

## **Expert Challenge**

I can apply learning and communication techniques.

Entrepreneurial Culture



## Learn how to learn in a holistic manner

What do children and adolescents have to know, to be able to cope with the challenges of an uncertain future? And what do they need, to be able to lead a self-determined and fulfilling life and take on social responsibilities? They will have to acquire learning competence, that is certain.

## Materials for Teachers and Students

The materials contain a detailed step-by-step description of the challenge to facilitate a direct implementation in the classroom.

All materials are provided at www.youthstart.eu.













## You<sup>th</sup> Start Entrepreneurial Challenges Programme

based on the TRIO Model for Entrepreneurship – www.youthstart.eu

Core Entrepreneurial Education				Entrepreneurial Culture						Entrepreneurial Civic Education	
0	Idea Challenge	Ŕ	Hero Challenge	0	Empathy Challenge	2.14	Storytelling Challenge	MA .	Buddy Challenge	()	My Community Challenge
	My Personal Challenge	0	Lemonade Stand Challenge		Perspectives Challenge	19.[]	Trash Value Challenge	0	Open Door Challenge	WYY Y	Volunteer Challenge
	Real Market Challenge	A S	Start Your Project Challenge		Extreme Challenge		Be A YES Challenge		Expert Challenge	0	Debate Challenge

The TRIO Model is a holistic definition of entrepreneurship that encompasses three areas:

Core Entrepreneurial Education comprises basic qualifications for entrepreneurial thinking and acting: developing and implementing original and innovative ideas in a creative and structured manner.

Entrepreneurial Culture refers to personal development: self-initiative, self-confidence, teamwork, empowering oneself and others.

**Entrepreneurial Civic Education** aims at enhancing social competences and empowering students in their role as citizens: assuming responsibility for oneself, others, and the environment.

Each challenge belongs to a **challenge family** that has its own icon with a colour code that corresponds to one of the three TRIO areas. A challenge family comprises several challenges on different competence levels. The letter codes given in the teaching materials correspond to the following levels:

A1 – primary level; A2 – secondary level I; B1 and B2 - secondary level II; C1 – transition from secondary level II to tertiary level. Each level builds on the preceding level.

#### **Expert Challenge**

Youth Start Entrepreneurial Challenges



# Learning in a holistic manner with the You<sup>th</sup> Start Entrepreneurial Challenges Programme

The whole *Youth Start Entrepreneurial Challenges Programme* is about promoting self-determination and self-motivation as well as raising awareness of potentials and their strengthening. The teaching material on *Learning how to learn in a holistic manner* at hand is part of this programme and comprises the *Expert Challenge* area which helps children and adolescents to become experts for their own learning process.

The tasks we want to give range from providing background knowledge on learning, to presenting numerous learning techniques and guidance on how to formulate your own learning objectives, and to a self-determined and self-confident assessment of what has been learned. It also includes the aspect of social learning, with the aim of getting on well together. Empathy and successful communication play key roles.

The *You<sup>th</sup> Start Entrepreneurial Challenges Programme* is seen in its entirety to be an innovative holistic learning programme. We wish to convey those competences which promote self-determined thinking and acting: empathic interaction, target orientation, self-initiative, creative ideas and a self-confident implementation of projects. All challenges include self-assessment sheets for children and adolescents.

The *You<sup>th</sup> Start Entrepreneurial Challenges* are based on the TRIO Model, which is described on the next page. Each challenge out of a total of 18 challenge families focuses on topics from various areas:

community, sustainability, economy, personal development, social awareness, project management and many more. A single challenge's scope may vary from few class units to a year-round project.

The learning programme uses a modular concept and offers teaching materials for primary to secondary level education II. All challenges can be downloaded from www.youthstart.eu and may be used individually for lessons.

The contents of the teaching materials at hand will refer back to other parts of the programme, in particular to challenges from the *Empathy* and *Be A YES* challenges, as well as to the *You<sup>th</sup> Start Mindfulness Programme*. In this document we furthermore want to introduce symbols for the four core competences, which have been defined within the *21<sup>st</sup> Century Skills* for the Learning and Innovation area: critical thinking, communication, collaboration and creativity. These symbols shall indicate, which of these competences can be trained with which exercises.

The teaching materials on *Learning to learn in a holistic manner* have deliberately been kept simple in order to be able to use them at the primary level. The contents provided are universally applicable and are directed to learners of all ages.

We wish you many inspiring moments!

Eva Jambor and Johannes Lindner, editors,

www.ifte.at, www.youthstart.eu



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## **Expert Challenge**

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#### **Expert Challenge – Introduction**

Youth Start Entrepreneurial Challenges



## Introduction

#### 21st Century Skills and Learning Competence

What do children and adolescents have to learn, to be able to cope with the challenges of an uncertain future? And what do they need, to be able to lead a self-determined and fulfilling life and take on social responsibilities?

They will have to acquire learning competence, that is certain.

Learning competence is the ability and willingness to understand and evaluate information on issues and contexts independently and with others and to arrange them in mental structures.<sup>1</sup>

This includes the competences, ...

- ... to comfortably handle new technologies and media and to put them to a creative and critical use this also applies to local and global cooperation and communication.
- ... to acquire and process new knowledge and link it to the known.
- ... to organise one's own learning in an autonomous and self-motivated way.
- ... to assess one's own work.
- ... to ask for help and advice, whenever required.
- ... to be able to concentrate on one thing over a longer period of time.
- ... to learn cooperatively and to share one's learning results.
- ... to draw from the benefits of heterogeneous groups.
- ... to assume responsibility for one's own actions.
- ... to think in a creative and solution-oriented way.
- ... to persevere in a self-motivated way, even if something is difficult or boring.
- ... to be able to control one's own impulses.

In times of digital revolution, solid basic skills in reading, writing, and mathematics are a prerequisite for learning in an autonomous, self-empowering manner. Since the early 1980s, stakeholders from education, economy, and politics have been engaged in the most important (learning) competences for or in a digital future.

In 2002 the P21 organisation (www.p21.org) was founded, which started the Framework "21st Century Learning". The *21st Century Skills* shall empower children and adolescents to become more resilient, sustainable, and determined in dealing with problems and conflicts.

The following "Learning and Innovation Skills" have been defined:

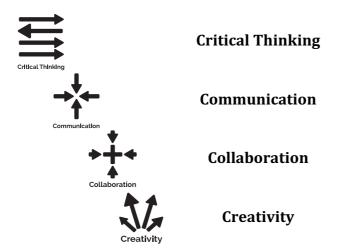
3

Source: https://de.wikipedia.org/wiki/Lernkompetenz

#### **Expert Challenge – Introduction**

Youth Start Entrepreneurial Challenges





These core competences must be incorporated in the lessons and trained in an interdisciplinary way. Thus, teachers must know, use, and introduce those (learning) methods which leave sufficient space for different forms of learning and cooperating. They must also provide the learners with realistic contents and tasks so that (lifelong) learning is perceived as a meaningful achievement.

#### **Structure of the Expert Challenge**

The Expert Challenge at hand is divided into nine chapters and contains varied and diverse (learning) methods. The first chapter serves as an introduction to the theme of *Learning how to learn in a holistic manner* and offers checklists for easier learning as well as a test to determine your own learning type or the learning types of the students in your class, respectively. The learning walk invites the students to learn with all senses and establishes a connection to the *Youth Start Mindfulness Programme*.

The following five chapters present numerous techniques and methods in detail: mnemonics, encouragements to "think outside the box", learning by asking, learning through motion and learning through playing. Each exercise is described on separate flash cards. Cards addressed to the teacher are framed by a dotted line, those addressed to the students are framed by a thick line. The materials can be sorted into a teaching and into a learning card index, from which a suitable method can be selected, depending on the situation and target group. All exercises may also serve as an incentive to try out a method using your own examples.

Chapter "Learning through Empathy" focusses on social learning with the aid of communication techniques. The chapter "Learning Goals and Learning Success" aims at motivating children and adolescents to learn autonomously; it shall furthermore guide them through the formulation of learning goals and the assessment of their own learning success. The self-assessment checks introduced in the materials are a fixed component of each challenge in the *Youth Start Entrepreneurial Challenges Programme*. A collection of links related to learning with new technologies rounds off the Expert Challenge.

The materials were developed on a "needs-oriented basis" for the use – as required – in "my" classes, where they have proven their worth.

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Youth Start Entrepreneurial Challenges



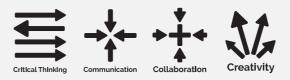
**Chapter 1** 

## 1. Introduction on learning to learn

The chapter "Introduction on learning to learn" includes material for teachers (dotted frame) and students (thick frame).

The 10 + 1 commandments for brain-friendly teaching and learning are based on findings from brain research and provide valuable tips for successful teaching and learning. The section on willingness to learn informs teachers on methods and ways to activate the students. A "learning fan" is a collection of tips on how to make learning easier for oneself. It was designed especially for students just like the "Checklist for my work space" and the easy to use "Test your learning style – Through which of my senses do I learn best?". The "Learning walk" invites the students to "Learn with all senses" by means of different activity centres and establishes a connection to the Youth Start Mindfulness Programme.

All four learning and innovation competences that have been defined as 21<sup>st</sup> Century Skills, can be acquired and trained in chapter 1: critical thinking, communicative and collaborative competence as well as creativity.



10 + 1 Commandments

## 10 + 1 Commandments for brain-friendly teaching and learning

according to: Schachl, Hans: Was haben wir im Kopf? Die Grundlagen für gehirngerechtes Lernen. Linz 1996. p. 8f. Source: http://www.dagmarwilde.de/kvdiv/gehirn.html

These commandments serve as background information and as an instruction on how to sustainably anchor contents in your long-term memory.

#### 1st Commandment: Overview first, specific information second

Before you start to learn details, you should get an overview of the topic. That way, the brain can search for already existing "storage places" or assign new memory cells. Only then can it be prepared for the "perception" of specific information.

#### 2nd Commandment: Making teaching and learning goals transparent

By asking "what for", learners want to discover the sense of learning. It is common knowledge that understanding why you want to or should deal with something, makes you more willing to learn and "ready for reception".

#### 3rd Commandment: Arousing the learner's interest

Curiosity is the best prerequisite for taking in and keeping new information. A personal interest creates the positive feelings which are an indispensable basis for efficient learning.

You<sup>th</sup> Start Entrepreneurial Challenges



#### 10 + 1 Commandments

#### 4th Commandment: Revising

Modern brain research shows that stimulating neural circuits more often makes them more stable. This does not imply learning something by rote. Instead, it is more advisable to revise contents in a varied way. It is particularly important to summarise the key information and compare the contents with the overall picture on a regular basis.

#### 5th Commandment: Engaging multiple senses

The eyes and the ears should not be the only transportation route for new information into the brain. It is also important for students to "grasp" what they learn. This means that the learners should do as much as possible themselves and explain contents to others. This is how learning takes place. The different "input channels" allow for the contents to be "multi-linked" and thus stored more permanently in the brain.

#### 6th Commandment: Watching your feelings

Anxiety and stress act as a hindrance for information on its way into our memory. Positive feelings are necessary to permanently store and successfully access information in our memory. Their role for our learning and thinking is clearly verifiable anatomically as well as physiologically.

#### 10 + 1 Commandments

#### 7th Commandment: Feedback

Learning is useless if you have no control over whether what you have learned is correct. Biologically, it is essential for the brain to receive feedback as soon as possible: Any "repairs" are easier while the storage process in the nerve networks is still ongoing than after its fixation. Consequently, unlearning something is always more difficult than relearning. Such "feedback" may be obtained by external monitoring or a self-check. When giving feedback, it is important not to forget the following: Praise! Reinforce! Support!

#### 8th Commandment: Take breaks

It takes time for the brain's chemistry to work on something new in peace. This process is called "consolidation" (stabilisation). During this phase our brain should not be disturbed by any new or similar information. Activities during the consolidation phase should ideally involve movement and not relate to the previous work! In order not to interrupt consolidation, it is necessary to prevent the "Ranschburg effect". This means that confusion is caused by the presentation of similar information within a short span of time and the information has no time to "settle".

Youth Start Entrepreneurial Challenges



#### 10 + 1 Commandments

#### 9th Commandment: Learning in the correct order

A logical "leitmotif" which recurs in all consecutive learning steps is crucial for successful learning since it causes new information to be linked to matching old knowledge in the brain, thus "making sense". Preliminary information makes it easier to understand and thus makes learning less strenuous. Similar contents should not be learned in succession, because they create interferences and overlapping processes, thus impeding the learning process.

#### 10th Commandment: Interlinking

Experiments in cognitive psychology show that our memory works in an interlinked manner (in terms of associations). Interlinking means that we engage multiple senses as well as that we learn in context and in an interdisciplinary and project-oriented way.

#### 11th Commandment: Take into account individual talents

Everyone has special talents. The more we take those talents into consideration, the greater the learning success will be.

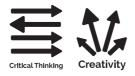
#### Willingness to Learn

## Willingness to learn

Are the students lacking concentration, are they fidgety and restless?

Then it can be helpful to know methods for increasing their willingness to learn. These cards are intended for teachers. If you want the students to take more responsibility for their learning, you can also give them the cards for individual practice. They can also carry out imaginary journeys in twos, in learning partnerships.

The following exercises help to promote, in particular, the following learning and innovation competences, which have been defined as 21st Century Skills: **critical thinking** and **creativity**.



Youth Start Entrepreneurial Challenges



Willingness to Learn

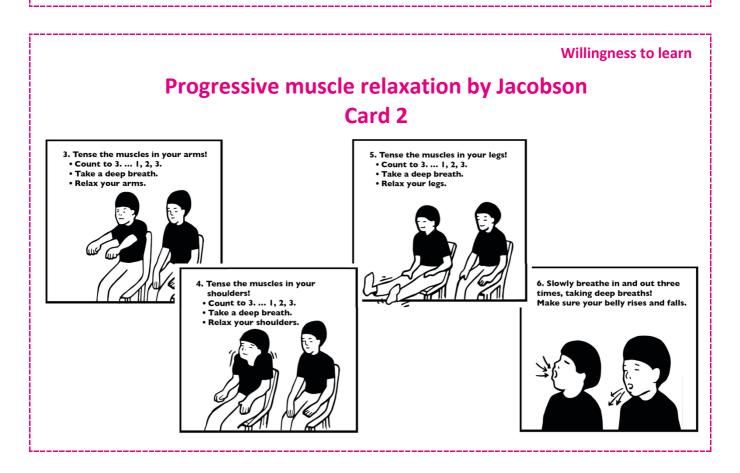
## Progressive muscle relaxation by Jacobson Card 1

You can support your brain's work by first tensing your muscles and the slowly releasing the tension. This results in an increased flow of bloc through your arteries which is then able to transport more oxygen in the brain, helping us to work and concentrate better.

This technique was developed by Dr. Edmund Jacobson – see: https://asdresources.wordpress.com/strategies/ relaxation-techniques-for-the-classroom (recreated by Helmut Pokornig)

Links to instructions (German only): www.gesund.at/a/progressiv-muskelentspannung-jacobsen, www.youtube.com/watch?v=c8NdFOXBgxE, www.youtube.com/watch?v=1EWMEPg8ZQk





Youth Start Entrepreneurial Challenges



Willingness to learn

## Cleaning your teeth and brain

Use your tongue to clean your teeth with your mouth closed.

Touch every single one of your teeth from all possible angles.

In the end, press your tongue to the roof of your mouth, placing your tongue just behind your front teeth.

This exercise triggers deep breaths, helping you to relax.

Since your tongue takes up a lot of space in your brain, this exercise helps to prepare your entire brain for learning and makes it more receptive.



#### Willingness to learn

## My place of energy

When you're not feeling well, you can make an imaginary journey to a place where you feel really comfortable.

Can you think of such a place?

If not, then imagine any place you would like to be: in a forest, on a meadow, at a lake, by the sea, or in the mountains... Or would you rather be in a building, in a room?

Travel there in your imagination and feel yourself, with all your senses, connecting with your place of energy.

- What can you see? What colours, shapes, things?
- What do you hear?
- What do you smell?
- What do you feel on your skin?
- Can you taste anything?
- How do you feel in this place?
   What feelings do you feel?



Youth Start Entrepreneurial Challenges



Willingness to learn

## A journey through your body with Posi Mem, Part 1

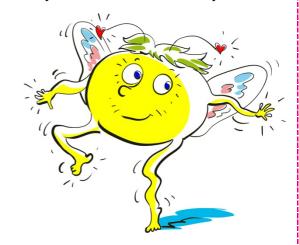
Posi is a tiny mem. Mems are infectious feelings, thoughts, and ideas. They can be good and positive, but they might also be bad or negative. They can be crazy, creative, boring, and so on.

Posi only spreads positive feelings, thoughts and ideas. That is why he looks a bit like a smiley.

Close your eyes, visualise Posi and smile at him. Now send him on a journey through your body. Imagine that Posi emits a warm and soft smiling light which spreads in your head behind your forehead.

All unpleasant thoughts vanish. You feel happy and smile. The tension on and around your forehead, eyes, cheeks, and mouth dissolves and everything feels smooth.

Now Posi wanders along your neck to your shoulders. Your neck and shoulders feel at ease.



Willingness to learn

## A journey through your body with Posi Mem, Part 2

Posi's light now wanders onto your right shoulder, down your right upper arm, on to your forearm and to your right hand. Your fingers are warmed from the inside. Now gently move your right arm, your right hand, every finger, and feel Posi's warmth.

Posi now wanders onto your right shoulder, down your right upper arm, on to your forearm and to your right hand and fingers. Gently move your right arm, your right hand, every finger, and feel Posi's warmth.

Posi then carries on to your chest. Feel how Posi's soft, warm light spreads throughout your body.

Now Posi wanders into your belly, spreading his light there. Your breath becomes calm and even, and you feel your abdominal wall rising and falling, while you start to relax.

Posi's light now wanders along your right thigh and into your knee, down your lower leg, to your foot and into your toes. Your leg feels relaxed.

Now let Posi's light also flow through your left leg. Enjoy the pleasant relaxed feeling in your left leg.

Take a few deep breaths, stretch, open your eyes, smile and be glad to feel Posi Mem in your whole body.

You<sup>th</sup> Start Entrepreneurial Challenges



Willingness to learn

## **Optimism is a great tutor!**

There are times when you have little or no confidence in yourself? Oh dear!

Negative thoughts have a weakening effect. You may find it harder to concentrate and more difficult to learn and to memorise things.

Fortunately, there is a trick that will help you to eliminate negative thoughts and make you feel better. Here's how it works:

Think of sentences that will strengthen you. Now repeat them over and over again. You can say them out loud or think them to yourself. Such encouraging and comforting sentences are called affirmations.

Here are a few examples for possible affirmations. Also try to come up with your own affirmations, they are sure to better suit your situation.

#### Willingness to learn

Everything will be fine.				
I can make it!				
I have mastered greater challenges before.				
I'm sure to think of something once I've taken a break.				
I'll take it with humour.				
There are two sides to everything. I prefer to see the good side.				
I'm sure to think of a solution.				
I always try my best.				
Mistakes are friends who tell you what to learn.				
I do everything right.				
I'm grateful for everything I have.				
I won't let you/this get me down!				
I like myself even if I have my faults and make mistakes.				

Youth Start Entrepreneurial Challenges



**Learning fan** 

## **Learning fan**

The learning fan is a great tool to remind you how to successfully go about new content in a stress-free manner. Each learner shall be given a copy of the following template. After cutting out the tips and punching holes on the left side, connect them with a cord and make a knot. Whenever the learners are faced with a new or difficult topic, they can get out their learning fan and go through the steps one by one.



Learning fan

## My learning fan

How to make learning easier?

You<sup>th</sup> Start Entrepreneurial Challenges



	earning fan
1. Attention and concentration	
I focus all my concentration on one task and stick to it I will not let myself be distracted from my learning. The faster I'm finished, the sooner I can play with my	
L	earning fan

## 2. Motivation

I think about the interesting features of my study matter. If there is nothing interesting about it for me, I look forward to the great feeling I will have once I've managed it.

Youth Start Entrepreneurial Challenges



**Learning fan** 

## 3. Underline and note down the most important information

I can memorise a text better if I underline or note down important words.



Learning fan

## 4. I learn through different learning methods

I use all my senses for learning:

Eyes: reading, painting pictures in my head, using

mnemonic images ...

Ears: reading out loud, letting others read to you,

repeating things again and again ...

<u>Hands:</u> writing things down, creating sketches or making

drawings ...

You<sup>th</sup> Start Entrepreneurial Challenges



	Learning fan
5.	Variation  My brain needs variation.  That is why I won't learn contents from similar subjects in succession.
	Learning fan
6.	Breaks I take frequent breaks, because breaks keep me alert and improve my concentration.

You<sup>th</sup> Start Entrepreneurial Challenges



	Learning fan
7. I schedule my learning time I divide my study matter into portions.	
I tick off things I have completed.	
	Learning fan
8. I repeat thing at regular intervals	
Just like athletes, my brain also needs its own traini	ng.

You<sup>th</sup> Start Entrepreneurial Challenges



	Learning fan
9. Step-by-step I plan small steps to achieve my goal. Each step I've taken gives me pleasure.	
	Learning fan

## 10. I check if what I've learned has sunk in

I try to explain what I've learned to others.

I create quiz questions on the study matter and make a quiz together with learning buddies.

I use a learning flashcards.

You<sup>th</sup> Start Entrepreneurial Challenges



Checklist

## **Checklist for my work space**

If my work space is comfortable, well-arranged and nicely decorated, I can learn better. Go through the following list and tick the appropriate answers.

What is true?	Yes	No	
I can work in peace and am not disturbed.			
The temperature is pleasant, and I can think and learn well.			
I remember to air out my room regularly.			
I make sure that the hand I use to write does not cast a shadow. If I write with my right hand, the light must come from the left side, or vice versa.			
Before I sit down, I think about what I need for learning.			
The things I need for learning are within reach.			

#### Checklist

What is true?	Yes	No
My chair suits my size.		
My work space is big enough for my working material.		
My work space is tidy.		
I enter all important dates in my calendar.		
I have a pin board onto which I can stick important reminders.		

See how suited your work space is for learning. The more "yeses" you have ticked, the better. Where have you ticked "no"? You should make changes to all items showing "no".

Youth Start Entrepreneurial Challenges



**Test your learning style** 

## Through which of my senses do I learn best? (simple learning style test according to Frederic Vester)

#### What is tested?

- ... Depending on the receptive channel (through the eyes, by listening, by reading, by touching), how well does the transition from the ultra-short-term memory to the short-term memory succeed?
- ... Which of the four is the preferred receptive channel?
- ... Which learning styles should be combined?

Duration: approximately 20 minutes

Procedure: Briefly explain the whole procedure (approx. 2 to 3 minutes), carry out the individual steps

and then enter the results into the chart at the end (about 3 minutes each).

#### Test your learning style

#### **Visual learning / watching -** Duration: approximately 3 minutes

Place ten items on the table, leaving about two seconds between each item.

For example: coin, knife, sponge, CD, key, pencil, booklet, glue, ruler, button

After that, give the test person mental arithmetic exercises for 30 seconds. Then the test person has 20 seconds to remember the items.

Enter the number of remembered items into line 1 of the evaluation chart.

#### **Auditive learning / listening -** Duration: approximately 3 minutes

Read ten words out loud and clearly to the test person, leaving about two seconds between each word.

For example: can, apple, boot, sugar, carpet, lamp, table, elephant, football, cupboard

After that, give the test person mental arithmetic exercises for 30 seconds.

Enter the number of remembered items onto line 2 of the evaluation chart.

Youth Start Entrepreneurial Challenges



#### Test your learning style

#### **Reading memory / reading -** Duration: approximately 3 minutes

Let the test person read ten words. He/she may look at each word for about two seconds.

For example: towel, cover, tree, sun, bird, coat, window, meadow, stove, fireplace

After that, give the test person mental arithmetic exercises for 30 seconds. He/she then has 20 seconds to remember the words.

Enter the number of remembered items onto line 3 of the evaluation chart.

#### **Haptic learning / touching –** Duration: approximately 3 minutes

Blindfold the test person and put an object in his/her hand so that he/she may feel what it is.

For example: glasses, rubber, fork, bottle, tooth brush, wristwatch, tumbler, scissors, book, shoe

Following 30 seconds of mental arithmetic exercises, the test person has 20 seconds to remember the items.

Enter the number of remembered items onto line 4 of the evaluation chart.

#### Test your learning style

#### **Combined learning / visual, auditive, reading, haptic -** Duration: approximately 3 minutes

This time the test person may see, listen to, read and also touch the items. Place ten items in front of the test person. In addition, write down the names of these items on small pieces of paper.

The test person is given an item every two seconds, while at the same time the piece of paper with its name is laid before him/her and read out loud and clearly.

For example: ring, stone, soap, note, hammer, pen, hat, plate, paintbrush, sweety

Following 30 seconds of mental arithmetic exercises, the test person has 20 seconds to remember the items.

Enter the number of remembered items onto line 5 of the evaluation chart.

Youth Start Entrepreneurial Challenges



#### Test your learning style

#### **Evaluation chart**

	1	2	3	4	5	6	7	8	9	10
1. Visual learning										
2. Auditive learning										
3. Reading memory										
4. Haptic learning										
5. Combined learning										

**Learning walk** 

## **Learning walk – Learning with all senses**

The learning walk is composed of a diverse range of exercises for consolidating words or texts to current topics. The students learn to identify and write words, to remember the content of texts as well as to reproduce words and texts in different ways. The focus lies on a playful approach which enhances the learning success. Here's how it works:

- Learning stations: Distribute flash cards and the relevant material within as well as outside the classroom.
- Each child chooses a learning partner.
  Alternative: The teacher determines the learning partners ("peers"/"buddies").
- The buddies go together from station to station and learn with and from one another.
- You might want to have the learning walk stations ready every day for children who finish their exercises before others. It is also well suited for "project days".

The learning walk encourages the students to communicate, collaborate, and be creative.

See also the You<sup>th</sup> Start Mindfulness Programme: It is available for download on www.youthstart.eu under the heading Mind & Body or may be ordered as a workbook "Why be mindful?" under arbeitsweltundschule@akwien.at for a fee of 4 euros.

You<sup>th</sup> Start Entrepreneurial Challenges



**Learning walk** 

#### Who will learn with me?



There are three ways how to get a learning buddy:

- You choose one.
- You draw a name.
- You are "assigned" a partner.

Now we can kick off our learning walk.

Have fun learning!

**Learning walk** 

## **Reading snake**

#### You will need:

- Reading material, e.g. flash cards, informative texts, books ...
- Class list (= reading list)

- Two children begin by reading to each other.
- Then one of the children gets another child (e.g. someone who has just completed his/her work) to read to them.
- The child that read to the others before now gets another child.
- And so on and so on. After having read to the others, the child can have his/her name ticked off the "reading" list.
- The reading list shows you who has not yet read out loud to the others.

You<sup>th</sup> Start Entrepreneurial Challenges



**Learning walk** 

## Look here, a peephole!

#### You will need:

- A peephole-folder (that's a loose-leaf binder with four transparent covers, each of which contains an A4-sheet with a hole. The holes get larger towards the end of the binder),
- cards with words or texts related to the topic,
- at least one child to play with.

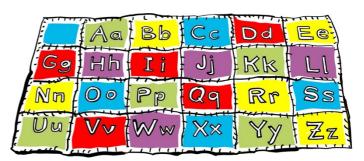
#### Here's how it works:

- One child hides a card under the four peephole covers.
- The other child tries to guess the word.
- No clue yet? Then turn to the page with the next peephole in size. Still no idea? No? Then turn the next page.
- Take turns.

**Learning walk** 

## **Dancing words**

- Let someone read you your learning words or words related to the current topic which you then "dance" on the alphabet rug.
- Do you need a capital letter?
- Then raise your hands up in the air and dance on your tiptoes.
- Take turns.



You<sup>th</sup> Start Entrepreneurial Challenges



**Learning walk** 

## **Back writing**

#### You will need:

• Learning words or texts related to the current topic

#### Here's how it works:

- "Write" questions to the learning words or the current topic with your finger on the back of your learning buddy.
- You can either say the answer out loud or write it down.

**Learning walk** 

## Blindfolded writing on the blackboard

#### You will need:

• Learning words or texts related to the current topic

- Your buddy dictates to you learning words or texts related to the current topic, and you write them on the blackboard while having your eyes covered with a blindfold.
- Take turns.

Youth Start Entrepreneurial Challenges



**Learning walk** 

## **Keeping sight of things**

#### You will need:

- Texts on the topic
- Bubble wrap

#### Here's how it works:

- One child covers the text with bubble wrap, the other child reads it out loud.
- Take turns.
- Check: Remove the bubble wrap.

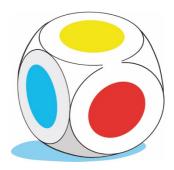
**Learning walk** 

## **Rolling words**

#### You will need:

- Colour cube
- Vocabulary flash cards (words related to the current topic)
- Paper (A6) matching the colours of the cube to cover the word cards

- Place 6 vocabulary cards flash cards on the table, take a good look at them and cover them with the colour cards.
- Throw the colour cube.
- Write down, from memory, the word under the corresponding colour card.
- Check: Remove the colour card.



You<sup>th</sup> Start Entrepreneurial Challenges



**Learning walk** 

## **Spinning**

#### Here's how it works:

- Choose the most difficult word from the current topic.
- Spin the top.
- Write down the word. Repeat until the spinning top has stopped.
- Stop writing when the top falls over.
- Now count how many times you managed to write down the word.
- Be pleased with yourself!

#### Alternative:

• Write down thoughts on a topic.

**Learning walk** 

## Rolling and spelling 1

#### Here's how it works:

- Choose a word related to the current topic. Now roll the die and write it down in the manner shown next to the corresponding number.
- While you write, spell it out.
- When you have finished writing it, read the word out loud.



Write down the word using your other hand.



Write down the word as fast as you can.



Write down the word with your eyes closed.



Write down the word as beautifully as possible.



Write down the word as big as possible.



Write down the word as small as possible.

You<sup>th</sup> Start Entrepreneurial Challenges



#### **Learning walk**

## Rolling and spelling 2

#### Here's how it works:

- Choose a word related to the current topic.
- Now roll the die and spell it out in the manner shown next to the corresponding number.

	•	
l		J

Spell the word in an evil voice.



Spell the word with a baby voice.



Spell the word with a robot voice.



Spell the word with a monster voice.



Spell the word with very tiny voice.



Spell the word singing.

**Learning walk** 

## **Memory**

#### You will need:

- Letter or learning word cards (two of each) or
- short texts and a corresponding headline.
   (e. g. the description of an animal on one card, the animal's name on the other card)

#### Here's how it works:

• Play Memory, just the way you know how!

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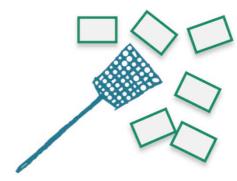


**Learning walk** 

## **Word swatting**

#### You will need:

- Big laminated learning word cards
- A fly swat
- A minimum of three children, one of which is the referee.



#### Here's how it works:

- The referee places the cards, words facing up, on the table.
- Then he/she calls out a word.
- The child managing to "swat" the word first, is allowed to take it and place if before him/her.
- The child who has the most cards in the end takes the role of referee.
- Alternative: Sentence swatting.

**Learning walk** 

## Learning trick Mindfulness: Use all of your senses to be your tutors!

If you perceive everything you learn about with all of your senses, you will find it easier to remember things. That's a fun way of learning and memorising!

Take a sheet of paper and write down or draw what you want to explore and learn about with all your senses. Answer the following questions:

- What feelings does it trigger when you think about it?
- What do you imagine seeing when you think about it?
- What do you imagine hearing when you think about it?
- What do you imagine smelling when you think about it?
- What do you imagine tasting when you think about it?
- What do you imagine feeling on your skin when you think about it?

Youth Start Entrepreneurial Challenges



**Learning walk** 

## Chinese symbol for luck

What does this symbol look like, what do you see? Learn to recognise and to write this symbol.

Tip: Think about how you can best memorise something, e.g. by

- ... taking a close look at it visualise the symbol in your head.
- ... describing it repeat the description.
- ... motion draw the symbol into the air with your finger and repeat this motion in your imagination.

Learn to write the Chinese symbol for "luck" in the way you find easiest and which most corresponds to your "learning style".

You will find it even easier to memorise if you use more than one of your senses!



**Learning walk** 

## Blooming like a beautiful flower

- Fold your hands in front of your belly and close your eyes.
- When you breathe in, your belly grows, your hands follow the movement of your belly and open like the petals of a flower. Keep the heels of your hands together as shown in the picture.
- When you breathe out, your belly gets smaller again and your hands close.
- Repeat this "blooming" a number of times.



Youth Start Entrepreneurial Challenges



**Learning walk** 

## Can you meet this challenge? (1)

Read the word out loud, but don't name the colour!

green yellow blue red orange black purple pink
brown grey turquoise black blue yellow pink
turquoise red purple brown orange green grey
grey red grey turquoise green pink orange

**Learning walk** 

## Can you meet this challenge? (2)

Name the colour, but don't read out the word!

preen yellow blue red orange black purple pink
brown grey turquoise black blue yellow pink
turquoise red purple brown orange green grey
grey red grey turquoise green pink orange

Youth Start Entrepreneurial Challenges



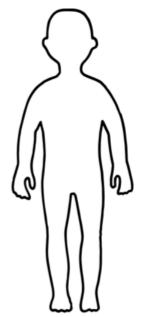
**Learning walk** 

## **Body researcher 1**

Take a few deep breaths, relax, and feel your body. Describe how the different parts of your body feel.

## For example:

- My scalp is tingling.
- My ears feel very warm.
- My forehead ...
- My nose ...
- My shoulders ...
- My tummy ...



**Learning walk** 

## **Body researcher 2**

- Tense your hand.
- Make a fist and then relax your hand.
- Repeat this 5 times.
- Do you notice any difference between your right and left hand?

## Expert Challenge – 2. Learning with memory devices

You<sup>th</sup> Start Entrepreneurial Challenges



**Chapter 2** 

## 2. Learning with memory devices (Mnemonics)

The word *mnemo* is derived from the Greek word for *memory* or *remembrance*.

The word mnemonics means memory aids (that is memory devices), which may range from expressions or rhymes to drawings. The aim is to anchor learning contents in the long-term memory more firmly and to help students learn to independently use mnemonics.

In this chapter you will be presented different *tricks for memorising* as well as a *Training to memorise*. Furthermore, we have included a few examples of how children work with *mnemonic story telling* they have come up with themselves.

Mnemonics promotes *creativity* in particular, one of the four learning and innovation competences defined within the framework of the *21*<sup>st</sup> *Century Skills*.



**Tricks for memorising** 

## Our introduction into tricks for memorising – a field report

Our first Egghead Days were devoted to the main topic "pets". First, I showed the children a picture of a rabbit and asked them a number of questions: "Are the ears as long as the forelegs? Can you see its whiskers? How many does it have? Do you think its ears are longer than its legs? Can you "take an inner picture" of the rabbit which you see even with your eyes closed?"

After all had answered in the affirmative, I told them about a crazy rabbit. I described it vividly, addressing *all senses*, what it looked like and what funny things it carried around with it. The children visualised this crazy picture with their eyes closed.

In front of you sits a small white rabbit. On its head, a laughing frog jumps up and down. (Rhythmic Speech, the children followed every word with their inner eye – you could see their heads moving.) Two red spoons are hanging from its long ears, jingling funny to a beat. It has blue carrots stuck up its nose and a rotten Easter egg stuck on its rodent front teeth. Around its neck it has a chain of coloured pencils. A transparent gym bag is dancing on its back. Its hind legs have been stuck into old, stinking socks, and with its forelegs it is holding a singing fish. It has a rose smelling of cheese stuck under its tail.

Then I repeated all body parts of the rabbit, and the children called out which objects had been put on every part. Since there was still time left, the children also were able to draw the crazy rabbit.

## Expert Challenge – 2. Learning with memory devices

Youth Start Entrepreneurial Challenges



**Tricks for memorising** 

## Tips for introducing tricks for memorising in class

The children are asked to paint their own pictures in their head (of family members, fantasy figures, animals, rooms, places etc.), to visualise them and to link them with the learning content in their imagination.

#### For example

Read a story which includes many animals. The children will find them a lot easier to remember if, in their imagination, they place the animals in the craziest places in the classroom.

This technique can be trained by using different rooms and objects.

After some time, their repertoire of learning tricks can be extended by adding further mnemonics.

Please leave enough time, though, so the children don't get confused.

**Tricks for memorising** 

## **Hook word technique**

This technique can be used if the order of things is important. For example, if you want to link the name of a month to its "number".

1st step: Imagine a picture fitting the form of the number. For example:

"1" looks like a candle, a ruler, ...

"2" looks like a swan or (two!) ears.

"3" looks like a triangle (geometrical shape or instrument) ...

2nd step: Now link these figures in your head to whatever (in our case the names of the months) you

want to remember in the determined order. Whenever you imagine the thing, you now can "see" which number it is linked to. This makes it easier to remember the order of the names

of the months.

Youth Start Entrepreneurial Challenges



**Tricks for memorising** 

### **Method of loci**

Locus is Latin and means place, space.

#### For example:

Think of a well-known room or a path you've gone over and over again and picture it in your head. In your imagination you will now place the things you want to remember there.

Paths are especially suitable if you want to remember a specific order. While you visualise yourself walking this path, you put down the objects or symbols you want to memorise along the way in the right order. We can also hang things on our body, e.g. cuddly toys, food, persons etc. The wittier the places and links are, the easier it will be for us to memorise them. Humour is a great memory aid.

#### Approach:

Visualise or figuratively immerse yourself into a well-known place (room, class, familiar path ...). Furnishings or local conditions are linked to the imaginary pictures of the things you want to memorise (e.g. a salad hanging from a lamp, you stumbling over potatoes in the lift ...). The basic rule of thumb: The crazier it is, the easier it will be to remember!

**Tricks for memorising** 

### **Sequencing systems**

**Alphabet system**: First, we choose a topic, e.g. animals, plants, people. Then we allocate a representative of this group to each letter: A = ape, B = bear, ..., E = elephant. Now we link the desired information in the right order to the words – i.e. the ape stands for the first detail, the bear for the second, the elephant for the fifth etc. We can then retrieve the information by thinking about what we have linked to the respective animal.

**Numbers:** The main problem with remembering numbers is that they almost exclusively require our logical thinking. That is why techniques have been developed with the aid of which numbers can be made accessible for visual thinking. In that, numbers are imagined as pictures. For example, the form of the figure 2 resembles a swan. Using the so-called form system, we assign an image to every figure. It is also possible to establish links by using them as "hooks" for memories related to numbers. These hooks are easy to remember and help us with the association with or the visualisation of pictures. When creating hooks, we should first look for obvious associations, e.g. 24 = Christmas, 00 = toilet, our street number, a birthday or other date, the first part of a telephone number. Then we fill up the remaining spots, using the form system.

Youth Start Entrepreneurial Challenges



**Tricks for memorising** 

### Methods to remember important figures

**Acoustic:** We remember the rhythm or melody of a sequence of numbers. Think of a telephone

number you have in your head. We have either memorised it in single digits (e.g. 5-8-5-3-4-7-2) or in groups (585-34-72). We will find it harder to reproduce the telephone number different from the way we are used to (i.e. when we memorised them in groups, we will have problems with the single digits and vice versa). Important in both cases: We have

memorised the sequence of numbers acoustically.

**Motoric**: Some people remember telephone numbers by the pattern it produces when typing it into

the keypad on the display.

Logical: Numbers sometimes follow a certain mathematical logic. Perhaps the individual digits

result in a small calculation (e.g.  $2911 \Rightarrow 2 + 9 = 11$ ) or a logical sequence. We remember some numbers because we have a certain personal connection to them (street number, birth date ...). That way, many small single pieces of information help to reconstruct and

reproduce a longer number.

**Tricks for memorising** 

### **Acronym technique**

Sometimes, if we can't think of a word, it helps to know the first letter.

Therefore, a popular method is to combine the first letters of a series of words to form a sentence.

#### For example:

For the eight planets of our solar system: Mercury-Venus-Earth-Mars-Jupiter-Saturn-Uranus-Neptune My Very Educated Mother Just Served Us Noodles.

For the right order of the wind directions:

North-East-South-West

Naughty Elephants Spray Water.

Youth Start Entrepreneurial Challenges



**Tricks for memorising** 

### **Association Exercises 1**

We want to promote creativity in the following way. With the aid of imaginary pictures, several words are linked together. It is important that the pictures are NOT(E)WORTHY – the funnier an association is, the easier it is to remember.

**Connect:** The easiest way of association is to spatially connect two words. This means, to stack them on top of each other, next to each other, into one another; e.g. monkey and desk -> the monkey sits on the desk.

**Exaggerate:** In order to make this picture more creative, we can exaggerate their size and number as the fancy takes us. Instead of placing one monkey on the desk, why not have thirty sit there.

**Exchange objects:** We can also transfer the function of one object to the other. The words "roll" and "show", for example, can be linked by imagining a show with a sole made of the bottom of a roll.

#### **Tricks for memorising**

### **Association Exercises 2**

**Address all senses:** The more colourful and vivid we imagine a picture to be, the more likely we will be able to remember it. That is why it is helpful if we are able to recall colours, sounds, tactile impressions and smells.

**Personify:** We can also bring something to life and give it human features. Using the example of the roll and the shoe, we could humanise the roll and have it complain, while we imagine the shoe laughing cheerfully.

**Movement:** To make our association even more lively, we could also incorporate movement, e.g. for the words horse and water lily. We imagine the water lily riding on the back of the horse, scared of falling down. If we imagine this picture in technicolour, we will be able to memorise it a lot easier.

**Personal connections:** Memorising works especially well if we can relate to something personally. We particularly like a certain picture or are delighted to have come up with a creative idea. Or maybe we are annoyed or even alarmed by a certain combination of words. In any case, emotions are involved and our memory is additionally stimulated. Both ensure better anchorage in the sense of learning.

You<sup>th</sup> Start Entrepreneurial Challenges



**Tricks for memorising** 

### **Learning texts**

If you want to learn a text, it helps if you use a room you know very well.

Imagine in your head, how you place the sentences at different positions throughout the room.

You can also actually stick notes with the written sentences onto these positions.

If you want to remember the content of a text, it is enough to write down or position keywords – in your imagination or "in real life".

If you want/have to learn a text by heart, you will have to memorise every single word – in the right order. To learn poems by heart is usually easier than "normal" texts, because they rhyme or have their own "rhythm".

**Tricks for memorising** 

### Memorising names and faces

If you want to memorise names, it is best to do it as a caricaturist and concentrate on noticeable details. If you meet someone, find a typical feature of his face and "exaggerate" it in your mind.

Now let us get down to memorising the name. Think about what is conspicuous or remarkable about the name. Some names remind us of things we can visualise. Or you can look for similar sounding words related to the name. The name Alex might remind you of an axe, Clara of clear water.

Get used to perceiving faces and names "consciously" and to finding associations that are as crazy as possible. Start addressing the person with his/her name as soon as possible and repeat it over and over again.

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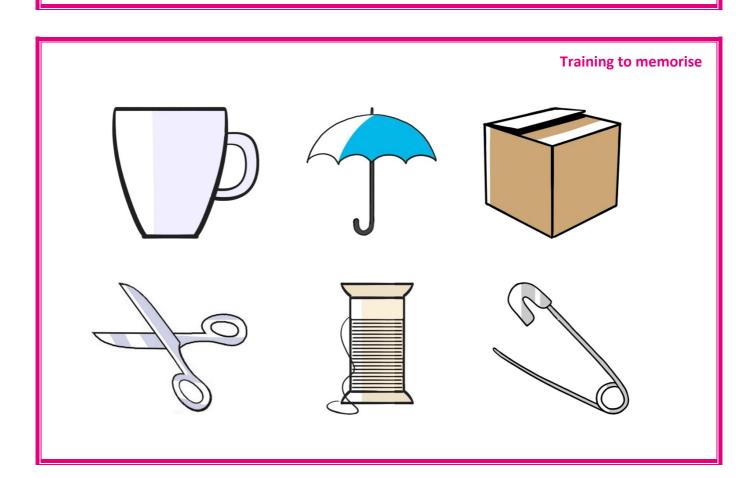


#### **Training to memorise**

#### Which trick works best for me?

Choose 1 to 3 learning buddies. Start with 5 cards. You can see if you can cope with more later on. Try to memorise the cards with the different memorisation tricks and find out which trick works best for you.

- Make up a crazy story using the pictures on the cards.
- In your mind, connect each of the objects with a part of your or another person's or animal's body.
- In your mind, place each object somewhere crazy in this room. Remember, where you have placed the objects.
- In your mind, arrange the items next to, into or on top of each other. Can you remember them that way?
- Visualise your way to school. In your imagination, lay down the objects in crazy places along the way. That way, you will find it easier to remember the order.



You<sup>th</sup> Start Entrepreneurial Challenges







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# Mnemonic stories - thought up by children

**Trick for memorising telephone numbers –** Florian, 7 years old

Once I had to remember a really long telephone number. It was so long that I just couldn't remember it. Then I thought of a trick. I visualised the way from my room to the front door. And in my head, I then imagined every digit to be on one piece of furniture, of course in the right order. In my imagination the numbers looked really crazy. The next day I got up, brushed my teeth, got into the shower and sang to myself. Then I went into the wardrobe. On my way, I looked at the furniture and suddenly I remembered the digits. When I had arrived at the door, I knew all of the telephone number by heart. It's as simple as that!

#### Training learning words is easy! - Danijel, 9 years old

If you imagine the words as detailed pictures in your mind's eye, you can memorise them a lot easier. It works even better if you imagine the words in a funny and crazy way.

What does "in your mind's eye" mean? In your mind's eye means that you simply close your eyes and imagine something clearly and in detail. You can imagine a picture, but also a word. Then you write down the word and look if you spelled it correctly. But you will also have to practise, otherwise you will forget them and misspell them after some time.

#### My trick against worries - Moritz, 9 years old

Before exams, I was always worried, because I often thought that I would make many mistakes and then receive a bad mark. Now Ingrid has showed me a good trick:

Before an exam I now talk myself into thinking that I know everything, because I normally do know it. And that I will manage to concentrate and work well. During the exam I don't let anything distract me. After the exam I now feel a lot better and am pleased with my work. This also shows in the mark. And if not, then it doesn't matter. After all, I go to school to learn something and not because I already know everything.

**Turn-in-trick** – Senada, 8 years old

When I have to turn in the envelope with the weekly tasks, my father gives me a cuddly toy to take to school which shall remind me that I have to turn in the envelope.

# **My trick for memorising –** Michi, 7 years old

My mummy once said to me I should get milk and sugar and flower and salt and a pizza and spaghetti and fish fingers and coke at the supermarket. But how am I supposed to remember all of this? I just think about it and then I know it. I simply have to image the milk on mummy's mouth, the sugar on mummy's nose, the flower on mummy's tongue and the salt on mummy's hair. The pizza is on mummy's eyes and the spaghetti are sticking to her feet. The fish fingers come out of mummy's ears and the coke runs out of her chest. Such a silly picture is easy to remember.

Youth Start Entrepreneurial Challenges



#### Cinema in your head - Jakob, 8 years old

Sometimes I create a film in my head out of the things I want to memorise. The crazier the film, the better I can memorise the things I have written down such a memorising screenplay:

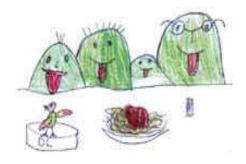
The star in my film is Schlawienerl (that's our school gnome Wienerl's dog). He wraps a dust cloth around his head and takes a pencil in his muzzle. Then he pops a light bulb up his nose and the bulb starts to blink. He also sticks an old carrot into one ear and a stinking fish into the other. Then he pees, first on my grandpa and then on my grandma. In punishment, they pour coke over Schlawienerl. He starts barking, and suddenly a huge salad jumps onto Schlawienerl's back and calls out "Giddyup Schlawienerl!". The dog runs off. A pair of pants full of grapes is hanging on his tail. The grapes fall out and fall on the floor where they turn into pears. Can you guess, what I wanted to remember?

# Trick for memorising the member countries of the EU (from 2003) –

Anna, 7 years

We spelt the first letters of the 15 countries belonging to the EU. Together we then combined the first letters to new words and combined the words to form an utterly crazy sentence. Here's how it went:

"Itsy bees fly useless green soup soufflés north, lifting parrots into dingy fresh aluminium dens." Then we drew a picture of it. Creating pictures is also a good trick for memorising.



# Trick for memorising the districts of Vienna – Dani, 10 years old

Dani created this mnemonic phrase so he can memorise the districts of Vienna faster. The occasion was less praiseworthy, though: He didn't realise until the morning that he would have a test in general education and should have learned the districts by heart.

He did not despair, however, but tried out a mnemonic trick. Bravo!

1.	Innere Stadt	In		
2.	Leopoldstadt	Lach-		
3.	Landstraße	Land		
4.	Wieden	will		
5.	Margareten	Margarete		
6.	Mariahilf	mit		
7.	Neubau	neuer		
8.	Josefstadt	Jacke		
9.	Alsergrund	als		
10.	Favoriten	fröhliche		
11.	Simmering Sänger			
12.	Meidling mit			
13.	Hietzing	Hut		
14.	Penzing	Papier		
15.	Rudolfsheim- Fünfhaus	rollen.		
16.	Ottakring	Ohne		
17.	Hernals	Hut		
18.	Währing	würde		
19.	Döbling	die		
20.	Brigittenau	blonde		
21.	Floridsdorf	Frau		
22.	Donaustadt	dauernd		
23.	Liesing	lachen.		

Youth Start Entrepreneurial Challenges



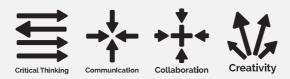
**Chapter 3** 

### 3. Learning by "Thinking outside the box"

If we want to do well in an ever-changing environment, we will need a creative and solution-oriented way of thinking. A school wanting to prepare children for the best-possible future on an individual basis must provide them with and train these competences.

Children are creative beings. If we want them to keep their creativity, we must give them the opportunity to develop their own ideas, to meet challenges in their own way and to think critically as well as to express themselves. This chapter includes the following: the *Egghead File, Thinking with six colours* and the *Box of Philosophy*.

Thinking out of the box promotes all four learning and innovation competences that have been defined as 21<sup>st</sup> Century Skills: **critical thinking**, **communicative** and **collaborative competence** as well as **creativity**.



**Egghead File** 

# Introduction to working with the Egghead File

Every classroom should constitute a learning environment which offers room for creativity, research, playing, experiments etc. In "normal" classrooms this can pose a challenge, which, however, is easily overcome with some creativity and flexibility.

The Egghead File is quickly made and easily stored. The materials needed are also easily found. Paper, pencils and time for pleasure in a playful "thinking outside the box" way are mostly enough to get to know as well as train different thinking methods and techniques.

The Egghead File should be introduced step-by-step and only extended by cards suitable for the respective class. It is important that ...

- ... the children are given enough time to delve into the topics and bring their thoughts to an end.
- ... any questions arising are discussed.
- ... feedback is given in an encouraging and appreciative way.
- ... witty ideas are acknowledged, even if they are not practicable for the moment.
- ... a humiliating criticism and assessment of ideas is avoided at all costs.

You<sup>th</sup> Start Entrepreneurial Challenges



**Egghead File** 

#### First comes the answer!

#### Here's how it works:

- Say a word (e.g. apple, bath, fifteen ...).
- The other children must think of questions.

### Here are a few examples for "apple":

- How was Snow White poisoned?
- What did the serpent seduce Adam and Eve with?
- What fruit has a core and can be either yellow, red or green?
- What fruit tastes delicious when stewed?

**Egghead File** 

### What if ...?

#### Here's how it works:

Think about the following questions, either alone or with others, and offer creative solutions.

- What if there were no shoes?
- What if it snowed in summer?
- What if we would never stop growing?
- What if ...?
- Come up with your own questions.

You<sup>th</sup> Start Entrepreneurial Challenges



**Egghead File** 

### Safety on the road

#### Here's how it works:

- How can we make the streets safer?
- How could we get drivers to slow down and drive more carefully?

Think of different ways to solve the problem – either alone, or with others. Write down or draw your ideas and present them in class. What if we would never stop growing?

**Egghead File** 

### **Brainstorming**

#### Here's how it works:

In groups, collect as many ideas as possible for the following situations:

- You are cold. What can you do about it?
- Think of reasons why weekends should last longer.
- It is raining and you have no raingear. What do you do?
- ..

You<sup>th</sup> Start Entrepreneurial Challenges



**Egghead File** 

### Compare!

#### Here's how it works:

Look for differences and similarities between things, e.g. between a frog and a tree, while considering the following characteristics:

- form
- colour
- material
- size
- parts

**Egghead File** 

**5** S

#### Here's how it works:

Describe different things using the following five characteristics starting with s:

- smell
- sound
- sensation (feel, touch)
- size (height, width, depth)
- severity (weight)

Who can guess what you mean?

You<sup>th</sup> Start Entrepreneurial Challenges



**Egghead File** 

### **Organising the supermarkets**

#### Here's how it works:

- Write down things you can buy in the supermarket on small slips of paper.
- Arrange them in different ways.
- What if a supermarket would implement your "organisation"?

**Egghead File** 

### Is this red?

#### Here's how it works:

- Choose a partner.
- Write down or draw all red things you can think of.
- Think of things that aren't red all the time or that turn red.

**Variation:** Try the same with other colours.

You<sup>th</sup> Start Entrepreneurial Challenges



**Egghead File** 

### My surroundings

#### Here's how it works:

- Get an ABC list (or make one yourself).
- Write something for each of the letters that you can find in your surroundings and that starts with the respective letter.

A	
В	
С	
D	

**Egghead File** 

### Make things interesting!

#### Here's how it works:

In your imagination, transform one of these shapes into a crazy, interesting, useful, ... thing or being.

Now draw a picture of your creative outpourings.











You<sup>th</sup> Start Entrepreneurial Challenges



**Egghead File** 

#### Let's collect ideas

#### Here's how it works:

- Work together in groups of two or three and find as many objects as possible relating to each of the examples shown below.
- Write down your ideas.
- Which group has the most ideas?

#### For example:

- Write down things that have a handle.
- Write down words that have something to do with "being happy".
- Write down words with three syllables (e.g. sum-mer-day).
- Write down as many transparent things as possible.

**Egghead File** 

### What can you do with it?

#### Here's how it works:

- Place the word cards (see the following two flash cards) on the table with the back facing up.
- 4, 6 or 8 children form 2 teams.
- Draw a card and place it on the table with the writing facing up.
- Collect ideas in your team for how to use the drawn object. Take notes.
- Compare: Which team has collected more (crazy) ideas?

Variation: Draw two cards and note down similarities and differences.

You<sup>th</sup> Start Entrepreneurial Challenges



		Egghead File
pencil	ruler	notebook
hanger	cap	cup
scissors	cardboard	safety pin
computer cable	keys	cooking spoon

	Egghead File
sneaker	milk carton
scissors	plate
umbrella	thimble
belt	sun
	scissors umbrella

You<sup>th</sup> Start Entrepreneurial Challenges



**Egghead File** 

### Modify a ladder

#### Here's how it works:

- Draw a simple ladder.
- Enlarge it.
- Add something to it.
- Replace or swap parts.
- What can you do with it now?

**Variation:** Do the same with a pair of glasses, a tennis racket, a pencil, a pullover or whatever else you can think of.

**Egghead File** 

### **CORATUC** spell

You can use this "spell" to look at and use objects in a whole new way. The CORATUC spell works with different objects, e.g. pencil sharpeners, pencil cases, books, bottles, apples, toys, trousers ...

#### **CORATUC** stands for:

- Change, e.g. enlarge or make smaller.
- Omit something!
- Replace swap characteristic with another.
- Adapt to circumstances other than the usual.
- Turn over the object or parts of it.
- Use utilise an object in an unconventional way.
- Combine individual parts to form something new.

You<sup>th</sup> Start Entrepreneurial Challenges



**Egghead File** 

### A new person

**Here's how it works:** Redesign the human body. Draw a picture of the modified body and describe the benefits of the changes made. Use the CORATUC spell for this. It stands for:

- Change, e.g. enlarge or make smaller.
- Omit something!
- Replace swap characteristic with another.
- Adapt to circumstances other than the usual.
- Turn over the object or parts of it.
- Use utilise an object in an unconventional way.
- Combine individual parts to form something new.

**Egghead File** 

### **Many cores**

#### Here's how it works:

- This year's harvest of apricots was exceptionally rich.
   The flesh of fruits is processed to make jam.
   What is left are the cores.
- What could we do with them?
- Draw or write down your suggestions for how to put the cores to use.

You<sup>th</sup> Start Entrepreneurial Challenges

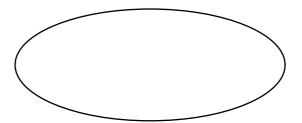


**Egghead File** 

### My new invention

#### Here's how it works:

- Use this shape as a basis for a new invention.
- Draw a picture of your invention.
- Give it a name and write it under the drawing.
- What is your invention used for?



**Egghead File** 

### Time capsule

#### Here's how it works:

- Imagine you could put different objects in a "time capsule" and send it to people living in the future.
- The time capsule is no bigger than a shoebox, though. Which objects would you put inside so people in the future could best imagine what our life and environment looked like.
- Alternatively, you could place a piece of paper in the box on which you describe our life today with a maximum of 30 words.

Youth Start Entrepreneurial Challenges



**Egghead File** 

### Finding characteristics 1

#### Here's how it works:

Write down characteristics that two things have in common.

### For example:

- child and cat
- flower and tree
- shoe and car
- bread and biscuit
- table and book

Come up with "pairs" yourself!

**Egghead File** 

### Finding characteristics 2

#### Here's how it works:

Write down characteristics that two things don't have in common.

### For example:

- child and cat
- flower and tree
- shoe and car
- bread and biscuit
- table and book

Come up with "pairs" yourself!

You<sup>th</sup> Start Entrepreneurial Challenges



**Egghead File** 

### **Inventing something new**

#### Here's how it works:

Write down the characteristics of two objects. Relate as many of them as possible to a new object.

### For example

words with S	Spoon	pencil
Smell		
Sound		
Sense		
Size		
SUPER special feature		

New	object:	 _
	•	

**Variation:** Compare other objects.

**Egghead File** 

### **Describing**

#### Here's how it works:

- Write down as many adjectives as possible to describe a person.
- Together with other children, now sort them according to different "topics"
  - e.g. according to their:
    - appearance
    - characteristics
    - strengths
    - weaknesses ...

You<sup>th</sup> Start Entrepreneurial Challenges



**Egghead File** 

#### Whenever-I Game

In the following way, we want to laugh, fool around, make jokes and really learn a lot.

#### You will need:

• a game partner, a die, cards with charts and beginnings of sentences

#### Here's how it works:

- Choose a partner.
- Place the "Whenever I" card with the charts and the beginnings of the sentences in front of you.
- Choose either chart 1 or chart 2.
- Roll the die and read what is written in the corresponding row.
- Complete the sentence in the craziest way possible.
- If you manage this without thinking long and hard, you are really creative. (If you find it difficult no problem, you're still learning!)
- Have fun with the crazy sentences!

**Egghead File** 

### Whenever-I game → charts and beginnings of sentences

	Chart 1	Chart 2			
1	Whenever I'm late	1	Whenever I tidy up my room		
2	Whenever I help somebody	2	Whenever I drink water		
3	Whenever I run	3	Whenever I read		
4	Whenever it rains	4	Whenever I eat soup		
5	Whenever the alarm goes off	5	Whenever it rains		
6	Whenever I sleep	6	Whenever I shower		

You<sup>th</sup> Start Entrepreneurial Challenges



**Egghead File** 

### Forming groups

#### Here's how it works:

- Sort the words below into groups.
- Then give each group a name: e. g. pieces of clothing, food ...

rice, eggs, coins, scratch, blink, biscuit, old, nail, sun, rub, ear, pilot, cupboard, tin can, big, doctor, rose, hat, folder, teacher, itch, eye, scissors, legs, new, smile, beans, light, dark, moon, grass, small

#### **Egghead File**

# Forming groups → word cards

rice	eggs	scratch	biscuit	cupboard
coin	rub	ears	pilot	big
sun	blink	hat	rose	doctor
nail	old	folder	eye	scissors
teacher	itch	legs	smile	beans
tin can	new	light	grass	small

You<sup>th</sup> Start Entrepreneurial Challenges



**Egghead File** 

### **Sorting objects**

#### Here's how it works:

- Form groups of two or three children.
- Find at least 10 objects in the classroom.
- Put them in a basket.
- Now think about how you could sort the objects.

**Egghead File** 

### **Even lines have feelings**

#### Here's how it works:

Think of a certain feeling and imagine how it would look if it were a line.

### For example:

- Draw a funny line.
- Draw a crazy line.
- Draw a sad line.
- Draw a line in love.
- Draw an angry line.

Youth Start Entrepreneurial Challenges



**Egghead File** 

### **Modify your classroom**

#### Here's how it works:

- Get together with others and think about how you can change the classroom to become an extraordinary and exciting place.
- Start with those things that disturb you about your classroom and think about what changes to make.

#### **Procedure:**

- Find things you do not like.
- Think of and implement changes.

**Egghead File** 

### **Quick-witted with PMI**

Do you have a problem?

Yes? Then play "Quick-witted with PMI" (P = PLUS, M = MINUS, I = INTERESTING). You will need a clock (kitchen timer, stop watch ...) and your wits.

#### Here's how it works:

- Take three minutes to think about what is good about the situation.
- Take three minutes to think about what is bad about the situation.
- Talk about the situation in your group and take notes.
- Then each of you, individually, think about which arguments you find that sound interesting.
- Concluding panel: Everyone explains what is most interesting for them. On what do most of you agree?

Youth Start Entrepreneurial Challenges



#### Thinking with six colours

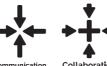
### Thinking with six colours

Edward de Bono's method of thinking with six thinking hats in different colours has become a classic of creative thinking methods. This tool can be applied in many different areas. Boxes (or simply coloured sheets of paper) are more practical for their diverse use in classes.

In order for this method to enable the students to work independently, it must be well introduced to the children and the parallel thinking process, which is represented by the different colours, explained to them.

Working with this creative thinking methods promotes all four learning and innovation competences that have been defined as 21<sup>st</sup> Century Skills: critical thinking, communicative and collaborative competence as well as creativity.







#### Thinking with six colours

### 6 colours – 6 thinking roles

• white: facts, "just" the facts, no feelings, no ideas

(What do I know for sure?)

red: your personal opinion, personal feelings, emotions

(What do I like about it – what don't I?)

**black:** all negative – dangers, difficulties ... (What is bad about it?)

**wellow:** all positive – value, benefits for ALL (What is good about it for all involved?)

green: creativity – new ideas (What can you do with it? What can you make out of it?)

**blue:** reconsider – new questions (What else do I want to know?)

You<sup>th</sup> Start Entrepreneurial Challenges



#### Thinking with six colours

### Try out "Thinking with six colours" together?

Some topics or things want to be explored more closely. With these, you want to ensure nothing is overlooked. In these cases, the different coloured "thinking boxes" provide a valuable tool.

#### Here's how it works:

**Selecting**: Choose an object that fits the current learning topic (e.g. apple, ruler, plastic bad, short

message, dog ...).

**Brainstorming**: Think about this "thing" and write down each term on a separate piece of paper.

**Sorting**: Now put these pieces of papers in the different coloured thinking boxes labelled with

collective names: e.g. "facts" (white), "personal opinion" (red), "negatives" (black),

"positives" (yellow), "creative ideas" (green), "reconsider" (blue).

#### Thinking with six colours

#### Task for forward thinkers

#### Here's how it works:

- Create an "advertising poster" on "Thinking with six colours" with all kinds of information on this learning method.
- Remember that the poster shall inspire people to try out "thinking with colours".
- Use fitting colours and drawings.
- Then present your poster to the other children.

#### Alternative:

• You can also do this task with a partner or as team work.

You<sup>th</sup> Start Entrepreneurial Challenges



Thinking with six colours

### "Thinking with colours" dice game - instructions

Thinking with different colours can be trained efficiently with a dice game.

#### Here's how it works:

- Ask your teacher to give you the game board for this dice game.
- You will also need a die, game partners, a pawn per person and your wits.
- Choose an interesting topic.
- Take turns rolling the die and move forward on the game board.
- The colours of the field you land on will tell you what to consider.
- If you find a good solution, you may move forward to this field, otherwise you have to stay where you are.

••	What is negative about it?	<u></u>	What is good about it for all involved?					
₹ <del>1</del>	What can you do with it?	•	What do I know for sure about it?					
$\bigcirc$	What do I like about it – what don't I?							

<u>••• 1</u>	<b>4</b> €	2	$\bigcirc$	3	···	4	•	5	6	<b>₹</b>	7	$\bigcirc$	8		9	•	10
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You<sup>th</sup> Start Entrepreneurial Challenges



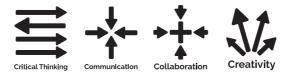
**Box of Philosophy** 

### **Box of Philosophy**

(see also A1 Debate Challenge on www.youthstart.eu)

Working with the Box of Philosophy can be used by children and teenagers to revise their knowledge (alone or together with others). Furthermore, they can form new correlations and train creative and critical thinking. They talk and listen to each other and can understand the other's train of thought. That way they learn to sort and clearly formulate their thoughts in a relaxed and playful way.

Working with the Box *of Philosophy* promotes all four learning and innovation competences that have been defined as 21<sup>st</sup> Century Skills: *critical thinking*, *communicative* and *collaborative competence* as well as *creativity*.

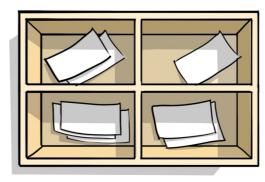


**Box of Philosophy** 

# Introduction into working with the Box of Philosophy

The Box of Philosophy consists mainly of four sections containing **topic cards** as well as **instruction cards**. Your **Box of Philosophy** could be organised as follows:





You<sup>th</sup> Start Entrepreneurial Challenges



#### **Box of Philosophy**

## **Topic cards**

The **topic cards** show words related to one general topic, such as "outer space". They are placed in the box with the words facing down.

Examples for **topic cards** related to outer space:

sun	planet	starship
earth	astronaut	star

The instruction cards contain instructions of what the children shall do with the respective topic cards. They are also placed on a separate card. The following flash card contains examples.

	Box of Philosophy
Draw two cards from one section. What is similar about the following objects?	Draw two cards from one section. What <b>differences</b> are there between the objects?
Draw two cards from two sections. What is similar about the following objects?	Draw two cards from one section. Which of the two cards are <b>more important</b> ?
Draw two cards from two sections. What differences are there between the objects?	Draw two cards from one section. Which of the objects named are <b>older</b> ?
Draw a card. Write a <b>fantastic story</b> relating to the topic.	Draw a card. Find a <b>funny new name</b> for the shown word. Can the others guess what the name stands for?
Draw a card. Make a <b>mind map</b> of the topic. Turn in the mind map.	Draw a card. Write a few <b>questions</b> relating to the topic on small pieces of paper. Turn in the papers. We will turn them into a quiz.

### Expert Challenge - 4. Learning by Asking

Youth Start Entrepreneurial Challenges



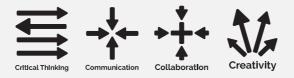
Chapter 4

### **Learning by Asking**

In this chapter students are taught to create their **own** quizzes within the framework of a **"Reading quiz workshop"**. By asking questions on a text, they learn new content. Following that is a collection of selected **texts for learning how to quiz**. The texts focus on the brain and other topics relevant for learning. After that the **research watch** is introduced, which shall encourage students to approach a new topic in a diverse manner from a questioning perspective, just like a scientist.

Formulating quiz questions also trains the reading competence in a diverse manner. The shape of the words are repeated and thus also the spelling is promoted. In addition, the learning contents are conveyed and anchored in a playful way.

The method "learning by asking" trains all four 21st Century Skills competences: critical thinking, communicative and collaborative competence as well as creativity.



Reading quiz workshop

### Reading quiz for one person

#### Here's how it works:

- Choose a text on a current topic.
- Read the text carefully.
- Think of questions about the text.
- Write each question on a separate sheet of paper or a separate flash card and the answer on the back of it. Also note down the page number and the title of the text. Be sure that you write legibly!
- Place your quiz cards in a special "quiz box".
- If you have collected enough cards in your box you can start reading and "quizzing".

### Expert Challenge – 4. Learning by Asking

You<sup>th</sup> Start Entrepreneurial Challenges



Reading quiz workshop

### Reading quiz for teams

#### Here's how it works:

- Choose two to four team mates.
- Decide on how you want to organise the quiz as a team:

  Do you want to challenge your teammates individually or compete as a team against another team?
- Choose one of the texts on a current topic.
- First you read the text individually.
- Then write one question on the text on a flash card and the answer on the back.
  - Be sure that you write legibly!
- Now we can start "quizzing".

#### Texts for learning how to quiz

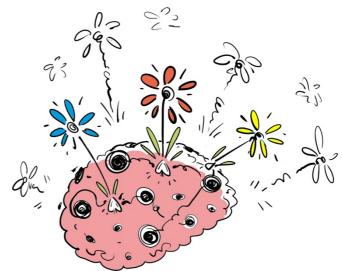
### **Our brain**

Thanks to our brain we perceive our environment through our senses. That way we are also able to learn, think and remember. Our brain works without interruption. Even when we are asleep it makes sure our organs (heart, lungs ...) work well.

Through our senses we perceive what is happening around us. This information is transmitted by our sensory organs via "electrical lines" (nerve tracts) to our brain, and especially to the brain cells in which similar information is stored.

The more often we look at, listen to or feel, taste and smell something, the stronger these lines get, and the better we remember something.

And the more we know, the easier it is for us to learn more!



### Expert Challenge - 4. Learning by Asking

You<sup>th</sup> Start Entrepreneurial Challenges



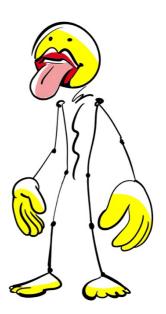
#### **Texts for learning how to quiz**

#### Sections in our brain

There are different sections in our brain that are responsible for different parts of our body.

In each section there are countless nerve cells which forward the brain's orders to our body parts.

The number of nerve cells depends on how important the respective part of the body is for the human. If the size of the different body parts were dependent on the number of nerve cells, our hands would be huge, we would have a big head with a big mouth and a long tongue.



#### **Texts for learning how to quiz**

### Brain size and ability to think



How well one can think depends on the number of brain convolutions the cortex is folded into.

The brain contains innumerable and very sensitive nerve tracts which send an incredible number of messages from one brain cell to another each second.

You can compare the nerve tracts with electrical lines which connect brain cells to each other. The more lines there are in our brain, the better we can think and learn.

How to create new lines?

That's easy: Every time we think about something and are attentive and curious about it, new lines are created – and we're a little bit smarter again.

### Expert Challenge - 4. Learning by Asking

Youth Start Entrepreneurial Challenges



#### **Texts for learning how to quiz**

#### Structure and tasks of the brain

The brain consists of several parts: cerebrum, cerebellum, brain stem and interbrain.

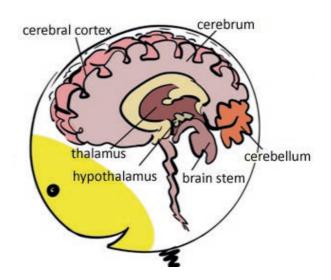
The **cerebrum** has two halves and is similar to a walnut. The right half of our brain controls the left side of our body, and the left half of our brain controls the right side of our body.

The **cerebrum** is responsible mainly for our thoughts and feelings.

The **cerebellum** is responsible for planning and moving.

The **brain stem** controls the vital processes in our body (heartbeat, breathing ...).

In the **interbrain** all signals from the body are transmitted to the corresponding brain region. It also controls our metabolism.



#### **Texts for learning how to quiz**

#### **Brain and motion**



The brain is the control centre of our body and responsible, among other things, for moving our muscles.

The spinal cord is an extension of the brain and is protected by the bones of our spinal column. The spinal cord is made up of a large number of nerve tracts.

These nerve tracts connect nearly all regions of the body with our brain, informing it of everything we perceive through our senses. On the other hand, the brain sends "motion commands" to the body via the nerve tracts.

If we break our spine, the spinal cord might be cut through. In that case, our body is paralysed from the point where our spinal cord or the nerve tracts have been severed. This is what you call "paraplegia". We are then no longer able to move parts of our body since the brain cannot send its command to them.

### **Expert Challenge – 4. Learning by Asking**

You<sup>th</sup> Start Entrepreneurial Challenges

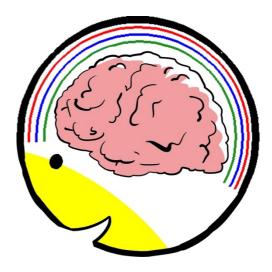


**Texts for learning how to quiz** 

### How is our brain protected?

A hard bone protects our brain, just like a helmet. Underneath we have three cerebral membranes which also serve as a protection.

Between the membranes is a fluid called liquor which serves as a buffer and protects the delicate brain from concussions and damage.



#### **Texts for learning how to quiz**

### **Our memory**

The memory helps us to memorise things and learn new stuff. Different types of memory determine how long we can remember information.

#### **Sensory memory**

It only works for a few seconds. That way we can, for example, repeat something that somebody just said without having actively listened.

#### **Short-term memory** (working memory)

It works for a few minutes and up to a few hours. We remember what we have eaten, done, heard or read. But after some time we forget the information again. Our memory gets rid of any information we do not use or repeat.

#### Long-term memory

It stores important memories or information we need over and over again. If we do or repeat something over and over again, it is stored in our long-term memory: e.g. riding the bicycle, reading, running, calculating ...

### Expert Challenge - 4. Learning by Asking

You<sup>th</sup> Start Entrepreneurial Challenges



**Texts for learning how to quiz** 

### Learning with the help of our memory

The memory works in different ways.

#### **Moving**

We learn actions such as walking, riding the bike or writing by trial and error and by practising. Over time, these movements become automatic processes.

#### **Planning**

Memories of good and bad experiences help us to assess how best to act or react in different situations. That way we also learn how other people react to our behaviour.

**Insider tip**: Considerate behaviour brings about positive reactions!

#### **Learning and memorising** ("learning by heart")

For some information it is necessary that we repeat it many times in order to memorise it and remember it when we need it. The "times table" is one of those things.

Texts for learning how to quiz

### What stays in our memory?

Unfortunately, we forget a lot of what we have learned, even though we want to remember it for a long time. Many scientists are dealing with the question of why and when we forget something. The "memory" stores words, pictures, melodies and experiences. Some things we will remember for a very long time, other things we forget after only a short time. We prefer to remember pleasant things, and it is easier for us to do so than with unpleasant things.

#### Tips that will help you to remember things better

- You will remember things from which you can create a "picture in your mind's eye" better than things you simply hear. The crazier these pictures are, the easier it will be to remember them. "Memory devices" and "pictures in your mind's eye" help you!
- Similar information is "overridden". You will then only remember the new information.
- Only those things which are linked to feelings and are repeated at regular intervals will remain in your memory's storage.
- Things you only learn for the test and don't repeat afterwards will soon be forgotten.

# Expert Challenge - 4. Learning by Asking

You<sup>th</sup> Start Entrepreneurial Challenges



### Texts for learning how to quiz

# Laughing

When you were only a few weeks old you already learned how to laugh and smile by "imitating". And when adults then smiled or laughed back, you did it again and again.

Later you learned that there were different types of laughing: smiling, laughing at somebody, grinning, a hearty laugh, ...

It has long been known that a hearty laugh is healthy.

Laughing helps us to relieve stress and to relax.

Laughing strengthens our immune system and you don't get ill as easily.

If you are already ill then laughing helps you to get well faster, and you feel less pain.

### Texts for learning how to quiz

# Laughing is healthy!

When you laugh you move 17 muscles in your face alone. In your whole body laughing activates 80 muscles.

Your shoulders, your belly and your diaphragm are shaking and the air hisses through your lungs at up to 100 kilometres per hour. Sometimes laughing weakens your leg muscles or even your bladder musculature. Hence the phrase "pee your pants" if you laugh hard.

Children laugh about 400 times a day, adults only about 15 times. Scientists assume that our ancestors started laughing about six million years ago. Possibly in order to appease fellow humans.

The study of laughter is known as gelotology in the specialist language. The scientists use different methods such as tickling a test person with machines, having them inhale laughing gas or watch funny movies, while measuring the blood pressure, muscular movement and the concentration of certain substances in the blood.

The results have shown that laughing is healthy. While you laugh, your body produces more antibodies in your blood. You also get well faster. After all, when you laugh, three to four times as much oxygen is transported through your body. Laughing helps you forget your pain, and you actually feel it less strongly. That is why in many hospitals, clowns make the patients laugh.

# Expert Challenge - 4. Learning by Asking

You<sup>th</sup> Start Entrepreneurial Challenges



### **Texts for learning how to quiz**

# Sleeping is vital!

Our brain is active day and night, even when we are asleep. While we are sleeping, our brain processes everything that happened during the day and "files" new information into our memory. This makes it easier for us to find "new" information when we need it, for example new words for a test. Sleep also helps us to stay healthy.

If you don't sleep enough, it is easier to get sick. You might get depressions, gain weight and more. If you don't sleep at all, you might even die. With two hours less sleep than usual you get "overexcited", hectic, you lack concentration and you get tired more quickly. Four hours less sleep slows down your body and mind. You don't really notice things anymore. The accident risk is seven times higher than usual! If you sleep too little over a longer period of time you also get hunger pangs and gain weight. Six hours less sleep bring your body and mind into a state of emergency. Your senses and nerves are oversensitive, your mind and body go haywire. Since your body can only produce growth hormones, which strengthen your immune system, in deep sleep, your body is then more susceptible to diseases.

### Tips to help you sleep:

- Go to bed and get up at the same time every day. Your body will get used to it.
- Don't watch any exciting films before you go to bed, better listen to calm music.
- Stay in bed, even if you don't fall asleep right away. At some point it'll work out.

### **Texts for learning how to quiz**

# What is my learning style?

There are different learning styles. Some people learn best when they see things (visual-style learner), others when they hear things (auditory-style learner). Some learn best when they talk about things and explain them to others (communicative-style learner), and others when they move while studying (motor-style learner). However, many people are mix-types and learn well using different styles. That is why the following learning tips apply to all. After all, those who use many channels and keep their eyes and ears open can take in and keep more information.

- Pictures, charts or mind maps work especially well for **visual-style learners**.
- Listening to a text (even if you read it out loud to yourself or learn with music and rhythm) is a good strategy for **auditory-style learners**.
- **Communicative-style learners** find talks, discussions or quizzes helpful for learning through playing. Studying together with others is beneficial to them.
- **Motor learners** learn best if they can do things by themselves or experiment. They find it easy to memorise movement sequences (e.g. dances).

# Expert Challenge - 4. Learning by Asking

Youth Start Entrepreneurial Challenges



### Texts for learning how to quiz

# **Tips for learning**

Some things just don't want to stick in your head. Different learning methods can help you!

**Revision**: If you repeat sentences or words (in your mind or by saying them out loud) again

and again, you will remember them easier.

**Writing**: Taking notes on texts or summarising them also helps. Studying is easier if you can

learn the study matter in your own words.

**Talking**: Whenever you don't understand something, it can help to talk to others about it.

**Listening**: Record the study matter onto your mobile phone and listen to it over and over

again.

**Singing** The study matter.

Memory devices: Some things are easier to memorise if you use crazy memory devices. Pictures,

charts, diagrams, sketches, mind maps etc. also help you to learn.

Learning "in your sleep": Repeat the study matter before you go to sleep. If you listen to or read

something directly before falling asleep, the information slips into your memory

more easily.

**Breaks:** After taking a break you can concentrate better and learn easier.

**Texts for learning how to quiz** 

# Learning to say no

It is not always easy to say no. Mostly it is a question of self-confidence. You can learn to say no, but only if you know what you want and what you don't.

### Tips for more self-confidence

- Do something that makes you feel good every day.
- Ask yourself what makes you feel what way.
- Think about what you want. That way you will get to know yourself a little better every day.
- Ask yourself for your opinion and also tell others in a polite and sensitive manner.
- Talk to others about your problems. But please don't overdo it. The more you talk about something, the more it gets engraved into your memory.
- Encourage yourself over and over again, for example by telling yourself "You can do it!"
- Be happy if you succeed in something.
- Learn to deal with things that don't work out. Just start over.
- Make sure you like yourself and are good to yourself.

# **Expert Challenge – 4. Learning by Asking**

Youth Start Entrepreneurial Challenges



### **Texts for learning how to quiz**

# Can you get smarter through sports?

You will need (juggling) balls or light scarves. Take a ball (or a scarf). Throw the ball into the air and catch it with the same hand. Make sure the ball reaches the height of your forehead so it will be easier. Practice this until you succeed well. Then throw the ball with one hand and catch it with the other. That is the first step to juggling.

**What happens?** By throwing and catching you improve your concentration as well as your creativity and your eye hand coordination.

**Why is that so?** The brain consists of two halves that are connected by nerve tracts. The crossing movements of juggling strengthens these connections between the two halves. The brain becomes "fitter". The new nerve tracts help you to learn, read, and write.

### Research clock How do you work with the research clock? 1. Start The research clock helps Find a topic you with your research the way scientists do it. If you 2. Ask research 8. Presentation want to do research, write questions: What? of research results down the topic as a heading How? Why? on a sheet of paper. Then follow the steps as you see 3. Guess: 7. Outcomes them on the clock. Take What answers of the research notes on each of the steps might be there? on a separate sheet of paper. 6. collect data: 4. Select research Photos, films, method: Questionnaire, questionnaires. photos, interviews, films, interviews observations ... 5. Plan and organize research

Youth Start Entrepreneurial Challenges



**Chapter 5** 

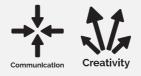
# 5. Learning through motion

(see also the videos with exercises for activation & concentration under the heading "Mind & Body" at www.youthstart.eu)

Why do our lessons urgently need to incorporate multiple opportunities for movement? This chapter will introduce numerous *good reasons for learning through motion*.

It is a start to allow different seating and give students the opportunity to get up, e.g. to fill up their water bottles, but it is not enough. *Movement games* – ideally with everyday objects – should be used as often as possible to liven up the lessons. You have mastered didactics if you manage to link movements to the repetition of learning contents in a creative manner.

Movement games promote in particular the following learning and innovation competences that have been defined as 21st Century Skills: **communicative competence** and **creativity**.



Good reasons for learning through motion

# Why should you learn through motion?

The development of your thinking ability and perception is closely linked to the development of motor skills. That is why learning, memorising and remembering word lists has been proved to be all the more successful if it is accompanied by gestures and language.

Brain research shows that movement triggers the production of substances which stimulates the growth of nerve cells and increases the number of neuronal networks. Muscle activity releases enzymes, neurotransmitters etc. which are essential for our thinking and learning ability. Through movement and sensorimotor impressions new connections between our nerve cells in the brain can be formed and existing ones maintained and strengthened. Both form the basis for sustainable learning. Physical inactivity, however, impedes the learning process. That is why lessons shall allow for a combining of learning with movement and the activation of sensory and motor skills whenever possible.

Research projects on the correlation of motor capability and the power of concentration show that children who have a good overall body coordination also achieve the best results in concentration tests.

Youth Start Entrepreneurial Challenges



Good reasons for learning through motion

# How can you learn through motion?

A survey has confirmed that children who have enough exercise opportunities every day are less aggressive and have fewer accidents. They are more motivated in school, more willing to learn and strengthened in their personality. This also has a positive effect on the classroom and school climate.

Movement possibilities are often limited to the sports lessons. In other subjects it is often regarded as distracting if the students move too much, fidget or walk around in class.

Movement should be an integral part of teaching – e.g. in group works, for gathering information or when comparing the solutions. It must be encouraged that students get up to fetch water. Call-to-action stories, dancing with music, active breaks and relaxation phases (e.g. stretching and straightening) also enhance students' awareness and attention spans.

Movement is just as important for a healthy general development as well as for the development of motor skills and social competences.

Good reasons for learning through motion

# Links to the teaching curricula

Excerpts from the teaching curriculum for primary schools relating directly to movement in class

- Individualisation, differentiation, promotion: "The schedule and content-related plan for each day of class should be balanced, ensuring that work and fun, effort and relaxation permeate and complement each other."
- Appropriateness for children and taking into consideration the learning requirements: "The chosen teaching methods shall ensure that the children's need for movement is met. There are many learning situations that do not require the children to sit. Short sessions of school gymnastics, such as gymnastic exercises, movement games, and other motor activities shall be integrated into the lessons." "The scope of homework assessments shall leave enough time for movement and playing even for children who are slower or have a learning disability."

(Source of quotations: Lehrplan der Volksschule 2009, "Allgemeine didaktische Grundsätze", translated into English)

Youth Start Entrepreneurial Challenges



Good reasons for learning through motion

# Why movement games?

Movement has been proven to increase learning and performance ability and to benefit our health.

### Impact on our cognitive skills:

- improved power of concentration
- gain in social competences (contact ability, mutual acceptance and integration, reduction of aggression)
- strengthening of children's autonomy
- positive impact on one's current mental state
- increased satisfaction with the school and eagerness to learn

### Impact on motor skills:

- improved movement coordination
- enhanced posture
- increased muscle strength

Source: cf. Breithecker, Dieter (1998). Bewegte Schüler – Bewegte Köpfe. Unterricht in Bewegung. Chance einer Förderung der Lern- und Leistungsfähigkeit? Wiesbaden: Bundesarbeitsgemeinschaft für Haltungs- und Bewegungsförderung e. V. Link to the document: http://bit.ly/2GnYfX9 (German only)

**Movement games** 

# Movement games with everyday objects

Many things of everyday life will inspire our creativity when it comes to inventing and adapting games and exercises. These everyday objects (chairs, tables, newspapers, rubber bands, cans, cotton swabs, scarves, sponges, straws, empty toilet paper or kitchen rolls etc.) can be used in a variety of ways as "gymnastics equipment" for the classroom. They are easy to procure and don't cost much.

### **Exercise ideas**

- Balance an object on your head while walking, running or jumping. How far can you get with the object on your head?
- Walk, run or jump around a table while holding an object between your knees. How often can you go around the table?
- Throw an object at a target (waste paper basket, target/circle on the blackboard ...).
- Strength training with rubber bands.

You<sup>th</sup> Start Entrepreneurial Challenges



**Movement games** 

# Chairs and tables – fantastic gymnastics equipment!

The chairs and tables in the classroom are perfect for using them as gymnastics equipment while at the same time training the children's creativity.

It is quite amazing what wonderful ideas children come up with if you include them in the brainstorming process for new exercises.

If you want to document the exercise ideas with photos, the children are even more motivated when it comes to finding a variety of exercises. That way you might even want to create a class-specific movement-file which the students then could proudly make available to other classes.



**Movement games** 

# **Everyday material: newspaper – suggestions 1**

### Newspapers can be used wonderfully as a "gymnastic apparatus"

Here are a few examples of exercises you can make with newspapers.

- Hold a newspaper sheet towards your tummy and run off without holding on to it. What happens?
- Balance along the edge of a big double sheet of paper.
- Hold the sheet of paper high above your head and run around.
- Skip over the newspaper forward, backwards, sideways.
- Place a newspaper on your head and walk through the classroom.
- Place the newspaper on the floor and move it by blowing on it.
- Pick up a newspaper with your toes and tear it apart.
- Roll two newspapers together and use the paper cones to carry objects through the room.
- Train your fine motor skills by tearing a line formed like a snake out of a sheet of newspaper. Whose snake is the longest?

Youth Start Entrepreneurial Challenges



**Movement games** 

# **Everyday material: newspaper - suggestions 2**

**Skiing:** Use two sheets of newspaper to glide through the room, without, however, losing or ripping either of them.

**Melting sheet of ice:** Walk around the room while you hear music playing. When the music stops, then sit down or stand on a (newspaper) sheet of ice. When the music starts again, fold your sheet of newspaper in half. Over the course of the game it will get harder and harder to stand on the sheet of ice without touching the floor.

**Newspaper-Pulling:** One child sits on a newspaper. Another child grasps his/her hands and pulls him/her around.

**Newspaper-Trap:** Two children trap the newspaper between their bodies (heads, chests, backs, bottoms ...). Will they manage to walk around the room without losing the newspaper?

**Newspaper relay:** Each group is given two newspaper sheets. The first child steps onto one of the sheets with both feet, then he/she lays the second sheet in front of the first and steps onto the second. Then he/she lays the first in front of the second and takes another step forward. Once he/she has reached the goal, he/she makes his/her way back in the same way and the second child does the exercise ... Which group finishes first?

**Movement games** 

# **Everyday material: newspaper – suggestions 3**

**Skiing:** Use two sheets of newspaper to glide through the room, without, however, losing or ripping either of them.

**Transport of shreds:** Suck in a shred of newspaper with a straw, carry it to a bowl and release it there.

**Newspaper transporter:** Hang large newspaper sheets over different parts of the body (head, arms, maybe legs). Without holding the newspaper, try to carry them to the defined destination. This can also be played as a relay game. If a sheet falls down, you have to pick it up before you can carry on.

**Turnaround:** Two children stand back to back, trapping a newspaper between them. Will they succeed in carefully turning around so that in the end they have the newspaper trapped between their bellies? Which pair manages without dropping the newspaper?

**Newspaper carrier:** Roll a sheet of newspaper into a tube. With the aid of this tube suck in a wad of cotton and transport it from one container to another.

Alternative: Blow through the tube to move a wad of cotton or a balloon from a starting point to a goal.

Youth Start Entrepreneurial Challenges



**Movement games** 

# **Everyday material: newspaper - suggestions 4**

### **Answering questions:**

Each group is given a copy of an identical newspaper page. Now they have to answer questions on the content.

### For example:

- What did the weather forecast say?
- How many words do you count in the paragraph headlined "..."?
- Where can you find the sentence "..." on this page?
- Look for an article with less than 50 words.
- How old is the newspaper? (Look for a date.)

**Movement games** 

# **Everyday material: Rubber**

Rubbers can be used in a variety of ways.

**Balancing:** The children walk, run, jump or dance through the room while balancing a rubber on their head, shoulder, nose or the back of their hand. Who manages to balance it the longest without dropping it?

**Throwing:** The children try to hit a target, e.g. a bowl, a mark on the table or floor etc.

**Nudging and flipping:** Nudge or flip the rubber with your thumb and index finger onto a text. The children must now guess and write down which word is covered by the rubber. Who can guess the right word?

You<sup>th</sup> Start Entrepreneurial Challenges



**Movement games** 

# **LANGUAGE IS "MOVING" – Instructions**

Thanks to "moving language exercises" which can serve as learning and memory aids, language teaching becomes more effective and pleasant.

The following "LANGUAGE IS MOVING" cards show a few examples of how to integrate movement into your (language) teaching. They shall also serve as an inspiration to come up with your own exercises.



**Movement games** 

# "LANGUAGE IS MOVING" - Suggestions 1

### **Running dictation**

Running dictations combine the training of the working memory and retention with movement.

### Here's how it works:

Lay out or stick sheets of paper with words, sentences or short texts all around and outside the classroom.

The children have to write down these words/sentences/texts into their notebook which remains lying on their seat. That way they move and train their memory.

Youth Start Entrepreneurial Challenges



**Movement games** 

# "LANGUAGE IS MOVING" - Suggestions 2

### Letter gymnastics

The children lie down on the floor, in pairs or alone, and form their bodies into the shape of different letters which then can be put together to (learning) words.

### Writing on the back

The children take turns to, using their fingers, draw letters or learning words onto each other's backs. It is beneficial if the children have letters with arrows pointing in the writing direction or learning words lying in front of them.

### **Exercising by numbers**

The teacher says random numbers. Whenever a number is higher than the one before, the children try to jump as high as possible. Whenever it is smaller, they lie or sit down.

**Movement games** 

# "LANGUAGE IS MOVING" – Suggestions 3

### **Grammar is moving!**

Movements are shown for different parts of speech to be copied upon calling out a (learning) word fitting that category:

Nouns: Jump up and stretch your arms up into the air

or step onto a chair.

Verbs: Run in place.

or around a chair.

Adjectives: Make a face, make a grimace

or embrace, stroke or hit a chair.

You<sup>th</sup> Start Entrepreneurial Challenges



**Movement games** 

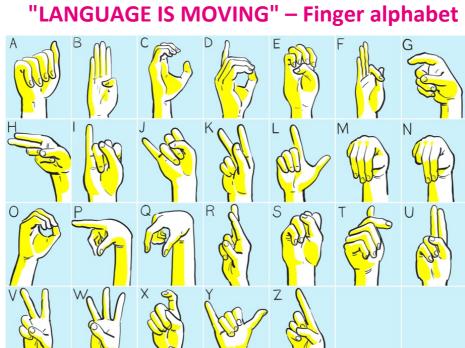
# "LANGUAGE IS MOVING" - Suggestions 4

The finger alphabet and sign language are perfect for encouraging a child's feeling for language and creativity. Further information on this method can be found under: www.visuelles-denken.de/Schnupperkurs1.html (in German only).

The following flash card shows an example of a finger alphabet.

# abet

**Movement games** 



Youth Start Entrepreneurial Challenges



**Chapter 6** 

# Learning through playing

This chapter can be seen as a plea for more playing in class.

The *Games workshop* introduces different methods to encourage children and adolescents to develop new games or adapt existing ones.

The *Fitness training for your brain* file is a collection of easy ways of playing which require no more than pen and paper and which get your working memory into shape.

The following section *Train your brain games* focuses on the use of existing knowledge. It aims at linking, associating, and relating existing knowledge to new information.

The chapter is rounded off with *Trust games*, showing how playing can build up confidence in yourself and in others.

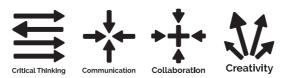
### **Games workshop**

# **Games workshop**

By inventing a new game together, students discover methods which are also used by designers for the development of team projects from the idea to its completion. This working method promotes creativity, the inventive spirit and stamina.

Students will recognise that it is important to make mistakes since they show you what you can improve. At the same time, they train in giving empathetic and encouraging feedback as well as presenting themselves effectively.

The development and playing of the games promotes all four learning and innovation competences that have been defined as 21<sup>st</sup> Century Skills: critical thinking, communicative and collaborative competence as well as creativity.



You<sup>th</sup> Start Entrepreneurial Challenges



### **Games workshop**

# Reinventing board games – Part 1

This exercise will teach you how (game) designers develop their ideas from start to completion. You can improve your creativity and inventiveness and train your team spirit. You will learn to persevere and how useful it can be to make mistakes. Furthermore, you will train in how to give feedback in a way that others will gladly follow your advice without feeling embarrassed. Finally, you will try out how to present your product in an interesting way.

### Best proceed as follows:

- **1. Team building:** Get to know the strengths of others by asking them what they are especially interested in or like to do. Take notes so you won't forget any strengths.
- **2. Make a choice:** Choose a board game that all team members know.
- **3. Explore the game:** What parts is the game made up of? Write a list.
- **4. Changing the game:** Discuss how you could change the game and develop a new one. You could draw up a chart comparing what remained unchanged and what is new.
- **5. Informing:** Read up information on the topic you want to base the game on. Are you familiar with mind maps? They help you to get an overview of the topic.

### Games workshop

# Reinventing board games - Part 2

- **6.** "Designing": Think about what you want the game to look like. Make a few sketches of the game board, the cards, the game pieces and the package.
- 7. **Describing:** Think up a game description and write it down in a way that is understandable.
- **8. Creating:** Create the game. Share out the work between your team, taking into consideration what each of you is especially good at.
- 9. **Testing:** Did everything go according to plan? Write down what went well and what didn't.
- **10. Revision:** Adapt and improve whatever didn't work out as planned.
- **11. Presentation:** Think about how you could advertise your game. Write invitations and create flyers to arouse the interest of other people.
- **12. Playing:** Organise a play lesson or a game day. Who do you want to invite?
- **13. Sharing:** Tell others how you reinvented your game, tell them about your mishaps and what you learned from them. If you make your point in an interesting and funny way, you might even inspire others to reinvent a game!

You<sup>th</sup> Start Entrepreneurial Challenges



**Games workshop** 

# Dice games for Learning to learn

Teamwork: Invent (design, develop, construct) dice games for *learning to learn*. The "texts for learning how to quiz" might provide inspiration for the questions.

### You will need:

- craft paper
- dice
- pawns
- flash cards for the tasks or questions
- paint
- felt-tip pens

### Best proceed as follows:

- Form teams. Remember that it is important to have children with different talents working together in a team: Who can read well, who has a nice writing, who can spell well, draw, has creative ideas, who can organise the material ...?
- Brainstorm in the group how you want to create your "Learning to learn game".
- Make your game and all that goes with it as beautiful as possible.
- Don't forget to write down the game instructions. Try out the game in your team and check that nothing has been forgotten. Only then introduce your game to others.

**Games workshop** 

# Tips for developing a game

The following fields on a game board make playing especially enjoyable:

- **Question fields** that require the players to answer questions on the chosen topic "Learning to learn".
- **Activity fields** that require certain activities e.g. miming something, singing, fetching a defined object, dancing, a certain movement ...
- **Narration fields** that require the players to tell a story.
- **Drawing fields** that require players to draw something which has to be guessed by others.
- "Make a wish" fields, that allow a player to wish for another player or the group to do something.

Youth Start Entrepreneurial Challenges



Fitness training for your brain

# Fitness training for your brain

Just like with your body, it is also possible to train your brain.

The following games require no more than a pen and paper and will help you bring your working memory into shape. The working memory is responsible for any kind of meaning- as well as purposeful activity. As with any muscle, you should warm up your brain before exposing it to big strains.

These games promote specifically the following learning and innovation competences that have been defined as 21st Century Skills: critical thinking and creativity.



Fitness training for your brain

# Fitness training for your brain – games with pen and paper

The following **thinking games** shall serve as playful prompts ...

- ... to repeat new information from different subjects (e.g. German, general education ...)
- ... to train skills (e.g. spelling, time tables ...)
- ... to introduce terms by using analogies (e.g. "What are clauses?"; First, an example is given, then the children define the clauses of other sentences in an analogy.)
- ... to train the children's creativity. After all, children love to invent their own games for others.

By the way, these games also support the teacher in collecting the individual performance-levels and learning types of their students.

Youth Start Entrepreneurial Challenges



Fitness training for your brain

# **KIM** games

### You will need:

- A "traditional" blackboard, chalk
- pencils, paper (sheets of paper or an extra "training notebook")

### Here's how it works:

- The teacher writes 5 to 7 words on the blackboard.
- Then the blackboard is turned around so that nobody can see which word is wiped out.
- The children are shown the blackboard anew ...
- ... and must now write down the missing word.
- Continue on in the same way with the other words.

The words may be chosen according to different criteria: e.g. part of speech or semantic fields, words related to the current topic or with a main focus on spelling, the class's learning words, ...

Fitness training for your brain

# **Training your visualisation**

### You will need:

- A "traditional" blackboard, chalk
- pencils, paper (sheets of paper or an extra "training notebook")

### Here's how it works:

- Write down words or sentences on the blackboard.
- The children take a close look and try to visualise the words/sentences.
- Then they determine particularities in spelling.
- They shall focus on ascenders and descenders of the letters ("ascenders" as in b, d, f, h, k, l, t; "descenders" as in f, g, j, p, q)
- Then the words/sentences are covered.
- The children now have to try to write down the words/sentences from memory by consciously using the pictures in their mind's eye.

You<sup>th</sup> Start Entrepreneurial Challenges



Fitness training for your brain

# "Automatically" recognising part of speech and clauses

### You will need:

pencils, paper (sheets of paper or an extra "training notebook")

### Here's how it works:

- The teacher gives the class an assignment. Example: "Write down only the subjects of the following sentences." E.g. "There's a table in the kitchen." Question: "Who or what is in the kitchen?" Answer: "The table is the subject."
- Similarly structured sentences follow, and the children are asked to write down the respective subjects.
- This also works well with grammatical terms such as verbs, pronouns, prepositions ...

### **Train your brain games**

# **Train your brain games**

Existing knowledge is a perfect "hook" to hang up, i.e. tie up, new information by linking, associations, and relations. All forms of knowledge can be useful here, so a child's individual interests are important learning aids. A child that knows the names of different types of dinosaurs could use this knowledge later to associate them with specific formal terms. Every hobby can be used as a "peg" on which to "hang" new knowledge.

Many brain games can be carried out without a lot of preparation or material. Popular games, such as memory games, "I'm packing my suitcase", chess or "categories" stimulate our grey matter. Brain games can be used in between to liven up the lessons, and they train our brain. Using these games, children can learn what animals live in a zoo, what products are made from milk or even the times table in a casual and playful way.

These games promote the following competences that have been defined as 21<sup>st</sup> Century Skills: communicative and collaborative competence as well as creativity.



Youth Start Entrepreneurial Challenges



**Train your brain games** 

# **Living letters**

### Here's how it works:

- Divide the class into 3 or more groups of the same size. A size of 4 to 6 children per group is ideal.
- One group leaves the classroom.
- The children of this group think of a word and how to spell it out by forming their bodies to look like the letters (e.g. "K" by stretching up your left arm and stretching out your left leg, "U" by raising both arms etc.).
- Then they go back into the class and "mime" their word.
- The other groups must try to guess the word.
- Whoever guesses the word first is allowed to "mime" the next word.

**Train your brain games** 

### What am I?

### Here's how it works:

- A child mimes an action standing for a profession.
- The other children must guess what is shown.
- Whoever guesses the right profession may continue with miming the next profession.

### For example:

- Kneading dough → baker
- hammering a nail → carpenter
- planting flowers -→ gardener

### Alternative:

- Miming different types of sports
- Miming animals

Youth Start Entrepreneurial Challenges



### **Train your brain games**

# I'm packing my suitcase

### The children sit in a circle.

One child starts, saying: "I'm packing my suitcase and taking with me a pair of trousers." The next child repeats the sentence and adds another item. "I'm packing my suitcase and taking with me a pair of trousers and a book."

Whenever a child forgets an item, that child has to "run home", this means, run around the circle once.

**Alternative:** A child leaves the classroom while the others agree on a person (e.g. a doctor, a baby, ...) for whom to pack the case.

The child is called back into the classroom and now has to ask the other children what they have packed into the suitcase. First, they shall name items that belong in the case, only later they may also give clues with reference to the person. If either the child managed to guess the person or if it guessed the wrong name, the child having named the last item becomes the next guesser.

**Train your brain games** 

### Forbidden letter

### Here's how it works:

- A "letter detective" leaves the classroom.
- The rest of the class agrees on a "forbidden" vowel, e.g. "A".
- Then the letter detective is called back into class.
- He/she asks for objects containing the different vowels (A-E-I-O-U).
- If a child pronounces the forbidden letter, he/she is no longer allowed to participate.
- The detective is released and may determine the next child to find out the "forbidden letter".

### Example using the forbidden letter "A":

The detective asks: "What are eggs boiled in?"

Now the children have to find a way to describe "water" without using the letter "A". "Eggs boil when put into fluid coming from the pipe in your kitchen or bottles bought in the shop." Made it, without using the letter "A".

The next question: "What grows on an apple tree?"

The answer to save the day could be: "Not plums."

If the detective randomly asks "Is it your turn?", this could be a trap if the child would answer "Yeah".

Youth Start Entrepreneurial Challenges



Train your brain games

# **Tapeworm**

### Here's how it works:

- The children are divided into groups. The teacher starts by saying a compound word, e.g. "front door".
- Which group manages to first call out the next compound word starting with "door", e.g. "door frame"?
- Another group could carry on with "framework".
- The groups receive points for each word they call out.
- The children are allowed and even welcome to look up words in the dictionary or on the computer or their mobile phones.

**Train your brain games** 

# Reading puzzle

**Here's how it works:** The children must complete different tasks while hearing a text.

### For example:

- In a well-known **fairy-tale** persons, items or situations are replaced by others. The children must note down the mistakes. *Examples: Sleeping Beauty pricks her finger on a tulip; Snow White meets giants instead of the seven dwarfs; Hansel and Gretel get lost in the city.*
- An **informative text** on a current topic gives false information. The children must note down the mistakes. *Examples: A bird has three legs; a flying car; potatoes grow on trees; water starts boiling at 50 degrees.*
- Before a text is read out loud, the class agrees on making **certain movements** (e. g. get up, draw a circle into the air, lift your leg ...) whenever they hear **certain words** (e. g. and, the, it ...).

Youth Start Entrepreneurial Challenges



### **Train your brain games**

# Touching!

### Here's how it works:

- The children sit around in a circle (this exercise can also be done in groups).
- One child writes the name of a group member with his/her finger on a neighbour's back...
- ... who "copies" it onto the back of the child sitting next to it and so on.
- Is it still the right name when it arrives on the back of the first child?

### Alternative:

- Write instructions onto the back to be carried out.
- Write numbers or calculations.
- Write words to be translated.

**Train your brain games** 

# The number "Buzz"

### Here's how it works:

- The teacher appoints a "number buzz", e.g. all numbers divisible by 3. The children count in turn: 1, 2, buzz, 4, 5, buzz, 7, 8, buzz, 10, 11, buzz, 13 ... How far do they get? The game works well for learning and practising the time tables.
- It is also possible to appoint numbers that aren't allowed to be pronounced while counting in turn, e. g. 2 and 5: 1, buzz, 3, 4, buzz, 6, 7, 8, 9, 10, 11, buzz, 13, 14, buzz ...

Number games are suited for children of all ages. Depending on the age and level, the exercises can be adapted and amended as needed.

You<sup>th</sup> Start Entrepreneurial Challenges



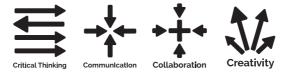
**Trust games** 

# **Trust games**

Trust is learned behaviour based on **self-confidence** and **trust in others**. Both are acquired through experiences made before, in and after school. That is why school must be a place of (establishing) trust in which children and adolescents feel safe and can strengthen their self-esteem. All this verifiably improves relationships in class.

The following file provides games which promote self-confidence and trust in others. These games may also serve as an incentive to make up your own games.

Trust games promote all four 21st Century Skills: critical thinking, communicative and collaborative competence as well as creativity.



**Trust games** 

# **Falling**

### Here's how it works:

- Form a close circle.
- One child stands in the middle.
- He/she falls in a direction ...
- ... where he/she is caught and gently pushed like a spinning top in one direction.

**Goal:** Trust and feeling the considerateness and gentle treatment by the other group members.

You<sup>th</sup> Start Entrepreneurial Challenges



**Trust games** 

# **Supporting hands**

### Here's how it works:

- Line up in two rows, facing each other.
- Take the hands of the person across from you and make a bridge.
- One child then lays on the hands of the other players. They try to raise that child in the air, shake or roll him or her from one side to the other, swing him or her front to back etc.

**Goal:** Feeling, that one is securely held.

**Trust games** 

# **Changeover**

### Here's how it works:

- Two groups stand facing each other.
- On the signal, they switch sides:
   All players move to the opposite side without touching.
- Once this works out, try it with closed eyes.

**Goal:** Take care of others and be considerate.

You<sup>th</sup> Start Entrepreneurial Challenges



**Trust games** 

# Zigzag circle

### Here's how it works:

- All children stand around in a circle, firmly holding hands.
- Count: 1, 2, 1, 2, 1, 2 ...
- All 1s fall backwards, the 2s fall forwards. No one's feet are allowed to move.
- Then do it the other way around. The 1's fall forwards, the others fall backwards.

**Goal:** Trusting each other that all will try to make the exercise work.

**Trust games** 

# **Sedan chair**

### Here's how it works:

- Two children firmly hold each other's hands.
- A third child sits down on their hands.
- He/she is then carried around in the classroom.
- It is also possible to use the chairs and tables to create an "obstacle course".

**Goal:** Trusting that no one will be let down by the community.

You<sup>th</sup> Start Entrepreneurial Challenges



**Trust games** 

# On one leg

### Here's how it works:

- Form a close circle.
- All stand in a circle on one leg, holding each other.
- All lean backwards with their upper body.

**Goal:** Experiencing a group as one and jointly keeping one's balance.

**Trust games** 

## **Obstacle course**

### Here's how it works:

- Form groups of twos.
- Child A is blindfolded.
- Child B tells child A how to get through the classroom.
- Whenever an obstacle is touched, the roles are switched.
- Which team goes the longest without touching any obstacle?

Goal: Realising the importance of good and clear communication.

Youth Start Entrepreneurial Challenges



**Chapter 7** 

# 7. Learning through Empathy

(see also Empathy Challenge – www.youthstart.eu)

This chapter promotes the students' social learning process by training their empathy in a variety of ways. The section *Active listening* shows how important it is to be engaged with your dialogue partner.

The section after that will introduce *Listening with four ears*. This communication model will sensitise the students for the numerous forms of potential misunderstandings in communication. With regard to the topic *Giving feedback*, the key message is that responses shall always be empathetic, encouraging, and target-oriented.

The *Learning stations for communication training* focus on the students and their feelings. They will learn how to become aware of their feelings and to observe how they react in different situations.

In the section *(Self-)Awareness through role playing games* the children and adolescents become actors and experience how another person acts in certain situations and how that feels.

At the end *resolving conflicts with the win-win method* introduces an important instrument for conflict management.

**Active listening** 

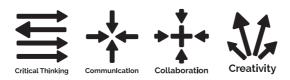
# **Training active listening**

**Goal:** The children shall learn how to actively listen, how to encourage others and be understanding.

### All these points are important:

- Look into the eyes of your dialogue partner and keep eye contact.
- An attentive expression shows your partner that you are listening intently to what he/she is saying.
- Turn your whole body towards your dialogue partner.
- Agree, nod and give your partner an encouraging smile every now and again.
- Ask questions that show that you are intently listening.
- Avoid criticism.

"Active listening" promotes all four 21st Century Skills: critical thinking, communicative and collaborative competence as well as creativity.



You<sup>th</sup> Start Entrepreneurial Challenges



**Active listening** 

# Active listening makes you likeable!

In order to be able to deal with others peacefully in a good and empathetic way, it is important to actively listen to them. **You should pay attention to the following:** 

- Turn your whole body towards the person talking.
- "Mirror" your dialogue partner. If you copy the posture, body language, facial expression or gestures of the other person, you will find it easier to empathise with and to respond to him or her.
- Keep eye contact.
- Be "all ears" and nod whenever you agree with what he/she is saying.
- Throw in short phrases such as "Yes!", "Mhm", "OK!" every now and again... But please do do without interrupting.
- In the end summarise what you have heard to make sure you have understood everything properly. For example: "I have heard that ..."; "It seems to me as if ..."; "As I understand it ..."; "Did you mean that ...?"

  (In technical terms this is what you call "paraphrasing".)

If you do that you can help others. They will be thankful for it!

**Active listening** 

# **Active listening training for three people**

### Here's how it works:

- Form groups of three.
- Decide together what you want to talk about.

### Ideas:

- That annoys me!
- That makes me sad!
- That makes me angry!
- That makes me happy!

### Once you have agreed on a topic, carry on as follows:

- A talks for 2 minutes.
- B listens.
- C observes and watches the time.
- Then switch roles until each person has had each role.
- Talk about your observations and experiences!

Youth Start Entrepreneurial Challenges



**Active listening** 

# **Active listening training with pictures**

### Here's how it works:

- Form groups of three. Each group member draws a picture relating to one of these topics (5 minutes time):
  - "What I wish for."
  - "What makes me happy."
  - "That is how I want to live."
  - "My dream place"
- Describe the pictures and present them as follows:
- A presents his/her own picture.
- B asks questions and repeats, using phrases such as: "I have heard that..."; "I understood that ..."
- C pays close attention to A's reactions and takes notes, if necessary.
- After about 3 minutes C describes what he/she has observed using phrases such as: "When you explained ..., you kept looking at the ground. It seemed to me as if you were uncomfortable talking about it. Is that so?"; "While you were talking, you kept tapping your hands slightly. I had the impression that you were nervous. Is that right?"

Role reversal: Everybody shall take on each role.

**Active listening** 

# Active listening training for three people with interruptions

### A (storyteller)

• talks about a book, a film or an experience for about 5 minutes, making it sound as exciting as possible.

### B (listener)

- first listens with interest and indicates intent listening by asking questions.
- After 2 to 3 minutes B stops listening and looks away.
- After about 4 minutes B turns away completely and starts doing something else.

### C (observer)

• closely monitors if or how A reacts to B's behaviour and, after that, describes A's reactions to B's behaviour as precisely as possible.

Role reversal: Everybody shall take on each role.

You<sup>th</sup> Start Entrepreneurial Challenges



**Active listening** 

# Active listening training for two

Active listening is practised, preferably without asking questions.

Topics: "What bothers me"; "What I want to tell you about"; "Incident at school"; ...

### Here's how it works:

- A talks for 3 minutes.
- B listens intently and shows his/her interest without words.
- B only talks ...
  - ... to encourage A to carry on.
  - ... to ask if everything has been understood correctly.
  - ... if A asks and cannot find the answer him/herself.

### Exchange your experiences after 3 minutes:

- B: How did it feel just to listen? Was it hard? What else was hard? What was easy?
- A: What behaviour of B helped in the talking? What could have been more? What behaviour of B was disturbing and could have been less?

Role reversal: Both shall take on both roles.

**Active listening** 

# **Change of position**

If you want to settle a dispute, you will have to understand what bothers, offends or hurts the disputants. A change of position can help to experience – and maybe even understand – an argument from both sides.

### Here's how it works:

- Form groups of three consisting of a mediator and two playing or really having an argument.
- The disputants sit down opposite each other.
- Both stick their name tag on the backrest of their chair.
- Both talk about how they experience the argument from their perspective.
- Then they swap chairs.
- They now tell the story from the other's perspective.
- Now they change back.
- After that, the mediator asks how the disputants felt while being in the different positions.

Youth Start Entrepreneurial Challenges



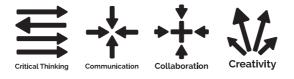
**Listening with four ears** 

# Listening with four ears

The "Four-Ear-Model" is a communication model by Friedemann Schulz von Thun that assumes that the sending and receiving of a message always includes four channels.

The person talking communicates on the following levels: **information**, **relationship**, **self-revelation** and **appeal**. This means that the talkers talk with four beaks, while the "receivers" hear and understand the content with four ears.

"Listening with four ears" promotes all four 21<sup>st</sup> Century Skills competences: critical thinking, communicative and collaborative competence as well as creativity.



**Listening with four ears** 

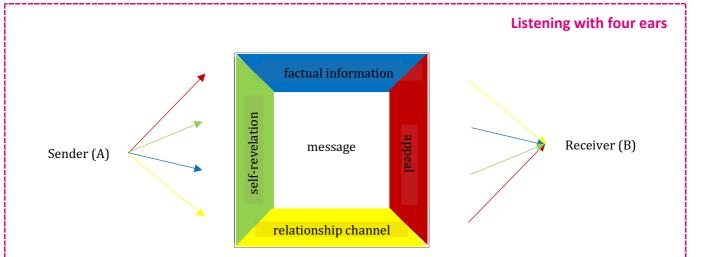
# The four sides of a message

The communication square by Friedemann Schultz von Thun (from his book published in 1981 "Miteinander reden, Störungen und Klärungen" - Talking with one another, failures and clarifications) shows that each message has four sides:

- The **factual information** is matter of fact like data and facts contained in a statement: What I inform you about.
- The **appeal** is a hidden demand: I want you to do this!
- The **relationship channel** gives information on the relationship between the sender and the receiver of a message: That is what I think of you and that is how we relate to each other.
- Through the **self-revelation** channel the sender reveals something about him-/herself: What I say about myself.

Youth Start Entrepreneurial Challenges





The four sides of the message sent – i.e. what A wants to express (and reach) with a statement – is not necessarily interpreted by B the same way as it is intended.

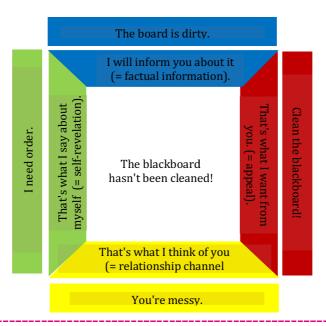
B can hear different intentions of the message, depending on which ear he/she receives the message with. This means: It does not count what A says, but what B understands.

"I don't know what I have said until I hear the answer of my counterpart" (Paul Watzlawick)

### Listening with four ears

# **Example for the four sides of a message**

Upon entering the classroom, the teacher says: "The blackboard hasn't been cleaned!"



Youth Start Entrepreneurial Challenges



Listening with four ears

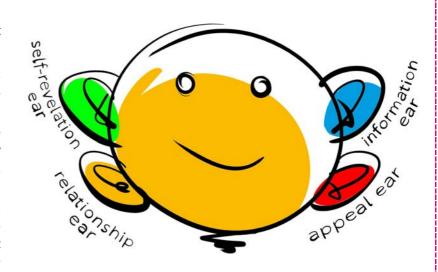
# That is how the message is heard by the four different ears:

Zoltan is listening with the **information ear** and understands: "Aha, the blackboard is not clean, it is dirty."

Brigitta is listening with the **appeal ear**: "I should clean the blackboard. (I heard: Clean the blackboard!)"

Tom is listening with the **relationship ear**: "The teacher doesn't like me. She thinks I'm a mess."

Esther is listening with the **self-revelation ear** and hears that the teacher said something about herself: "The teacher doesn't like when there is a mess. Then she can't work well."



Listening with four ears

# Training to listen with all four ears

A classmate comes to your table and says: "It smells like a sausage roll."

What do you hear? Write down the answers on a sheet of paper.

- Information she wants to inform me about:
- Appeal that is what she wants from me:
- Relationship that is what she thinks of me and how we relate to each other:
- Self-revelation that is what she says about herself:

Compare what you have written down with what your neighbours have written down.

What is your dominant ear?

Youth Start Entrepreneurial Challenges



**Listening with four ears** 

# What I hear is not necessarily what was meant.

Think of a difficult discussion and consider the following:

### If you listened (receiver):

- What did you hear?
- How did you understand what you heard?
- What else could the sender have meant to say?
- How did you react?
- How else could you have reacted?
- What could you do differently in the future?

Talk with a learning partner about it.

Next time when you have a difficult talk remember what you can do differently in the future.

**Listening with four ears** 

# What you understand does not necessarily have to be what I said

Think of a difficult discussion and consider the following:

### If you talked (sender):

- What did you say?
- How did others react to it?
- How could it have been understood?
- How did you react?
- How else could you have reacted?
- What could you do differently in the future?

Talk with a learning partner about it.

Next time when you have a difficult talk remember what you can do differently in the future.

Youth Start Entrepreneurial Challenges

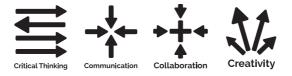


**Giving feedback** 

# **Giving feedback**

Feedback is another person's response on a situation. It complements one's self-perception or self-assessment by an *encouraging*, *objective* outside assessment of how one's behaviour comes across outwardly, how it is perceived by others. Feedback should be target-oriented and should show possibilities of how to learn from mistakes. If it is used correctly, feedback can be extremely valuable and virtually essential for one's further development.

It is important to give feedback sensitively about how you see something, without hurting or humiliating the other. Therefore, it is essential to know the rules of feedback as soon as possible and to learn to apply them. Training in the feedback rules promotes all four 21st Century Skills competences: critical thinking, communicative and collaborative competence as well as creativity.



**Giving feedback** 

# Tips on how to give feedback

Basic rule: Give feedback on what someone does, not on what someone is like!

- I describe what I hear or see (I don't rate).
- I say something to a specific action.
- I say clearly and precisely what I mean.
- I am honest.
- I talk about my personal observations and only use "I-messages":

I perceive ...

I see ...

I mean ...

I assume ...

I think ...

I feel ...

- I am open to being wrong or mistaken.
- I say what I like and what I don't like.

You<sup>th</sup> Start Entrepreneurial Challenges



**Giving feedback** 

# Tips on how to receive feedback

**Basic rule**: Feedback can help me to understand how others perceive me. That is how I deal with it:

- I listen attentively and ask whenever I don't understand something.
- I don't defend myself.
- I think about what may help me and what I can learn from something.
- I say what I have learned about myself and others from the feedback.

**Giving feedback** 

### What do I see? What do I think I see?

Training the difference between perception and interpretation

#### Here's how it works:

- Form groups of two and sit down facing each other.
- Round 1: A talks about what he/she sees or *perceives in B for a minute.* (Example: "I see that you are looking down with your eyes." Not: "I see that you are looking *sad*". Then it is B's turn to talk for a minute.
- Round 2: A talks about what he/she sees or *perceives* and *interprets* it. (Example: "I see that you are looking down with your eyes and assume that you are sad"). Then it is B's turn to talk for a minute.
- Talk about your experiences: It is easy for you to say what you see (perceive with your eyes)?
- Was your interpretation right? How did it make you feel to be right or wrong with your interpretation?

You<sup>th</sup> Start Entrepreneurial Challenges



**Giving feedback** 

### How does someone I don't like see me?

**Goal:** We connect to another person and try to see ourselves through the eyes of that person. That way we train to be mindful of other people when judging them.

#### Here's how it works:

- Think of a person you don't like and don't feel comfortable with.
- Take on the role of this person and say out loud (in the I-form) what this person might think of or feel about you. Let your imagination run wild.
- Think about how you can test empathetically if "fantasy" and actual thoughts match.

**Giving feedback** 

## "I FEEL" instead of "YOU ARE"

**Goal:** We train to express our own feelings as I-messages. We learn that an adjective with which we describe someone is a rating which can be offensive.

#### Here's how it works:

- Think of three persons you know.
- Describe each of them with two suitable adjectives a positive and a negative one. Example: "Miss Nela is nice and unpunctual."
- Transform the adjectives (that are you-messages) into underlying I-messages.
   Example: "nice" "I feel accepted by Miss Nela."
   "unpunctual" "I have been annoyed a lot about her being late."
- Talk to others out of your class about what you have learned through this exercise.

You<sup>th</sup> Start Entrepreneurial Challenges



**Giving feedback** 

# **Creating a feedback sheet**

We learn how to create a feedback sheet on a certain topic.

#### Here's how it works:

- Form groups of two.
- Read through the feedback sheet on a presentation.
- Talk about it.
- Together, create a feedback sheet on another topic.
- Take into consideration the tips on how to give feedback.
- Examples: Feedback to your teacher on a lesson, feedback on a theatrical performance, feedback on a picture someone has painted ...

**Giving feedback** 

# Giving feedback on a presentation, Part 1

		8	<u>;</u>	<u>:</u>	
	At the start of the presentation an overview was given on what will be discussed.				
	The contents were accurate.				
Contents	The contents were easy to understand.				
Con	The presentation was well researched.				
	Questions were answered and explained well.				
	The contents were logically structured.				

You<sup>th</sup> Start Entrepreneurial Challenges



### **Giving feedback**

# Giving feedback on a presentation, Part 2

		8	<u>:</u>	
	The presentation was interesting.			
	Fitting pictures and diagrams were used.			
Presentation	Eye contact was made with us.			
Prese	The presentation could be heard well in the whole class.			
	It was not spoken monotonously but expressively.			
	The contents were well worded.			

### **Giving feedback**

# Giving feedback on a presentation, Part 3

		(D)		
	Foreign words were explained well.			
Presentation	At the end the most important information was summarised.			
Prese	The presenter spoke freely.			
	The time given was well used.			
Cou	nt the gether the 🤌 🤐 🥶 and write down the total number in the corresponding column. Which has the most?			

You<sup>th</sup> Start Entrepreneurial Challenges



**Communication training** 

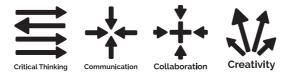
# Learning stations for communication training

The learning stations for communication training should only be carried out after the topic "My own feelings and feelings of others" has been dealt with in class.

The order, expenditure of time, and choice of exercises should be adapted to the class's requirements. It is also possible to organise a communication day with all 10 stations.

The students work independently and may choose whether they want to work in pairs, in groups or on their own. They enter the stations they already worked on in a plan.

The learning stations promote all four 21st Century Skills competences: critical thinking, communicative and collaborative competence as well as creativity.



#### **Communication training**

# **Preparing the learning stations**

Station	Material needed
Station 1: Argument Comic	14 image cards
Station 2: Interpreting images	Magazines with pictures; paper for writing and sticking on pictures
Station 3: Interpreting sentences	Paper for writing
Station 4: Claims	None
Station 5: Feelings	Flash card "Exploring my feelings", flash card "Recognising feelings", paper for writing
Station 6: Needs	Flash card "Worry sentences", flash card "Training empathy and sympathy", paper for writing
Station 7: How do we get along?	Flash card "Instructions for peaceful and successful talks"
Station 8: Working out solutions with "PMI"	None
Station 9: Listening with four ears?	Computer, printer, link to a website
Station 10: Training discussions and arguments	Paper for writing

You<sup>th</sup> Start Entrepreneurial Challenges



### **Communication training**

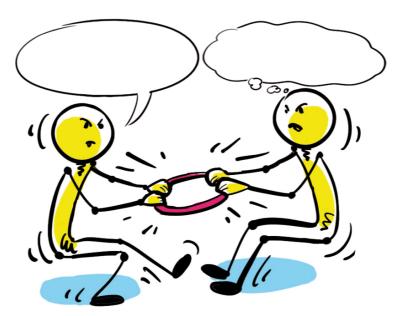
# **Station 1: Argument Comic**

Here's how it works: You get pictures showing different argument situations. Choose a picture.

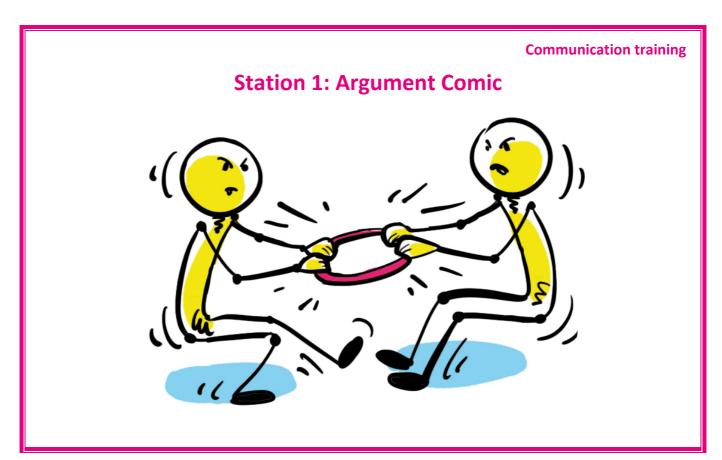
- What could the cause for the conflict be?
- What are the quarrelling parties saying? What are they thinking?
- Draw speech bubbles for each picture with a pencil, just like in a comic.
- Then write what the quarrelling parties could be saying into the speech bubbles.
- If the bubble is too small, make it bigger.
- You can also draw thought bubbles and write something in them.

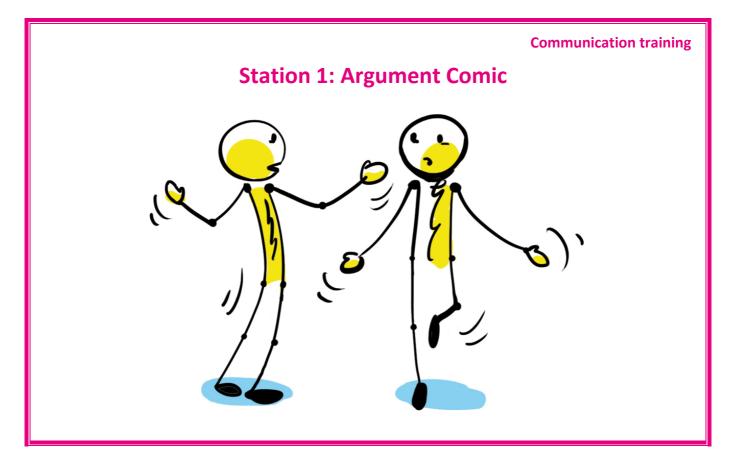
### **Communication training**

## **Station 1: Argument Comic**

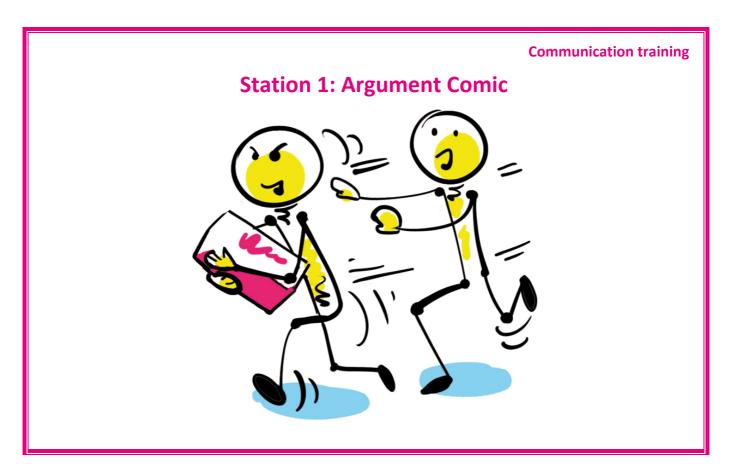


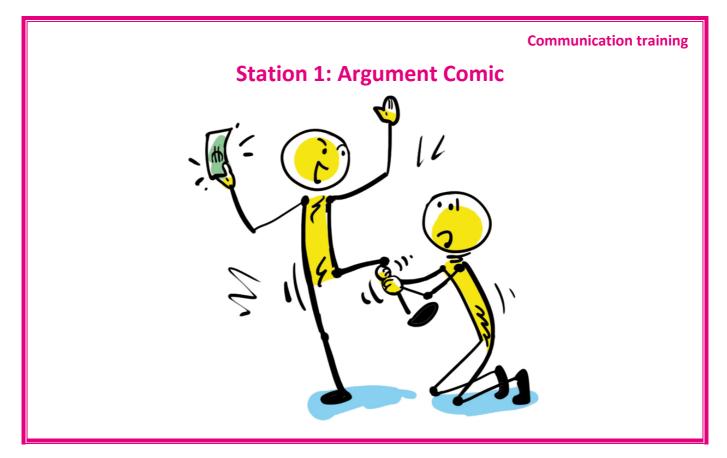




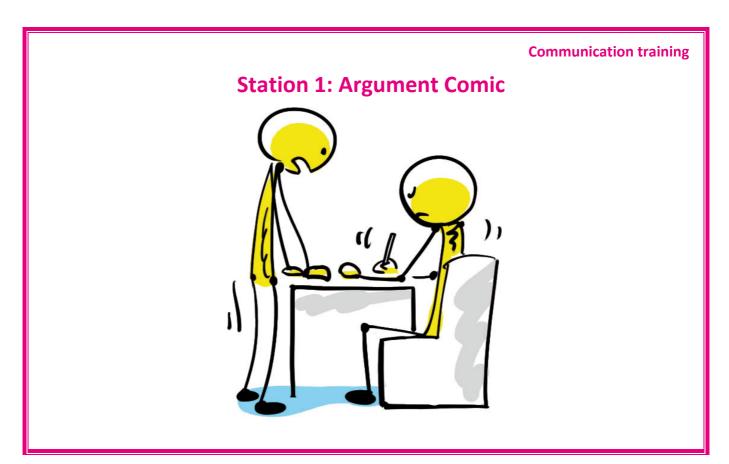


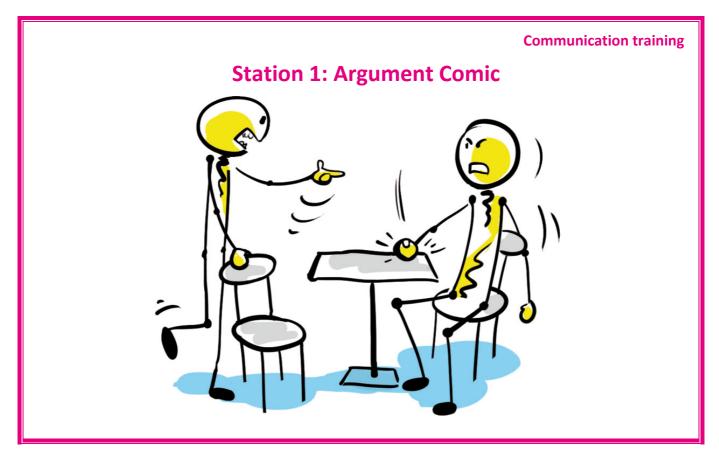




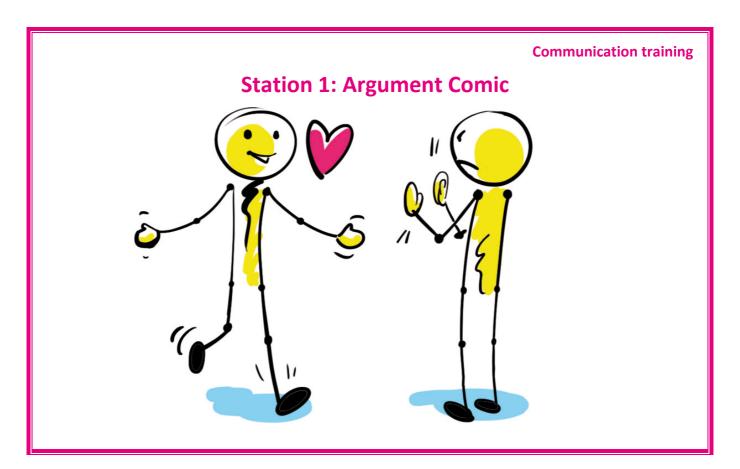


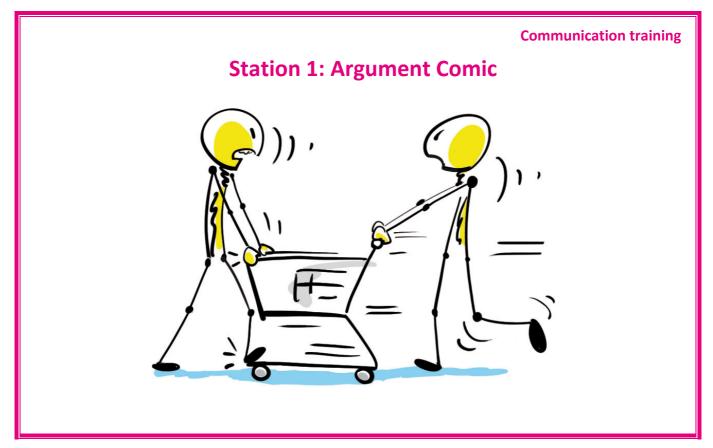




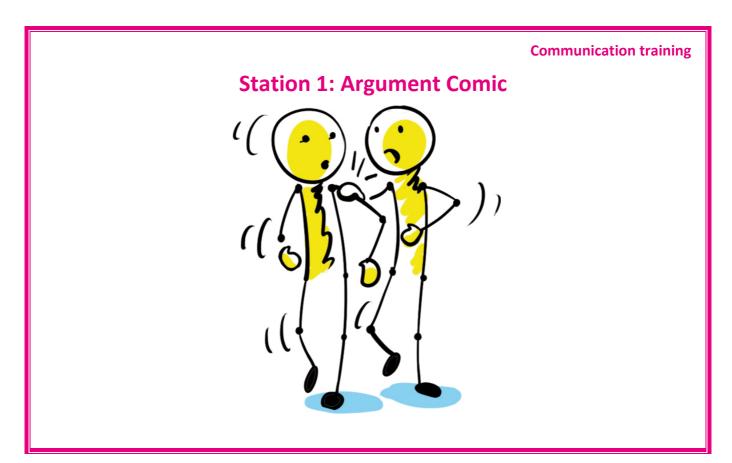


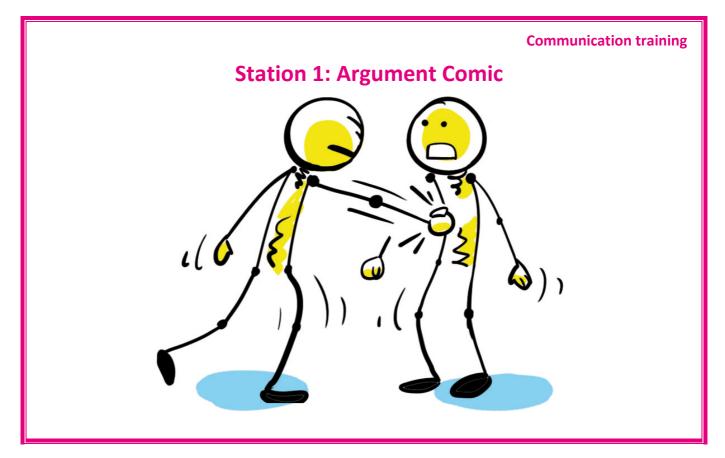




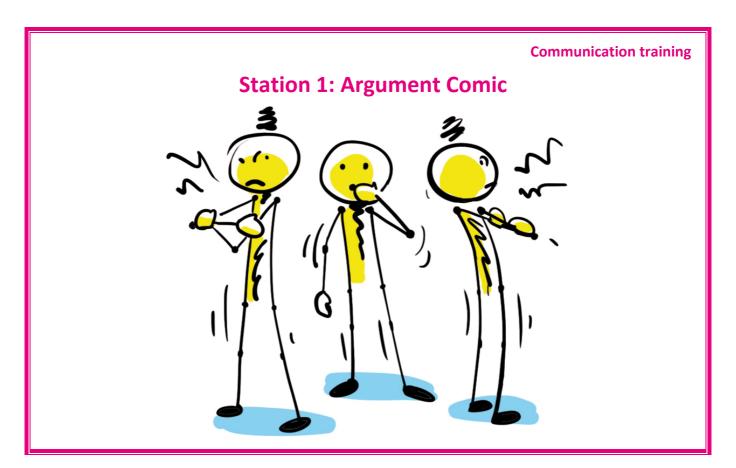


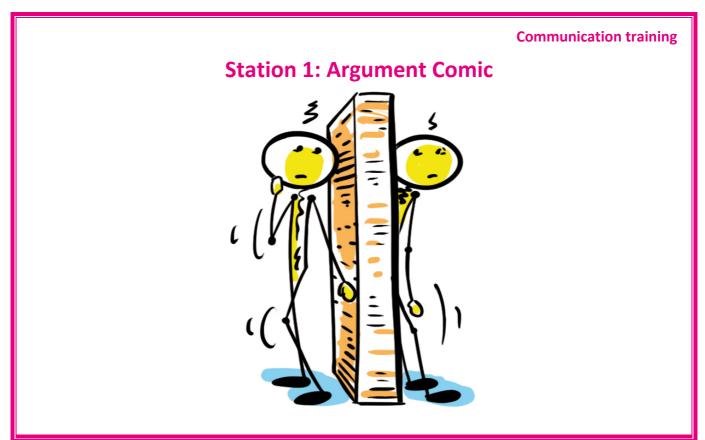




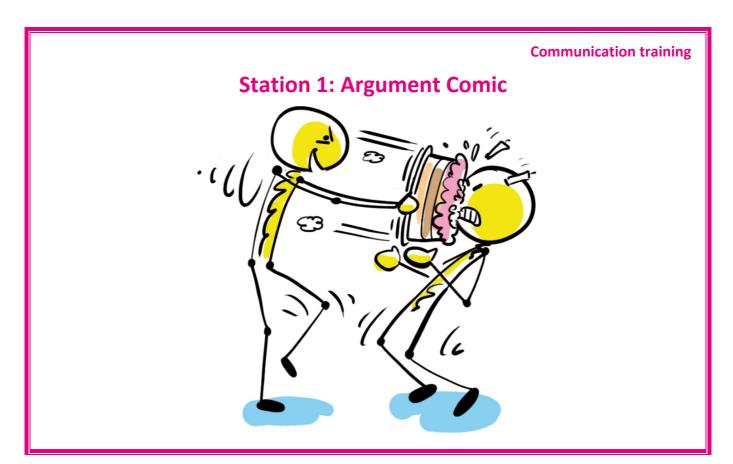


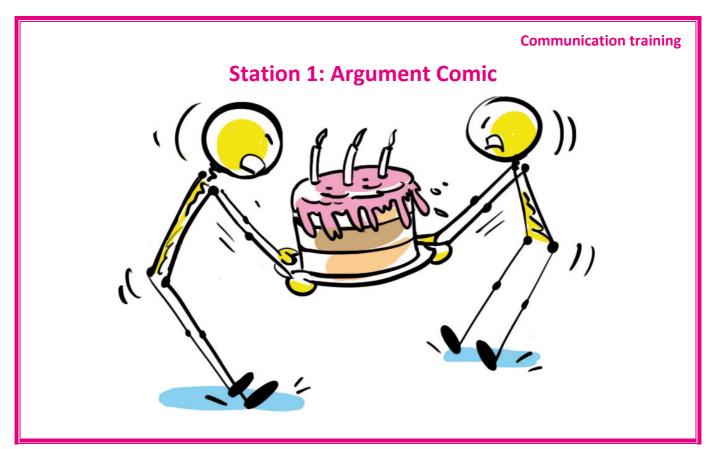












You<sup>th</sup> Start Entrepreneurial Challenges



#### **Communication training**

# **Station 2: Interpreting images**

Here's how it works: Your teacher will give you a few magazines.

- Choose a photo and stick it onto a sheet of paper.
- Write at least two captions for the photo. Each caption should point out a different view of the situation.

### For example



Caption 1: Best friends

Caption 2: There's gonna be trouble!

### **Communication training**

## **Station 3: Interpreting sentences**

**Here's how it works:** Choose at least one learning partner.

- Where does the speaker want to achieve with others with the following sentences? What does he/she actually mean to say?
  - "Are you coming?" That could mean, for example: "Please come with me." Or: "I will not wait much longer for you."
  - "Have you finished your chores?"
  - "Have you even got time for other things?"
  - "I always have to do everything alone!"
- Talk about what different desires could be behind these questions and statements in your group.
- Write down assumptions for the possible meanings of each of the sentences.
- Then compare your own assumptions with those of the others from your group. Did you have similar ideas?

You<sup>th</sup> Start Entrepreneurial Challenges



#### **Communication training**

### **Station 4: Claims**

**Here's how it works:** Choose a learning partner. Read the following sentences:

- "You are kind."
- "You are rough!"
- "You are listening."
- "You are clumsy."
- "You are helpful."

Then insert the following adverbs in turn in the sentences:

always, so, sometimes, quite, occasionally, a bit, not, gladly, not at all, already, by no means

How does this change the effect of the sentences on you and others? Talk with your learning partner about it.

### **Communication training**

## **Station 5: Feelings**

**Here's how it works:** Choose a learning partner.

- "Feelings and how you express your emotions may take different forms."
- Work on the card "Exploring my feelings" and think about how you deal with your feelings.
- Compare your answers with your partner.
- Which answers are the same, which are similar, and which are different?
- Talk about it.

Work on the card "Recognising feelings" and discuss what you both felt while reading and listening.

Youth Start Entrepreneurial Challenges



#### **Communication training**

# Station 5 – Exploring my feelings

Write down these beginnings and finish the sentence:

Example: When I am cheerful, then I have a bounce in my step.

- When I am cheerful, then ...
- When I am sad, then ...
- When I am angry, then ...
- When I am scared, then ...
- When I am happy, then ...

#### Write down:

- Which colours fit with the above-mentioned feelings?
- In which situations do you have these feelings?
- What makes you feel that way? pleasure sorrow rage anger

### **Communication training**

## **Station 5 – Recognising feelings**

Read the sentences to each other and express the feelings written in the right columns with your voice.

It's Saturday today. Pleasure It's Saturday today. Rage It's Saturday today. Anger Fear It's Saturday today. Yes! Pleasure Yes! Rage Yes! Anger Yes! Fear I cannot believe it. Pleasure I cannot believe it. Rage I cannot believe it. Surprise I cannot believe it. Admiration I cannot believe it. Reproach I cannot believe it. Disappointment I cannot believe it. Insecurity

Youth Start Entrepreneurial Challenges



#### **Communication training**

### Station 6: Needs

#### Here's how it works:

- Choose a learning partner.
- Work on the card "Worry sentences".
- Talk about what you both noted down.
- Play the role play game described on the card "Training empathy and sympathy".
- Talk about what you found out in the process.

### **Communication training**

## Station 6 – Worry sentences

### Here's how it works:

"I have a bad grade again!"

"Somebody always hides my slippers."

"I am always chosen last in handball."

"The teacher never calls on me if I raise my hand!"

Hidden in these sentences are worries, desires, and needs. Real friends give you compassionate answers, they listen closely and don't interrupt you. That way they show that they sympathise as well as empathise with you. Then they help you find a solution. Compassionate answers may start as follows:

- "You are sad because you ..."
- "You are worried that ..."
- "It would make you happy to ..."
- "It bothers you that ..."

What would your compassionate answers look like? Write three compassionate answers to each of the worry sentences.

You<sup>th</sup> Start Entrepreneurial Challenges



**Communication training** 

# Station 6 – Training empathy and sympathy

#### Here's how it works:

**Find your own worry sentences:** Think of worries you and your learning partners have and write down your worry sentences. Or invent some.

Using these sentences, **train** compassionate listening and reacting by doing a **role play**:

- One of you plays the "troubled child" (A), the other listens (B).
- Round 1: A says a sentence and B responds in a COMPASSIONATE way.
- Round 2: A says a sentence and B responds in an UNSYMPATHETIC way.
- Talk about how A felt in the first and second round with the different reactions of B.
- Promise each other that you will always think about how your behaviour can trigger good or bad feelings in others in the future.

**Communication training** 

## Station 7 – How do we get along?

### Here's how it works:

Create an "advertising poster", alone or with others from your class, for a pleasant, peaceful and successful coexistence. The following chart with "Instructions for peaceful and successful talks" will help you.

You could hang the poster either in your classroom or in the school corridor, or even at home.

In groups or alone, think about what recently caused unpleasant feelings or arguments in class.

Choose a learning partner and re-enact the situations. With the aid of the "Instructions for peaceful and successful talks", try to resolve the unpleasant situations so that all parties involved feel comfortable.

Youth Start Entrepreneurial Challenges



#### **Communication training**

# Station 7 – Instructions for peaceful and successful talks

(see also A1 and A2 Empathy Challenge on www.youthstart.eu)

9 🛎	I say what I hear or see without rating or interpreting the situation. I don't say what or who you are, I say what I see or hear.	"I saw" "I heard"
	I say what I feel when I observe specific situations. I talk about myself and not about the person I am observing.	"I feel"
	I learn to identify the need underlying every feeling I have and to accept it.	"I need"
Please!	I articulate what I want from you in a specific situation and phrase it as a request.	"I ask you to"
	I thank you.	"Thank you for!"

(according to M. Rosenbergs "Nonviolent Communication")

### **Communication training**

## Station 8 – Working out solutions with "PMI"

PMI is a thinking tool. It helps you to avoid giving in to prejudices, to recognise the different aspects of a situation, and to think or reflect in a more creative way. That way you can prevent errors (in reasoning) which result from reacting and acting too rash. PMI stands for

### Plus (positive) - Minus (negative) - Interesting

#### Here's how it works:

- You are given a topic: e.g. traffic, social media, space travel ...
- In groups, collect and note down:
  - arguments for PLUS (2 minutes) and
  - arguments for MINUS (2 minutes) for each of the issues.
- Then all groups get together. The results are presented by the group's spokesperson.
- Together you decide, what is INTERESTING for all of you.

Youth Start Entrepreneurial Challenges



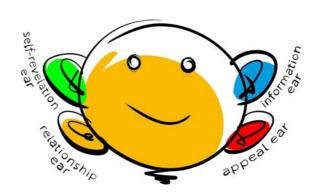
**Communication training** 

# Station 9 – Listening with four ears?

#### Here's how it works:

You're probably thinking: "Listening with four ears? That's not even possible". It is! Follow this link (German only): http://www.pearls-of-learning.com/material/andere/40hren.pdf

- Ask somebody to print out this short text.
- Read it.
- Choose a reading partner. Work together to develop and rehearse the text as a reading performance.
- Perform it and talk about it.



**Communication training** 

## Station 10 - Training discussions and argumentations

Further down you will find a statement or an opinion. Beneath is written an instruction on how to train in discussion and argumentation. Carefully prepare all items. You may do that at home. Then you can also practice with your family or friends.

**Statement or opinion**: Everybody should only do what they want to do!

#### **Instructions:**

- Discuss this statement with others. Find arguments for (pro) and against (contra) this statement and note them down.
- Write down your own opinion.
- Ask others about what they think and compare the answers.
- Discuss with others about possible consequences.

#### **Alternative:**

Discuss the following opinion: *It is okay to frequently interrupt others when they speak.* Find other topics you would like to discuss.

You<sup>th</sup> Start Entrepreneurial Challenges



**Role plays** 

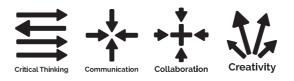
# (Self-)Awareness through role playing

Playing different roles lets you experience how another person behaves and feels in certain situations, and you also learn a lot about yourself.

If you want to encourage a certain behaviour, it makes sense to take up a current issue in the group (argument, bullying, project ...). A "reversal of roles" trains and strengthens the following areas: perception, empathy, flexibility, openness as well as cooperation, communication, problem-solving, and observational ability.

Please choose only the role play cards that fit to the respective classroom situation.

The role plays promote all four 21st Century Skills competences: critical thinking, communicative and collaborative competence as well as creativity.



### **Role plays**

### **Situation cards**

Imagine the described situation and re-enact the situation. You can let your imagination run wild. The situation cards shall help you to put yourself in someone else's situation.

Father, mother, daughter, and son are sitting at the breakfast table.	Father, mother, daughter, and son are driving on holiday in the car.
Father, mother, daughter, and son are celebrating a birthday.	Father, mother, daughter, and son are planning an outing.
A teacher and a student are preparing a class trip.	A teacher and a student are planning a project.

You<sup>th</sup> Start Entrepreneurial Challenges



### **Role plays**

### **Role cards Part 1**

You will work with the cards which show you a description of different persons and their behaviour. Try to imitate the descriptions as realistically as possible and observe how you feel about it. By playing different roles you can learn more about yourself.

<ul> <li>A responsible person</li> <li>takes responsibility for him-/herself and others for materials and the environment</li> <li>stands by his/her opinion</li> <li>is scrupulous</li> <li>is self-confident</li> </ul>	<ul> <li>A helper</li> <li>is considerate of others</li> <li>helps others</li> <li>takes over work from others</li> <li>makes suggestions</li> <li>acts as mediator between quarrelling parties</li> </ul>
<ul> <li>A joker</li> <li>is mostly in a good mood</li> <li>laughs a lot</li> <li>infects people with his/her good mood</li> <li>sometimes doesn't understand that others don't find everything funny</li> </ul>	<ul> <li>A muscleman</li> <li>brags</li> <li>acts self-confident</li> <li>protects only his own people</li> <li>hits people, is violent</li> <li>finds it stupid to be well-behaved</li> </ul>

### **Role plays**

## **Role cards Part 2**

<ul> <li>A busybody</li> <li>likes to be in the spotlight</li> <li>takes over any tasks</li> <li>often says "I can do that!"</li> <li>organises everything</li> <li>likes to make lists</li> </ul>	<ul> <li>A schemer</li> <li>is phony and sneaky</li> <li>runs down other people</li> <li>teases others and gossips about others</li> <li>spreads rumours, exaggerates</li> <li>laughs at others</li> </ul>
A good person  is hard-working and scrupulous does what he/she is told doesn't express his/her own opinion is easily influenced is timid and good-natured	<ul> <li>A show-off</li> <li>always wants to receive attention</li> <li>acts the clown, disturbs and pesters others</li> <li>is provocative and taunts others</li> <li>laughs at others</li> <li>doesn't contribute to the work, doesn't do his/her part</li> </ul>

You<sup>th</sup> Start Entrepreneurial Challenges



Win-win method

# Resolving conflicts with the win-win method

The win-win rules are an important basis of conflict management. It is essential for a peaceful and pleasant coexistence to know these methods well and always remember them.

Applying the win-win method promotes all four 21<sup>st</sup> Century Skills: **critical thinking**, **communicative** and **collaborative competence** as well as **creativity**.

Win-win method

### Poster on the win-win method

#### Here's how it works:

- Form teams of two to three persons.
- Read the three different descriptions of the win-win method in your teams and talk about which of them is the most understandable.
- Think of how you can create a clearly understandable, pretty poster for your class, your school or home.
- Copy the text by hand or type it into the computer. You may, however, use a different wording.
- Enhance your poster by adding colours, drawings or patterns ...
- Make an exhibition of the different posters in class.
- You might even want to choose which poster you like best. Which poster is given the most votes?

You<sup>th</sup> Start Entrepreneurial Challenges



#### Win-win method

# Win-win method – Explanation 1

- **1.** Imagine you are mad at somebody. Take your time to calm down, if necessary. Think of different ways to express your rage.
- **2.** Describe your feelings and give your own view on the problem. Use only "I-messages" and avoid any blame or insults.
- **3.** Then describe the problem from the other person's view.
- **4.** Own up to the part you had in the conflict.
- **5.** Try to find solutions together and decide on a solution that satisfies both sides i.e. a win-win solution.
- **6.** Acknowledge, forgive and thank each other.

#### Win-win method

# Win-win method – Explanation 2

- 1. Calm down.
- **2.** Use "I-messages".
- **3.** Repeat from the other's point of view.
- **4.** Admit your own wrongdoing.
- **5.** Find solutions by way of brainstorming.
- **6.** Acknowledge, forgive, thank ...

You<sup>th</sup> Start Entrepreneurial Challenges



Win-win method

# Win-win method – Explanation 3

- Treat each other with respect.
- Listen to the other person.
- Be honest.
- No accusations, insults, and interruptions.
- Find a common solution which all can live with.

Win-win method

# Training to apply the win-win method

Here's how you can train the win-win method!

#### Proceed as follows:

- Think of an argument you found very unpleasant.
- Talk to others about your experiences. Somebody else might also remember the same situation!
- Now re-enact the argument with different roles. First re-enact it the way it actually took place.
- Then change the way it ended by applying the win-win rules. You could change roles.
- Talk about your experiences.

Youth Start Entrepreneurial Challenges



**Chapter 8** 

## 8. Learning goals and learning success

(see also Be A YES Challenge and B2 Buddy Challenge – www.youthstart.eu as well as Treasure Hunt for your Strengths – www.jedeskind.org)

This chapter wants to empower children and adolescents to take responsibility for their individual learning process.

They train to define their personal *learning goals* and how to reach them step-by-step.

As experts in their personal learning process they self-confidently manage their own initiative. In order to achieve this, they have to learn to assess and appreciate their own *learning success*. This chapter will also guide them in this aspect.

**Learning goals** 

# Learning to achieve your learning goals

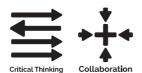
(See also B2 Buddy Challenge on www.youthstart.eu)

"If you don't know, where you want to go, you will easily land somewhere you did not want to be." (Robert Mager)

"Learning objectives describe the increase in knowledge, skills and abilities learners have acquired at the end of the learning process." (Hartmut Lenhard, 2003)

Learning goals are an effective instrument for planning good lessons. They should provide a "leitmotif" for the learning matter and create transparency, while being challenging and realistic at the same time. Furthermore, they should allow for a quality check in the learning process and increase the learners' self-confidence, motivation, and performance. Upon including learners in the definition of their own learning goals, a simple list of learning goals will turn into a clearly structured documentation of the learning progress.

By formulating their own learning goals and the process of learning to reach them step-by-step, the 21<sup>st</sup> *Century Skills critical thinking* and *collaborative competence* are promoted.



You<sup>th</sup> Start Entrepreneurial Challenges



**Learning goals** 

# **Defining my learning goal**

(see also Treasure Hunt for your Strengths – www.jedeskind.org)

**Here's how it works:** Think of answers to the below-mentioned questions and write them down.

- What am I really good at?
- What am I proud of?
- What am I pleased with?
- What am I grateful for?
- In what do I succeed especially well?
- What things do I want to stay exactly as they are?
- In what do I mostly not succeed especially well?
- What am I not yet pleased with?
- What do I want to change?
- What do I want to learn?

Of the things you want to learn, choose the one that is most important to you. Imagine exactly how it will be once you've learned it. Write down this goal.

**Learning goals** 

# Steps to my learning goal (1)

**Here's how it works:** Think of answers to the questions below and write them down.

- What do I want to be different at the end of the school year?
- What is my first step I will start with tomorrow morning?
- What intermediate goals do I have to set myself in order to achieve my big goal?
- By when should I have reached these intermediate goals?
- How can I check if I have reached my intermediate goals in time?
- With whom can I work together well?
- Which of the mistakes I have made so far will I avoid?
- Who could dissuade me from my plan?
- How can I protect myself against that?

Choose somebody who can support you in reaching your goal. Talk about all the answers you have written down with that person.

You<sup>th</sup> Start Entrepreneurial Challenges



**Learning goals** 

# Steps to my learning goal (2)

#### Here's how it works:

- Think of ways how to reach your goal.
- Plan the smallest possible steps.
- Enter the deadlines for reaching your goals into your calendar.
- Also enter dates in between on which to check if you are still on track.
- Start with the first step tomorrow morning.

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# Agreement with yourself

**Here's how it works:** Sign an agreement with yourself. Write down everything and sign the contract. Also take down the date. The following points should be included in your contract:

I want to change the following things:

The reasons for wanting to change them:

How can I change them? What steps will I take?

I will reach my intermediate goals on:

I will reach my big goal on:

Date: Signature:

Youth Start Entrepreneurial Challenges



### **Assessing your own learning success**

# Assessing one's own learning success

There are various ways to assess your learning success. In the *Youth Start Entrepreneurial Challenges Programme* self-assessment sheets have been included at the end of all challenges to help the children and adolescents self-confidently assess their own learning success. The goal is to turn them into experts of their own learning process and to encourage them to be self-determined to set their own learning goals and monitor their achievement.

Assessing each other's learning successes is another helpful step in this direction. The following cards show some suggestions for self- and peer-assessment sheets.

Being able to assess your own learning success promotes *critical thinking* in particular which has been defined as one of the four learning and innovation competences within the framework of the *21*<sup>st</sup> *Century Skills*.



### **Assessing your own learning success**

# **Creating a self-assessment sheet**

We learn what a self-assessment sheet is and how to create such a sheet on a specific topic.

#### Here's how it works:

- Form groups of two.
- Look at the examples for self-assessment sheets on the cards given to you by your teacher.
- Talk about them.
- Create a self-assessment sheet jointly.
- Choose a topic that is important to you and for which you want to check if you know it well enough.
- Formulate your learning achievements as "I can" sentences. Example: "I can carry out tasks well." Or: "I can work together well with others."

You<sup>th</sup> Start Entrepreneurial Challenges



Assessing your own learning success

# Self-assessment sheet on the topic "Learning to learn"

Tick off the smiley you think fits best.

No.	Statement	<u></u>	
1.	I can name at least 3 things that will support my learning process.		
2.	I know what I am good at.		
3.	I can remember things using the method of loci.		
4.	I know which of my four ears is the most dominant.		
5.	I can put myself in the role of another person.		
6.	I can apply the rules of giving feedback.		
7.	I can apply the rules of active listening.		

Assessing your own learning success

# Self-assessment questions on the topic "Learning to learn"

**Here's how it works:** Think of answers to the questions below and write them down:

- What helps me most to learn?
- What do I eagerly want to learn in the next year?
- What am I already really good at?
- Which learning tips can I give my best friend?

You<sup>th</sup> Start Entrepreneurial Challenges



### **Assessing your own learning success**

# Self-assessment sheet on the topic "Giving feedback"

Read through each of the sentences and decide for yourself how good you are at it. Tick the box that fits best for you.

	goes well	requires more training
I have described what I have seen or heard.		
I have said something about a specific action of one of my classmates.		
I have said clearly and exactly what I mean.		
I was honest.		
I talked about my personal observations, using I-messages.		
I said what I like and also what I don't like.		
I was open to being wrong.		

### **Assessing your own learning success**

# Assessment sheet for classmates on "Giving feedback"

Read through each of the sentences and decide how good your classmate is at giving you feedback. Tick the box that, in your opinion, fits better.

	goes well	requires more training
You describe what you heard or saw.		
You said something about a specific action of mine.		
You said clearly and precisely what you mean.		
You were honest.		
You used I-messages.		
You were open to being mistaken.		
You said what you like and also what you don't like.		

### Expert Challenge – 9. Learning with new technologies

Youth Start Entrepreneurial Challenges



**Chapter 9** 

# 9. Learning with new technologies

"If we want students to become smarter than a smartphone, we need to think harder about the pedagogies we are using to teach them. Technology can amplify great teaching but great technology cannot replace poor teaching." – Andreas Schleicher, OECD

You cannot stop digitalisation, not even in school life. That is why it is up to the teachers to look into new technologies as well as to deal with modern forms of communication.

For this reason the "Verein zur Förderung digitaler Bildungsangebote" (Association for the Promotion of Digital Educational Offerings) was called into being, and dedicates itself to the "research, development, and distribution of digital educational offerings for schools and extracurricular purposes". The association operates the web-platform "Future Learning". Frequent visits really pay off, seeing that the platform gives a continually updated overview of the rapid developments in this area. <a href="https://futurelearning.at">https://futurelearning.at</a> (German only)

The platform's core message is: "The human being is the measure of all things – digitalisation is a new reality." The following points are mentioned:

"Learning is of elementary significance for humanity – from the start, on a life-long basis. Round the clock – sometimes more, sometimes less intensively.

Learning is significant for the future of people – of each individual and all together. Digitalisation is becoming increasingly important – in every respect.

#### Chapter 9

Digital media and instruments create unprecedented chances – and new challenges – for the learning process. Through digitalisation humanity has gained new possibilities altogether. Recognizing the risks involved, we must master those possibilities and make use of them in a responsible way.

Future Learning combines all of this – digitalisation for the benefit of the learning process, and learning that makes the most of digitalisation in the sense of a bright future for all people."

In cooperation with the University College of Teacher Education Vienna (PH), the association also operates the Future Learning Lab Vienna (FLL): <a href="http://www.fll.wien">http://www.fll.wien</a> / <a href="https://zli.phwien.ac.at/lernraeume2/fll/">https://zli.phwien.ac.at/lernraeume2/fll/</a>

The Future Learning Lab is based on a pedagogic and didactic concept of the EUN Schoolnet and the "Klassenzimmer der Zukunft" (Future Classroom) project. The learning spaces offer a learning environment for learning and teaching digital competences and are an important measure of the PH Vienna for the implementation of the Federal Ministry of Education's (Bundesministerium für Bildung, BMB) initiative "School 4.0".

The Zentrum für Lerntechnologie und Innovation (ZLI, Centre for Learning Technology and Innovation) at the Institut für übergreifende Bildungsschwerpunkte (IBS, Institute for Cross-Cutting Educational Areas of Emphasis) of the PH Vienna is another of FLL's partners.

#### Reading tips and links

We have based our references to literature and links on the overview provided by "Future Learning". You will find magnificent examples for Future Learning at <a href="https://futurelearning.at/weiterlernen">https://futurelearning.at/weiterlernen</a>. Here we also recommend: Check back regularly to always be up to date (the following list is dated 27 February 2018).

### Expert Challenge – 9. Learning with new technologies

Youth Start Entrepreneurial Challenges



**Learning with new technologies** 

### Literature

### Mehr als 0 und 1. Schule in einer digitalisierten Welt.

The standard work on this topic. (German only) By Beat Döbeli Honegger.

Medienmündig. Wie unsere Kinder selbstbestimmt mit dem Bildschirm umgehen lernen. Another standard work. (German only) By Paula Bleckman.

### Coherence. The Right Drivers in Action for Schools, Districts, and Systems.

The handbook for all who really want to make a change. By Michael Fullan, one of the most renowned and experienced developers of educational systems worldwide.

### Links

### mediamanual.at (German only)

Everything you need for good practice in media education – incl. a media competence check.

### digikomp.at (German only)

Building digital competence in a systematic and age-appropriate way – incl. digicheck. **code.org** 

Gives all students a chance to learn computer sciences.

#### **Learning with new technologies**

### Links

#### Schule neu denken und medial gestalten (Reconsidering school. Media design for schools.)

Mediatisation and digitalisation pose a major challenge for schools: What will schools and education look like in the future? How can we integrate digital media into every day school life? Such are the questions discussed by the project "Schule neu denken und medial gestalten" from a scientific as well as practical school perspective. Visionary outlines are complemented by articles introducing projects from everyday teaching practice – especially from the KidZ (Future Classrooms) project.

#### SaferInternet.at (German only)

Using the internet safely – for teachers, parents, adolescents, and senior citizens.

### digi4family.at (German only)

Media competence for everybody! And the business ventures of Austria's biggest IT suppliers – an outcome of the Future Learning pilot project.

### School 4.0

We're going digital! The BMB's comprehensive digitalisation concept.

#### eEducation Austria

Digital education for all! A school development initiative aiming at incorporating digital and computational competences in all classes throughout Austria.

### Expert Challenge – 9. Learning with new technologies

Youth Start Entrepreneurial Challenges



Learning with new technologies

# Further platforms on "Learning digital learning"

At this point we also want to refer to three additional links that also deal with digitalisation in schools and its practical implementation within classrooms.

The Learning and Teaching WIKI for the German Language: http://deutsch.learnandlead.org/(German only)

A WIKI – "Work material for reading, writing, listening, and learning" – for children, adolescents, adults, and all who teach German: no matter if online via PC and smartphone or face-to-face.

### The modular system: www.learningapps.org

LearningApps.org supports learning and teaching processes with interactive multimedia modules, to be created online and incorporated into the learning content. A number of templates (matching exercises, multiple-choice tests etc.) are available for the modules (Apps). The apps do not constitute self-contained learning units but have to be incorporated into the classroom scenario first. No registration is required.

### Millions of learning kits: www.quizlet.com

The platform gives you the possibility to browse through millions of learning kits or to create your own practical tools: from flash cards to games and quizzes. However, you must register first.

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