

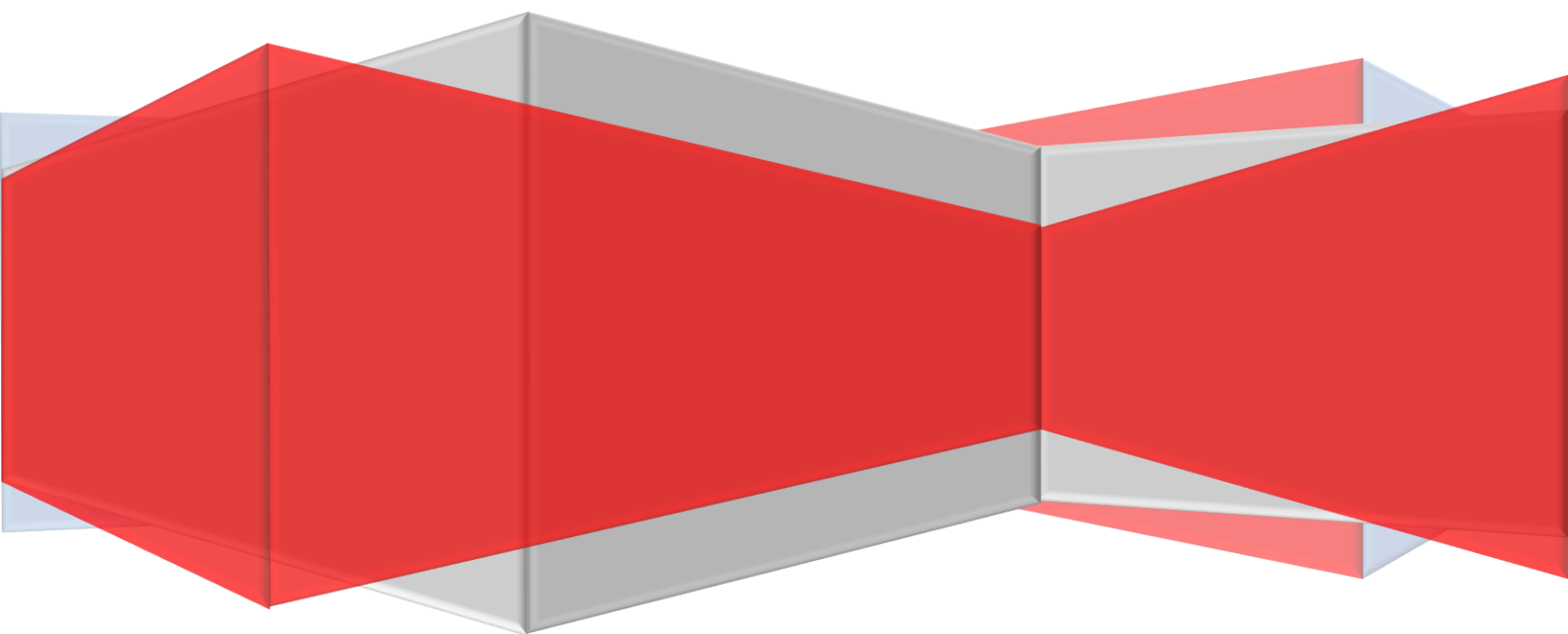
Cultivate school entrepreneurial mindset through holistic approach targeting teachers and pupils



ISO Certified Materials for Teachers: Development of Entrepreneurial Mindset for teachers Level 6

IO5A8: 3.5 Learning through experience

Partner Responsible: MMC



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Apostolos
Varnavas
Primary School

4th Primary
School of
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The LOs at a glance

Competence Code and Title	3.5. Learning through experience
Entercomp Area	3.5 Learning Through Experience
Learning Outcome Numbers and Titles	<p>39. Describe traditional reflection strategies, such as journals and oral or written reporting, as well as new techniques (such as thinking routines e.g. I used to think but now I think, 3-2-1 bridge, two sided notebooks) and self-checks that can be applied with the pupils.</p> <p>40. Develop reflection skills of pupils so as to reflect on their learning from both success and failures through the practical use of traditional and new techniques such as thinking techniques (I used to think but now I think, 3-2-1 bridge, two sided notebooks etc.).</p> <p>41. Support pupils on their reflection during the different stages of their learning.</p> <p>42. Support pupils in recognizing opportunities for learning as well as in evaluating and adjusting learning processes and goals.</p>

Methodological tool Type	Number of Methodological tools
<input checked="" type="checkbox"/> Lecture (compulsory)	1
<input checked="" type="checkbox"/> Open-ended questions	1
<input checked="" type="checkbox"/> Closed questions	1
<input type="checkbox"/> Individual Exercise	
<input type="checkbox"/> Role play	
<input type="checkbox"/> Experiential workshop	
<input checked="" type="checkbox"/> Group discussion	1
<input type="checkbox"/> Brainstorming	
<input checked="" type="checkbox"/> Group Exercise	3
<input type="checkbox"/> Other (Please indicate)	
Total Number of methodological tools:	7

Compulsory Methodological tools

Power Point Presentation

Code of methodological tool PPT_3.5_1

Competence Code and Title	3.5 Learning Through Experience
LO codes and titles	<p>39. Describe traditional reflection strategies, such as journals and oral or written reporting, as well as new techniques (such as thinking routines e.g. I used to think but now I think, 3-2-1 bridge, two sided notebooks) and self-checks that can be applied with the pupils.</p> <p>40. Develop reflection skills of pupils so as to reflect on their learning from both success and failures through the practical use of traditional and new techniques such as thinking techniques (I used to think but now I think, 3-2-1 bridge, two sided notebooks etc.).</p> <p>41. Support pupils on their reflection during the different stages of their learning.</p> <p>42. Support pupils in recognizing opportunities for learning as well as in evaluating and adjusting learning processes and goals.</p>
Aim of the methodological tool	This methodological tool aims to introduce learners to the theoretical framework of the competence 3.5 Learning Through Experience.
Hints and tips for the trainer	Trainers should prepare examples and relevant information for the topics analysed by this competence.
Attachment	

Open-Ended Questions

In this methodological tool you need to develop at least five (5) open ended question for the competence to be developed through classroom learning.

Code of the methodological tool **CL_3.5_2 Open-Ended Questions**

Competence Code and Title	3.5 Learning Through Experience
LO codes and titles	<p>39. Describe traditional reflection strategies, such as journals and oral or written reporting, as well as new techniques (such as thinking routines e.g. I used to think but now I think, 3-2-1 bridge, two sided notebooks) and self-checks that can be applied with the pupils.</p> <p>40. Develop reflection skills of pupils so as to reflect on their learning from both success and failures through the practical use of traditional and new techniques such as thinking techniques (I used to think but now I think, 3-2-1 bridge, two sided notebooks etc.).</p> <p>41. Support pupils on their reflection during the different stages of their learning.</p> <p>42. Support pupils in recognizing opportunities for learning as well as in evaluating and adjusting learning processes and goals.</p>
Aim of the methodological tool	This methodological tool provides basic open-ended questions in order to trigger learners' interest and motivate them to read further on the presented topics.
Hints and tips for the trainer	Trainer should provide learners with resources for further reading and prepare himself/herself in order to answer question that might arise.

Question 1 What are the purposes of reflecting?

Answer:

To consider deeply our experiences, actions, feelings and responses.

Through reflection we are able to 'hear' our own thoughts. This process helps us to learn from our experiences.

Question 2 List at least two tips for encouraging pupils to become independent learners

Answer:

1. Provide pupils with opportunities to self-monitor

Self-monitoring depends on the two processes of establishing goals and receiving feedback from others and from oneself. You can encourage your s to self-monitor by helping them develop their



use of self and peer assessment to see whether the strategies they were using were effective for achieving learning goals.

2. Use questioning as scaffolding to independent learning

The aim here is a gradual, step-by-step transfer of responsibility from the teacher to the pupil. The teacher must develop effective classroom discourse, asking higher order, open-ended questions, responding flexibly to pupils' responses to promote thinking, problem-solving skills and deeper understanding.

3. Offer models of behaviour

Encourage your pupils to model your behaviour. For example, by showing them how categorizing information can make it easier to remember.

4. Develop communication that includes language focused on learning

This helps pupils to become more aware of the steps involved in learning, to understand their own individual learning style and helps them share their thinking.

1. Provide written and/or oral feedback on classwork and homework

This can be a good way to improve pupils' confidence in working independently. Limit use of attainment grades and scores and consider giving grades for level of effort.

6. Encourage collaboration

Give your pupils regular opportunities to complete quality, small group tasks and encourage them to learn from each other and develop their own ideas, rather than always looking to you for answers.

7. Give pupils choices and encourage them to set their own learning goals.

Thus, they can reflect on their own interests and preferences and take ownership of their learning. This will make your pupils feel empowered and in control of their own learning.

8. Involve pupils again in lesson planning

Asking your pupils for their input will help them feel that they have a responsibility for and involvement in their own learning. Video reflections can help you recognize the level of pupils' involvement in a lesson and allow you to plan your practice better.

9. Encourage your pupils to be reflective

Suggesting to your pupils to keep a 'learning diary' can enable them to keep track of their learning and monitor their progress. Hopefully their confidence will increase as they look back and become aware of how far they've come throughout the school year.

Question 3 How do pupils benefit from goal setting?



Answer:

Apart from the obvious reasons like helping pupils believe in themselves and setting them up for success in school, goal setting also benefits pupils in many ways, including:

- *Provides direction, which most pupils are either seeking or trying to nail down.*
- *Helps pupils clarify what is important to them and focus on it.*
- *Facilitates more effective decision making through better self-knowledge, direction, and focus.*
- *Allows pupils to take a more active role in building their own future.*
- *Acts as a powerful motivator by giving pupils something to hope for and aspire towards.*
- *Gives pupils a positive experience of achievement and personal satisfaction when they reach a goal.*
- *Assists pupils in finding a sense of purpose in their lives.*

Question 4 Provide a reason why teachers should promote pupils' reflection

Answer:

When there is one teacher and numerous pupils and all the feedback comes from or through the teacher, there is no hope of providing sufficient good quality feedback. Feedback is in a language that pupils use and strengthens pupils' voice in the classroom.

Engaging pupils in reflection is much more than checking for errors or weaknesses. It involves making explicit what is normally implicit and thus requires the pupil to be more active in their learning. Pupils become more aware of when they are learning and when they are not.

Question 5 List at least 2 ways that pupils can use in order to reflect on their learning

Answer:

Pupils can reflect on their learning, by:

- *Writing down relevant outcomes, thoughts or expectations regarding their learning*
- *Talking about their learning with their classmates (open discussion) or through a thorough discussion with an experienced teacher of their preference*
- *Becoming creative in order to describe their learning experience, by creating a video diary about their learning journey, construct a short presentation or design any other relevant activity*
- *Setting goals about their learning with clear and achievable outcomes that can even form a short educational path*
- *Using peer/self-assessment as formative evaluation method in a supportive learning environment*

Closed Questions

In this methodological tool you need to develop at least ten (10) close questions, of any type in order to consider as concluded methodological tool.

Code of methodological Tool:	CL_3.5_3 Closed Questions	
Competence Code and Title:	3.5 Learning Through Experience	
LO Code and Title:	<p>39. Describe traditional reflection strategies, such as journals and oral or written reporting, as well as new techniques (such as thinking routines e.g. I used to think but now I think, 3-2-1 bridge, two sided notebooks) and self-checks that can be applied with the pupils.</p> <p>40. Develop reflection skills of pupils so as to reflect on their learning from both success and failures through the practical use of traditional and new techniques such as thinking techniques (I used to think but now I think, 3-2-1 bridge, two sided notebooks etc.).</p> <p>41. Support pupils on their reflection during the different stages of their learning.</p> <p>42. Support pupils in recognizing opportunities for learning as well as in evaluating and adjusting learning processes and goals.</p>	
Aim of the methodological tool:	This methodological tool provides learners the opportunity to test their knowledge on the topics of the competence Learning Through Experience	
Hints and tips for the trainer:	Trainers should be aware of the questions presented, and be able to further analyze them or construct similar questions to expand their learner's knowledge.	
Question Type:	Type	Number
	True/False questions and answers	0
	Multiple Choice Questions and answers	5
	Multiple Response Questions and answers	3
	Sequence questions and answers	0
	Matching question and answers	1
	Word Bank questions and answers	1
		10



Multiple Choice Question

Select the correct answer from the choices below

Statement:	Which of these goals is specific?
Alternative 1	Lori will practice her instrument.
Alternative 2	Lori will solve ten single digit multiplication problems.
Alternative 3	Lori will get along with her peers.
Alternative 4	Lori will improve her math computation skills.
Correct answer	Lori will solve ten single digit multiplication problems.

Multiple Choice Question

Select the correct answer from the choices below

Statement:	Who is responsible for a pupil's learning: teacher or student?
Alternative 1	Pupil
Alternative 2	Teacher
Alternative 3	Both
Correct answer	Both

Multiple Choice Question

Select the correct answer from the choices below

Statement:	Thinking routine " <i>I Used to Think... But Now I think...</i> " fosters pupils' reflection since:
Alternative 1	It guides pupils to remember and learn by heart certain facts and have the ability to repeat them in detail.
Alternative 2	It promotes pupils to constantly change their mind over several subjects
Alternative 3	It helps pupils reflect on how and why their thinking about a topic has changed over time.
Correct answer	It helps pupils reflect on how and why their thinking about a topic has changed over time.

Multiple Choice Question

Select the correct answer from the choices below

Statement:	What is the methodology of Thinking Routine " <i>3-2-1 Bridge</i> "?
Alternative 1	Each pupil shares 3 thoughts, 2 questions, and 1 analogy about a topic of study.
Alternative 2	Each pupil has to answer orally in 3 questions, answer to 2 written exercises, and undertake 1 essay.
Alternative 3	Each pupil reflects on 3 topics, answers 2 questions, and presents 1 of them.
Correct answer	Each pupil shares 3 thoughts, 2 questions, and 1 analogy about a topic of study.



Multiple Choice Question

Select the correct answer from the choices below

Statement:	Which of the following is a benefit of pupils' reflection?
Alternative 1	Significance; pupils can see the importance of their own learning process.
Alternative 2	Punctuality; pupil learns to be on time.
Alternative 3	Alert; pupils train to be on top of their feet, waiting anything unexpected to happen.
Correct answer	Significance; pupils can see the importance of their own learning process.

Multiple Response Question

Select one or more correct answers from the choices below

Statement:	Which of the following consist(s) successful goal setting tips for pupils?
Alternative 1	Write clear and measurable goals.
Alternative 2	Create a specific action plan for each goal.
Alternative 3	Revise goals only when something goes really wrong.
Alternative 4	Reflect on your progress to see if you are on target.
Alternative 5	Do not celebrate accomplishments.
Correct answer	<ul style="list-style-type: none"> • Write clear and measurable goals. • Create a specific action plan for each goal. • Reflect on your progress to see if you are on target.

Multiple Response Question

Select one or more correct answers from the choices below

Statement:	Which of the following are considered measurable?
Alternative 1	Rick will read his lessons for Monday from Friday night
Alternative 2	Rick will solve 5 mathematic exercises every day
Alternative 3	Rick will finish three essays in two months period
Alternative 4	Rick will improve his grades in literature the next semester
Correct answer	<ul style="list-style-type: none"> • Rick will solve 5 mathematic exercises every day • Rick will finish three essays in two months period

Multiple Response Question

Select one or more correct answers from the choices below

Statement:	<p>When pupils set their own learning goals, they tend to achieve more, compared to when they focus on goals set for them by a teacher. According to research in this field, the behaviour that results from setting personal goals is empowering and proactive. When pupils identify what is important to them, they take control of their learning, becoming more autonomous and independent. Setting individual learning goals means you are not simply passively absorbing information.</p> <p>Why do pupils do better when they set their own goals?</p>
Alternative 1	Because pupils setting own goals makes them feel more motivated.
Alternative 2	Because pupils become an active participant in their own development.

Alternative 3	Because pupils tend to lower their expectations
Alternative 4	Because pupils feel that they replace their teachers by setting own goals
Alternative 5	By setting own goals, pupils simply passively absorb information needed to achieve them.
Correct answer	<ul style="list-style-type: none"> • Because pupils setting own goals makes them feel more motivated. • Because pupils become an active participant in their own development.

Matching Question

Match the following items

COLUMN A	CORRECT	COLUMN B
Sketch reflections	It's a visual notetaking style that mixes writing, drawing and other visual cues, an effective pupil' reflect technique.	The ideal active learning classrooms are easy to reconfigure for different activities, giving opportunities for both solitary reflection and group sharing.
60-second Think	At the end of class, set a timer and ask pupils to record their most eye-opening revelations or biggest questions. This activity lets pupils reflect on learning and build writing skills.	It's a visual notetaking style that mixes writing, drawing and other visual cues, an effective pupil' reflection technique.
Ideal space for reflection	The ideal active learning classrooms are easy to reconfigure for different activities, giving opportunities for both solitary reflection and group sharing.	At the end of class, set a timer and ask pupils to record their most eye-opening revelations or biggest questions. This activity lets pupils reflect on learning and build writing skills.

Word Bank Question

Drag the words and drop them to the appropriate places

"Having _____ makes pupils aware of their actions, _____, and even their time management skills. Setting goals obligates them to take action, regardless of the _____ that may be in place. As such, it can encourage pupils to develop _____ thinking skills, new problem-solving techniques, and a better _____ of how to overcome issues"

1.	efforts
2.	goals
3.	obstacles
2.	understanding
3.	critical
Correct answer	<ol style="list-style-type: none"> 1. goals 2. efforts 3. obstacles 4. critical

5. understanding



Additional methodological tools

Group exercise

Code of methodological Tool:	CL_3.5_4 Statements Hat/Bowl
Competence Code and Title	3.5 Learning Through Experience
LO Code and Title	40. Develop reflection skills of pupils so as to reflect on their learning from both success and failures through the practical use of traditional and new techniques such as thinking techniques (I used to think but now I think, 3-2-1 bridge, two sided notebooks etc.). 42. Support pupils in recognizing opportunities for learning as well as in evaluating and adjusting learning processes and goals.
Aim of the methodological tool:	This methodological tool aims to encourage participants reflect on their own beliefs/knowledge/experience in view of other participants' beliefs/knowledge/experiences.
Hints and tips for the trainer	Trainers are may choose one specific topic on which the participants will write their statements, or may leave it open.

General Guidelines (for the facilitator)

Give each team member a small piece of paper and a pen.

Ask participants to write down a statement which reflects their beliefs/knowledge on a social topic, such as equality, justice, environmental protection etc.

After a few minutes, the team leader collects all the statements in the hat/box/bucket or whatever they have to hand.

The team leader then gives the hat to one person, who will pick a statement randomly. The person who picked the statement will try to comment on it by defending it or dismissing it, in either case by adding arguments.

The facilitator may wish to open up a discussion.

The hat is passed round the circle until everyone has picked and commented on a statement.

Number of persons (or groups)

Minimum 4 persons

Instructions (for the participants)

Each team member has to take a small piece of paper and a pen.

Write down a statement which reflects your beliefs/knowledge on a social topic, such as equality, justice, environmental protection etc.

You have 5 minutes to think and write your statement. Then the team leader will collect all the statements in the hat/box/bucket.

Each person will pick a statement randomly. The person who picked the statement will try and provide his view on the statement.



Person responsible for each task (allocation of work, if applicable)
<i>1 team leader for every team, 4-5 team members</i>
Estimated Duration
<i>30 minutes</i>
Materials
<i>Pens, post-it notes or small piece of papers, a collection box (hat or something similar)</i>
Guidelines
<i>Trainer/facilitator should ensure that all learners participate in the activity. Be punctual with time frames, and creative with the presentation of the activity to pupils.</i>
Debriefing Question 1
<i>N/A</i>
Instructions/Comments from facilitator

Group Exercise

Code of methodological Tool:	CL_3.5_5 Questions to support pupils' reflection
Competence Code and Title:	3.5 Learning Through Experience
LO Code and Title:	41. Support pupils on their reflection during the different stages of their learning. 42. Support pupils in recognizing opportunities for learning as well as in evaluating and adjusting learning processes and goals.
Aim of the methodological tool:	The aim of this methodological tool is for teachers to find ways to support and encourage pupils' reflection in the different stages of learning, including their evaluation of their learning goals and outcomes. Teachers will be requested to devise specific questions to support this process.
Hints and tips for the trainer:	The participants will first write down their questions individually and then in group discussion they will discuss what they wrote also in relation to the questions on handout.

General Guidelines (for the facilitator)
<i>The trainer will first ask participants to write down which questions they would ask in order to support and encourage pupils' reflection. Then the participants in group discussion will compare their questions to the questions on the handout and will assess which of them would be more or less useful for their teaching.</i>
Number of persons
<i>N/A</i>



Instructions for the participants
<i>Please think of questions through which you can encourage and support pupils in their reflecting upon their learning, knowledge, performance, coursework, experiences.</i>
Estimated Duration
<i>40 minutes</i>
Materials
<i>Handout, pens, paper</i>
Debriefing Question 1
<i>Have you ever used any of these questions to support pupils' reflection in your class? Which ones?</i>
Debriefing Question 2 (please add as many questions as needed)
<i>Which of these questions will you use in the future?</i>
Instructions/Comments from facilitator

Group Discussion

Code of methodological Tool:	CL_3.5_6 Learning from success and failures
Competence Code and Title	3.5 Learning Through Experience
LO Code and Title	40. Develop reflection skills of pupils so as to reflect on their learning from both success and failures through the practical use of traditional and new techniques such as thinking techniques (I used to think but now I think, 3-2-1 bridge, two sided notebooks etc.).
Aim of the methodological tool:	This methodological tool aims to stimulate learners towards the concept of failure and success, in order to provide their pupils with the right tools and mind-sets regarding these topics.
Hints and tips for the trainer	Trainers are advice to further read regarding failure and success and proceed to this discussion with openness to every opinion which may arise from their learners.

Introduction to the topic (if applicable)

Failure and success

Failure sometimes creates extraordinary change.

Failure can act as a seed for two things: a road to despair or a springboard to growth. What grows out of the initial failure is entirely up to the person who "failed."

Even the smallest of our daily life activities involve success and failure. For instance, reaching your place of work on time, in spite of obstacles, is a goal. Achieving this goal may be a small success, but significant enough to start your day in the right way. If you fail to achieve this small target, you are welcomed by disapproval. This has a domino effect on all the activities of the day.



Every person is thinking differently about being prosperous in life and is defining success in another way, so there can't exist a definition that is suitable for all. Make yourself aware what accomplishment, success, and prosperity in general mean to you in your life. Once you have figured out what is important for you personally you are able to focus on your visions and goals.

Guiding questions (if applicable)

What is your definition for failure and success?
 What is the difference between failure and success?
 How can/do you measure failure and success?
 Do you agree with the quote: *It's not whether you fall down, it's whether you get back up?*
 How much pressure does your environment put on you to be successful?
 Have you ever succeeded in something you hate?

Conclusion questions

Have you reformed your definition of failure and success (after this discussion)?
 Did you learn something that you didn't know?

Conclusions (if applicable)

Failure is just life's way of giving you feedback
 If you can treat life as a big experiment with the goal to learn as much as possible as fast as you can, so you can get to your success-formula faster, you'll be better off than you would have been had you taken the "safe" road.

Maintain a Positive Attitude

Maintain a positive attitude so that, no matter what you encounter, you'll be able to see the lessons of the experience and continue to push forward.

Group exercise

Code of methodological Tool:	CL_3.5_7 Setting and assessing SMART goals
Competence Code and Title	3.5 Learning Through Experience
LO Code and Title	41. Support pupils on their reflection during the different stages of their learning. 42. Support pupils in recognizing opportunities for learning as well as in evaluating and adjusting learning processes and goals.
Aim of the methodological tool:	This methodological tool aims to help pupils to set and review their personal educational goals, using SMART methodology.
Hints and tips for the trainer	Trainers should be aware of SMART methodology and find suitable examples and wording in order for their pupils to be able to use the methodology.



General Guidelines (for the facilitator)		
<p><i>The aim of this exercise is to set learning goals with your pupils using SMART methodology. This will help them feel in charge of their progress and be partners in their progress.</i></p> <p><i>There are a number of ways that you can introduce and use goal setting. But is always helpful to be transparent about your own goals while pupils set theirs.</i></p> <p><i>Spend one session with your pupils reviewing what SMART goals are and working on setting their learning goals together.</i></p>		
Number of persons (or groups)		
N/A		
Instructions (for the participants)		
<p><i>Take your SMART matrix.</i></p> <p><i>Fill in every slot, as it was previously explained.</i></p>		
Person responsible for each task (allocation of work, if applicable)		
N/A		
Estimated Duration		
45 minutes		
Materials		
<ul style="list-style-type: none"> • Pens or pencils • SMART matrix for each pupil 		
S	Specific	What exactly will you do?
M	Measurable	How will you measure your goal?
A	Achievable	Do you have the skills/resources to accomplish your goal?
R	Relevant	What is the reason for pursuing your goal?

T	Time-bound	How much time will you need to achieve your goal?
Guidelines		
<p><i>Think about what goals you are comfortable disclosing with your pupils, how much is appropriate to share, and what the pupils can relate to.</i></p> <p><i>Then the actual implementation starts. Each pupil will receive a SMART matrix.</i></p> <p><i>An introduction will be made regarding how the pupils are expected to use the matrix and what they should complete in every slot.</i></p>		
Debriefing Question 1		
<ul style="list-style-type: none"> • Which slot was the hardest one to complete? (and for what reason?) • Which slot was the easiest one to complete? (and for what reason?) • Do you feel comfortable to apply the same procedure to another one of your goals? 		
Instructions/Comments from facilitator		