energiser

Brief description, and rules of the implementation of the learning activity

The "Object Lesson Energiser" is a quick energiser exercise in which the teacher uses a physical object to teach an abstract concept, to capture attention, build connections, and introduce or reinforce a concept in an active, memorable way.

Skill focus

Primary Skill Focus

- Connectedness

Secondary Skill Focus

- Valuing people and nature,
- Emotional regulation,
- Flexibility,
- Curiosity, sense of wonder and openness,
- Creativity

.Age group	Student number	Duration
6-10 years old students	whole class	10 – 15 minutes

Proposed step by step implementation of the learning activity:

This technique gets learners moving and connecting (like an energiser, or icebreaker) while anchoring an abstract idea in a tangible symbol (object lesson). Students briefly engage with peers, attend to the object's features, make personal or social links, and then map those observations onto the learning target - closing with a quick active reinforcement to cement meaning.

Running the activity

1. **Preparing the activity:** The teacher selects a simple concrete object whose features symbolically represent connectedness—for example:
   - A braided friendship rope (different coloured strands woven together),
   - A circle of paper people linked hand-in-hand,
   - A small globe with strings pinned to places showing where classmates' families come from,
   - A multi-coloured keychain of interlocked rings,
   - Or a bundle of small cards tied together with ribbon, each card representing someone or someplace.

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- Prepare “connection mission” cards (e.g., “Find a classmate who likes the same thing as you.” “Ask someone in another class what helps them feel included,”), reflection stickers or tokens, and a simple ritual or gesture for the reinforcement (e.g., a “connection high-five” or adding a bead to a class string).

2. **Warm-up connection (classroom layer):** Kids pair up, say their name, share one thing they like about school or a friend, and do a small movement together (e.g., a thumbs-up handshake or a “connection clap”).
3. **Reveal the symbolic object :** The teacher shows the object without immediately explaining. Children look, touch, describe it in pairs or small groups: “What colours do you see?” “How does it feel?” “What is it made of?” “What does it remind you of?”
4. **Bridge discussion (school/community/global prompts):** In small groups, children answer guided questions using prompt cards: “Who in our class is like one of these parts?” “How do we help each other here?” “Who in another class or part of the school is connected to us?” “What outside person or place (neighbourhood helper, family far away) is part of our story?” They share briefly.
5. **Concept unpacking (teacher models and co-construct):** Teacher explains the intended symbolism (e.g., “Just like these braided strands become stronger together, we are stronger when we help each other and connect across our school and beyond”). Invite children to offer their own words or examples (“So when I share with a friend, it’s like adding another strand”).
6. **Active reinforcement ritual:** Each child performs a simple gesture (e.g., touches the object, adds a small paper link to a class chain, places a sticker on a connection board) and states one small action they will do to show connectedness (e.g., “I will help a new friend,” “I’ll say hello to someone from another class,” “I’ll ask my neighbour how they’re doing”).
7. **Optional quick debrief:** Whole group shares one thing they will remember when they see something like the object again (“I’ll remember the rope when I help someone because…”). Teacher collects a few and places them on a “Connection Reminder” display.

Indoor/Outdoor Classroom layout notes

Typically indoors but not limited to. Depending on the situation, the activity may require a spacious area, and the tables and chairs should be pushed against the wall. It can also be carried out perfectly outdoors, in a courtyard.

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How does this learning activity develop the primary skill?

- Gets children focused, reduces awkwardness, and reminds them they are part of the same classroom community.
- Encourages observation and personal association; begins linking physical features to social ideas.
- Moves thinking outward—from self to class to school to neighbourhood—building awareness of layered relationships.
- Makes the abstract idea explicit and gives children language for it, reinforcing shared humanity.
- Encodes the idea in a physical ritual and links intention to action.
- Surfaces transfer, solidifies memory cue, and reinforces that connectedness continues beyond the moment.
- Increased sense of belonging or connection through shared warm-up interaction.
- Demonstrate empathy or valuing others (if the concept is people/nature oriented) via stated commitments or reflections.

What do we want to achieve regarding primary skill development (student understanding and/or behaviour)?

As a result of this activity, students will be able to:

- recognize that, as members of a team or class, everyone is responsible for the others.
- understand that everyone is needed to maintain a "strong network," regardless of their role.
- make simple analogies or connections between the object and their own lives or community.
- apply the idea to a new, related situation (e.g., naming a real example of supporting someone).
- actively listen to their peers, maintain eye contact, and consciously involve quieter peers in the activity.
- listen to peers and build on others' ideas (e.g., "I noticed that..., and that reminds me of...").
- follow through with the small commitment or gesture tied to the concept (e.g., verbal pledge, supportive action).

Suggested use, and practical subject-related examples

The activity can be used as a warm-up before any lesson or group work, or as an energizer during the lesson for 10-15 minutes.

- Introduce a new concept or unit in a memorable way (hook attention and create a mental anchor).
- Build classroom community / social-emotional learning (e.g., valuing others, empathy, teamwork).
- Refocus or re-energize mid-lesson when attention dips.
- Reinforce or review a previously taught idea by bringing back the symbol as a retrieval cue.
- Surface prior knowledge gently before diving deeper.
- Check understanding in a low-stakes way through students' analogies

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General curriculum connection examples

- Science: Students pass around a sponge to explore absorption and compare it to how roots take in water, then act out parts of a plant growing.
- Math: A puzzle piece is used to show how all parts fit together in a number sentence, then students build their own math "puzzle" using blocks or drawings.
- Language Arts: A pair of shoes represents "walking in someone else's shoes" to discuss character feelings, followed by students acting out a short scene from a story.
- History/Social Studies: A worn backpack represents "carrying stories from the past," and students talk about what an object from long ago might tell us.
- Environmental Studies/Geography: A seed is used to talk about change and care for the Earth; students then plant their own seeds and share how they will take care of the planet.

Materials and tools needed for implementation:

- Assorted everyday objects/props (small, tactile, varied textures/shapes)
- Container or "mystery box" for object selection
- Prompt/question cards (for linking object to lesson)
- Sticky notes (responses, quick reflections)
- Index cards or role cards
- Markers/pens
- Visual display space (whiteboard, flipchart, large paper)
- Timer/stopwatch (for pacing energisers)
- Music player or sound cue (for movement-based energisers)
- Space markers (cones, tape, zones) for activity layout
- Movement props (e.g., scarves, soft balls, hand signals)
- Reflection slips or quick exit ticket sheets
- Name tags or group identifiers
- Tokens/stickers or simple recognition items (optional)
- Safe open space for physical engagement
- Facilitator cue sheet or agenda (brief structure of the lesson/energiser)

Guiding questions

- "Tell us one thing you are noticing.
- "Say that again in your own words."
- "What's one question you have right now?"
- "What idea does this object stand for?"
- "How does the object show the idea in more than one way?"
- "What real examples do you see around us?"

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Tips and Tricks for dealing with challenges

Use sentence stems, such as: "This rope is like our friendship because...". For beginner groups, choose symbols that are extremely clear and concrete.

- **Challenge**: Students do not see, or have difficulty seeing, the connection between the object and the concept.
  Tip: Use sentence stems, such as: "This rope is like our friendship because...". For beginner groups, choose symbols that are extremely clear and concrete.
- **Challenge**: Students treat the object as a toy and lose focus. At this age, children love touching physical things. When the teacher passes an object around, students often just play with it instead of focusing on the hidden meaning.
  Tip: Use a "mystery box" to grab their attention. Before talking about the abstract idea, give them a dedicated 1-2 minutes of "discovery time." During this time, they can touch it, look at it, and describe its physical details. Only move on to the symbolic meaning after this step.
- **Challenge**: The abstract idea is too hard to understand for 6-7 year old beginners. They find it hard to connect physical details to social ideas.
  Tip: Tailor the difficulty level. For 6-7 year olds, the teacher must model the connection very explicitly. Use pre-written sentence stems, such as: "This object reminds me of...". For 9-10 year old experts, you can let them choose their own symbolic objects and frame the connection themselves.
- **Challenge**: Too much noise when moving around. This activity requires open space. Students have to push desks away and move around the room. With young kids, this can easily become loud and chaotic.
  Tip: Use clear markers on the floor (like coloured tape or small cones) so students know exactly where to stand. Use a timer to keep things moving. You can also use an agreed clear sound signal (like ringing a bell or clapping your hands) when you need everyone to stop and listen.
- **Challenge**: The commitment is quickly forgotten after the lesson. At the end of the activity, every child makes a small commitment (e.g., "I will say hello to someone from another class"). However, 6-10 year olds tend to forget this instantly during break time or the next lesson.
  Tip: Close the activity with a visual and physical ritual to cement the memory. Create a "Connection Reminder" display together. Students can write or draw their commitments on sticky notes or reflection stickers and put them on the board. This can serve as a retrieval cue for the teacher in a later lesson

Design tips

- Choose objects whose features cleanly map to the concept; avoid mixed or culturally ambiguous metaphors.
- Keep the learning activity brief and dynamic: Aim for 5–10 minutes to spark interest without losing momentum.
- Combine talk and action: Pair reflection with a simple physical token/gesture to aid encoding.
- Reuse the symbol later as a retrieval cue (e.g., display the object when revisiting the topic).
- Avoid overloading with too many metaphors in one session—keep the symbol focused.
- Be sensitive to cultural meanings of objects; vet examples in context.

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Difficulty level tailoring

Teachers can tailor the learning activity to three difficulty levels to meet students' needs.

- **Beginner learners (6-7 years old):** Use a very concrete, obvious symbol. Teacher models the connection explicitly. Students get sentence stems or fixed prompts, work in pairs or small groups with assigned roles, and do a simple, single-step action/commitment. Reflection is guided ("I notice..., I will...") with yes/no or fill-in-the-blank support.
- **Advanced learners (8-9 years old):** Use a symbol with a bit more nuance; students help generate the analogy. Small groups discuss guided open questions, compare ideas, and choose a related action. Teacher scaffolds but let us groups revise or extend their commitments. Reflection asks "what" and "why" and includes simple self-assessment.
- **Expert learners (9–10 years old):** Students select or adapt their own symbolic objects, frame the connection themselves, lead peer discussions, and design multi-part or sustained actions. Feedback (peer and teacher) informs iteration. Reflection is metacognitive - students articulate how their thinking is changing and set next-step goals.

Debriefing and Reflection questions

- "How do people depend on each other in this activity?"
- "What is one thing I would try differently next time?"
- "What evidence do I have that I'm starting to value others or nature more?"
- "How do I explain the connection between the object and the idea in my own words?"
- "Why does this idea matter in our classroom or community?"
- "How did your group work together to show the concept?"
- "How do we depend on each other in this activity?"
- "What is one thing we would try differently next time?"
- "How do we explain the connection between the object and the idea in my own words?"
- "What feedback did you give or get, and how do I use it to improve?"
- "How do we help others remember or act on this learning?"

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