

MODULE 2

Teaching and Learning

CONTENT OPTION 1 (Lesson planning):

- M2O1 Workshop Module 2 - Lesson planning
- M2O1 Lesson Planning Presentation
- M2O1 Bloom's Taxonomy
- M2O1 Lesson plan_1_handout
- M2O1 Lesson plan_2_handout
- M2O1 5 step lesson plan template

CONTENT OPTION 2 (Differentiation):

- M2O2 Workshop Module 2 - Option 2 Differentiation
- M2O2 Differentiation Presentation
- M2O2 Multiple intelligences Handout
- M2O2 Learning techniques Handout

- M2 Evaluation Sheet

		Summarize learning and test mastery		
		<p>1) Work in groups – each group watches a <u>short video</u> from a classroom where the teacher describes the big goal. Then teachers have to identify key points and describe what the basic elements of that big goal are and how it is inspirational for the students.</p> <p>2) Work in groups – each group has 2 or 3 lesson plans with different quality and they have to discuss each plan and decide if it covers the standards. Each group gives ideas how to improve the lesson plan. Some of the mistakes concern lesson goals and teachers should set a new goal demonstrating their knowledge of Bloom’s taxonomy.</p>	<i>2 different lesson plan handouts</i>	Teachers start working with goals, objectives and lesson plans, focusing on standards and Bloom taxonomy
		<p>1) Work in groups. Each group will define a pupil group with some information about the background of the children, their social status, interests and results. Each group should create a Big Goal that could inspire kids and involve them in learning.</p> <p>2) Each teacher has to create a Lesson plan using all the elements. Then some of the teachers present their work.</p>	<i>5-step lesson plan template</i>	Teachers create goals, objectives and lesson plans
		<p>Tasks to check understanding of the material in the session:</p> <p>1) Teachers have a short description of a group of children and have to develop big learning goal for them.</p> <p>2) Teachers have to set a lesson goal for a given lesson topic; they have to briefly describe how children will learn new material and what activities could be included to help the learning process.</p>		Trainers are aware of the level of understanding of the covered material
		<p>Watch some videos that describe students’ progress in the classroom working with teachers that use all the described methods.</p> <ul style="list-style-type: none"> ✓ <u>Example Link 1</u> ✓ <u>Example Link 2</u> 	Videos	Teachers have access to best practices on the topic
<i>Possible variation</i>		<i>Teachers create their own lesson plan to be used.</i>		



Trainee to Trained Teacher

Module 2 – Teaching and Learning

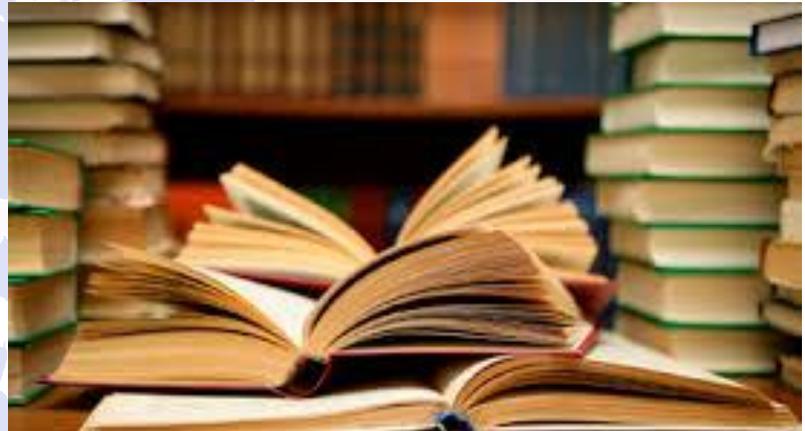
Lesson Planning



Erasmus+



Lesson planning. WHY?



Backwards planning

- Set Big goals

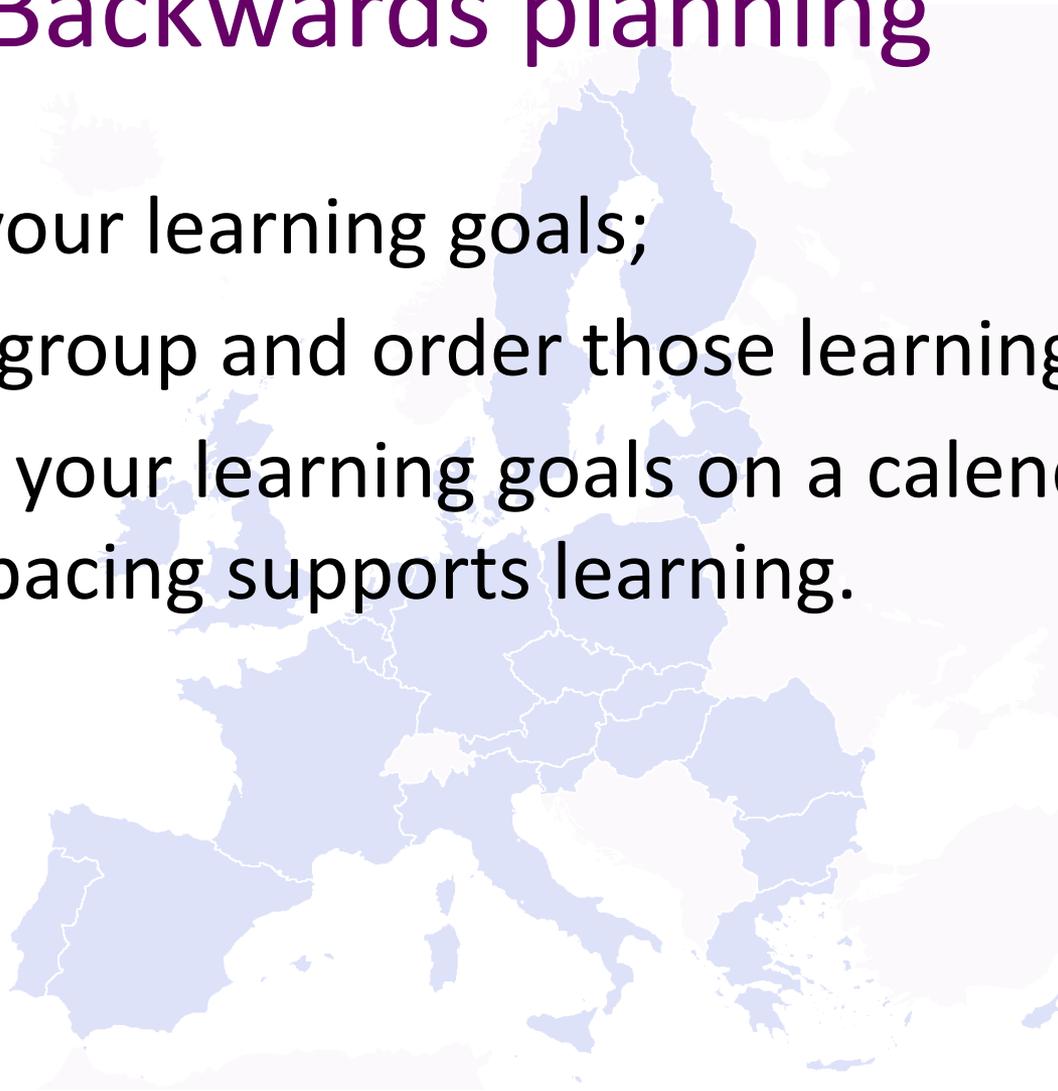
A good big goal is:

- ✓ powerful,
- ✓ measurable,
- ✓ ambitious,
- ✓ meaningful



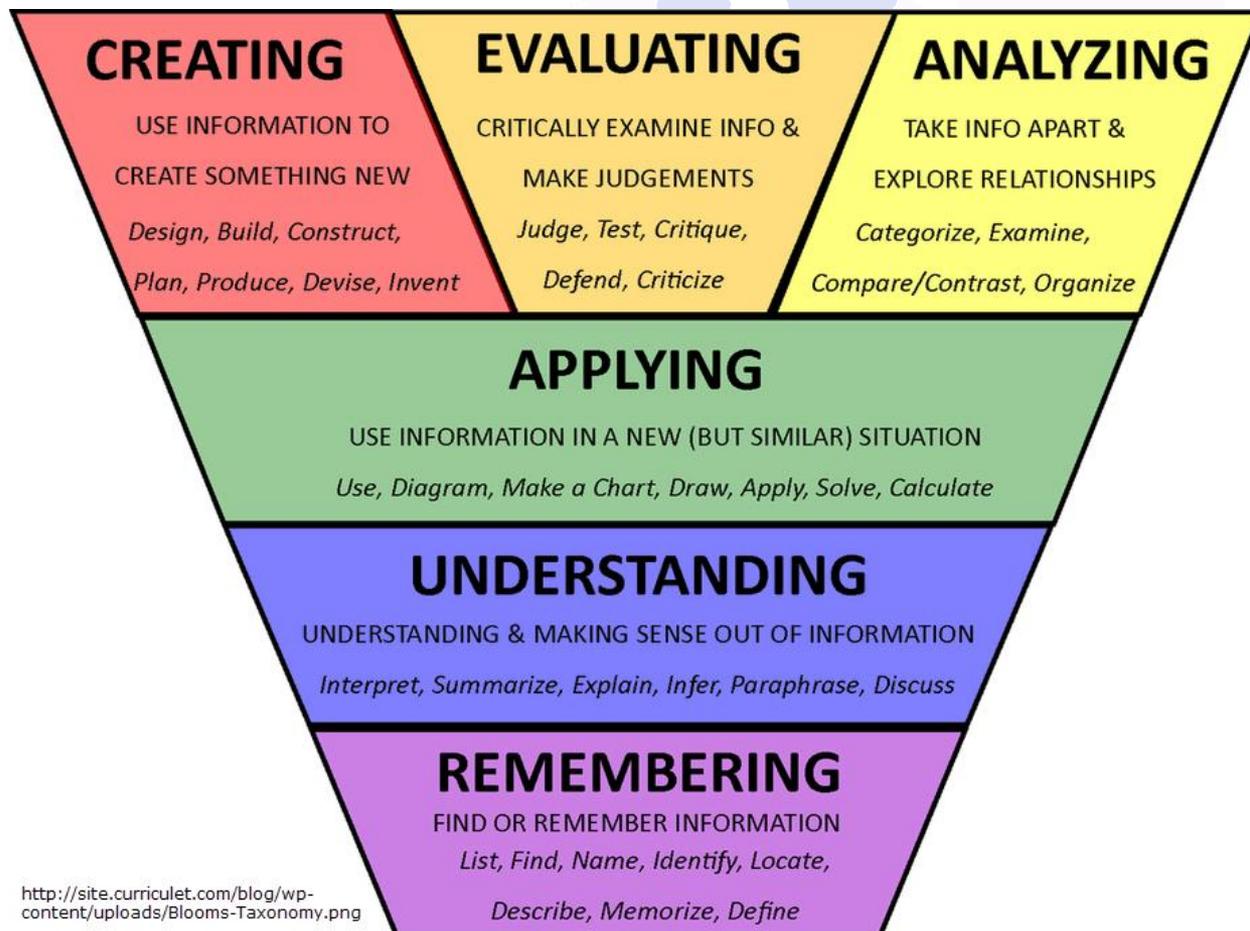
Backwards planning

- Identify your learning goals;
- Logically group and order those learning goals;
- Schedule your learning goals on a calendar so that the pacing supports learning.



Create objective-driven lesson plans

1. Identify your **objective** on your unit plan



Create objective-driven lesson plans

2. Create your lesson assessment.



Create objective-driven lesson plans

- Write your key points: break down your objective into the bare essentials.



Create objective-driven lesson plans

- Decide on a lesson plan model

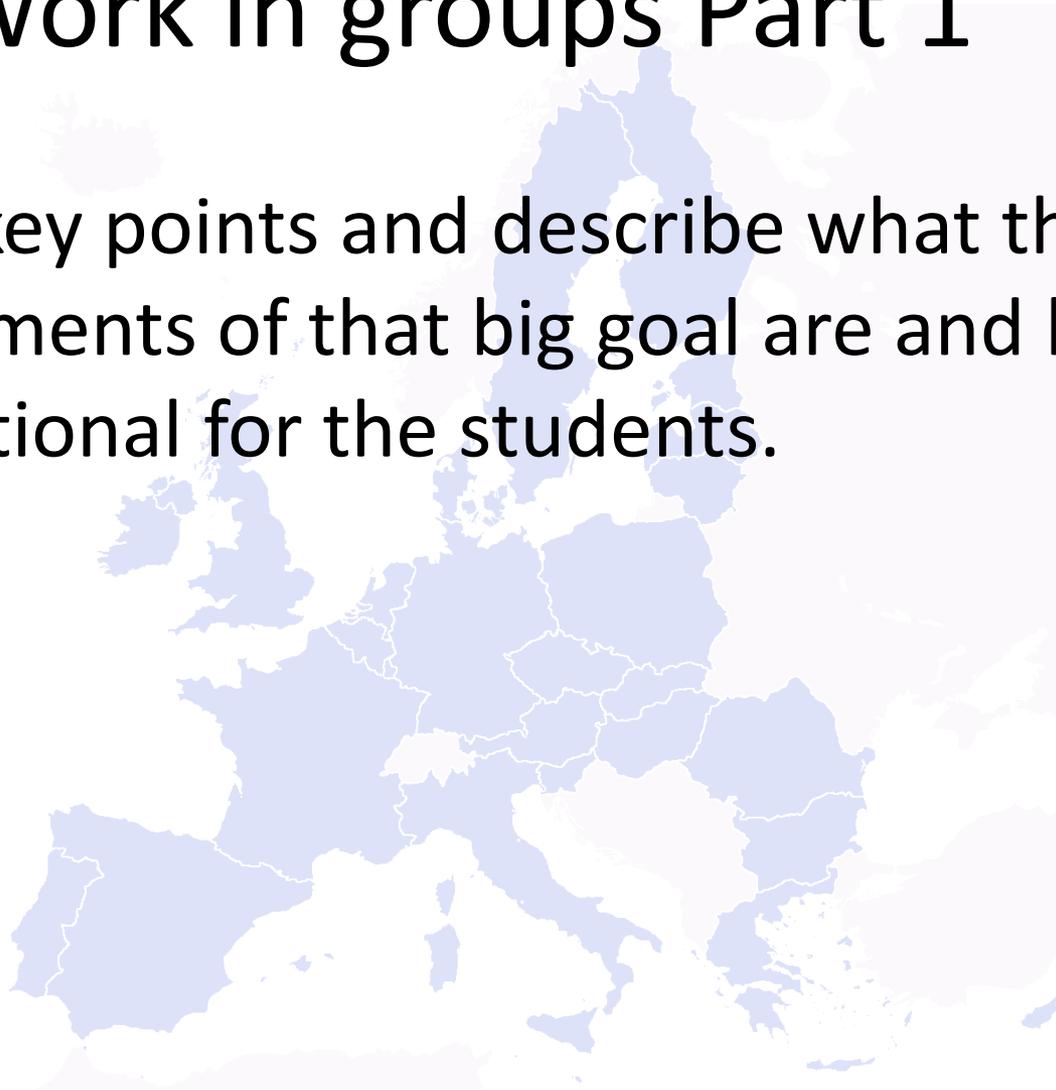


Create objective-driven lesson plans

- Plan lesson activities so they fulfil key purposes:
 - Communicate the what, why, and how of a lesson
 - Engage students in new content in clear and accessible ways
 - Give students multiple, scaffolded opportunities to practice with a gradual release of teacher support
 - Give students opportunities to show mastery of the objective independently

Work in groups Part 1

- Identify key points and describe what the basic elements of that big goal are and how it is inspirational for the students.
- [Video](#).



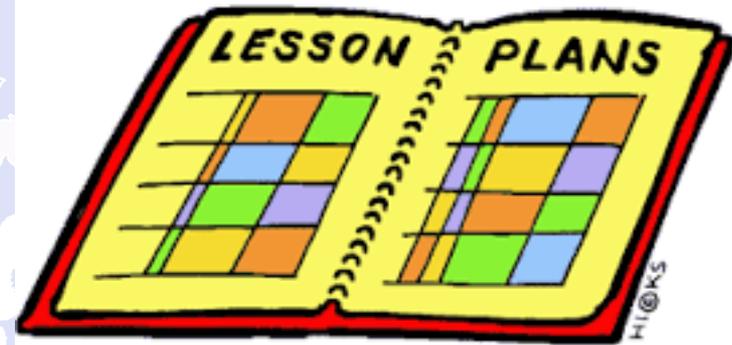
Creativity time #1

- Create a Big Goal that could inspire students and involve them in learning.



Work in groups Part 2

- Look at the different lesson plans and discuss if they meet the standards.



Creativity time #2

- Create a Lesson plan using all the 5 elements in the handout.



Exit ticket



Some inspirational examples...

- [Video 1](#)
- [Video 2](#)





5 step lesson plan 5th Grade – ESL – A2

Date:

Vision and objectives	<p>OBJECTIVE</p> <ul style="list-style-type: none"> - Students answer 3-4 open questions verbally - Students say 3-4 key words from a text they've listened to (for students who are behind curriculum) 	<p>KEY POINTS</p> <ul style="list-style-type: none"> - Listening comprehension strategies
	<p>ASSESSMENT (EXIT TICKET)</p> <p>OK guys, it's time for our final listening test. Listen carefully, follow the strategies and you will do great! Remember – our aim is 80%!</p> <p>http://learnenglishteens.britishcouncil.org/skills/listening-skills-practice/library-giving-personal-information</p> <p>http://learnenglishteens.britishcouncil.org/skills/listening-skills-practice/describing-people</p> <p>Exit slip attached below.</p>	
	<p>CONNECTION TO THE BIG GOAL</p> <p>The goal is a Revision and it covers the part of my Final (big) goal which is connected to the Listening part of the final assessment where each one of my students should have more than 80%.</p>	
	Teacher's actions	Students' actions
Selection of methods	<p>OPENING</p> <p>https://www.youtube.com/watch?v=ZyhrYis509A</p> <p>Hi guys,</p> <p>Last week we closed a lesson with a song, today we are going to open it with one.</p> <p>It's a well-known song, but listen carefully because in the end I will want you to tell me what the song is about.</p> <p>I run a record of the song - Barbie Girl – first 1:30 min.</p> <p>When I stop the music, I randomly choose a student to answer the question: „How does the song begin? What happens first?“</p> <p>Next question to another randomly chosen student: „Who sings the song?“</p> <p>Next question to another randomly chosen student: „According to the song, life is your?“</p> <p>OK, guys – great! As you've probably guessed from this exercise, today we will be practicing listening again. We will do a short review of the listening strategies we've looked at before and then we will practice together. At the end of the lesson we will do the final listening exam, on which you should all have above 80%!</p> <p>On the board: „6th August, 2014 At the end of this lesson, I will be able to answer questions after hearing a short passage or dialogue. Lesson plan:</p>	

1. Revision (5min)
2. Exercise with Miss Nikol (10min)
3. Independent work (10min)
4. Exit slip (10min)

INTRODUCTION TO NEW MATERIAL

OK, let's talk about listening comprehension strategies.

I write every strategy on the board while we are discussing it.
What's the first thing we need to do BEFORE we hear the text?

(I pick up a name of a student from the jar with the cards with all the students' names and ask for an answer like – “*Read the questions that we will be answering*”)

OK, why is this important?

(I pick up another name and expect this answer - “So that we know what to be listening for when the recording begins.”)

Great! We hear each recording twice every time. What do we do the first time we listen to it?

(We've already discussed that, however if they can't answer, I say: „we look for key words which we've found where? – in the questions!”)

So, the next thing we do is to listen and pinpoint where in the recording the information we are looking for is.

Great, so far we have two strategies! – Peter, could you read them out loud for everyone to hear?

What is the third thing we need to do when we hear the dialogue for the second time?

(I pick up another name and expect this answer – We listen carefully to the sentences where we know the information we need is to find the correct answer!)

I write on the board:

OK, so to summarize – we read the questions, during the first listening we pinpoint where the information we need is and during the second hearing we listen carefully to find the correct answer.

And remember, guys, just like with the reading – you DO NOT need to understand every single word, you only need to focus on the key words and facts. And one last thing, you are allowed to take notes on a blank piece of paper while the hearing is going on if this is going to help you structure your thoughts or remember things.

Pick up a student's name and ask – Let's see who is going to tell me the three major strategies for when we are doing listening comprehension.

Great – now make sure to implement them in the last 10 minutes of the class, so that we can all be above 80% today!

EVIDENCE OF PROGRESS

EVIDENCE OF DIFFERENTIATION

GUIDED PRACTICE

Ok, now we are going to hear a couple of dialogues and go through the three strategies together as a class, so that we can practice them and they come more easily to you by the end of the lesson.

Let's begin with a guy who wants to make a dinner reservation. For the first exercise, you have multiple choice answers, so it must be easier.

Take 30 seconds to read the questions, so that you know what you will be looking for in the recording.

<http://esl.about.com/library/media/audio/reservation.mp3>

Ok, now let's listen to the recording for the first time and try to pinpoint the information we need.

I play the record of the dialogue.

Cool, do we know where the information we need is? So-so? Ok, let's listen to it again before we answer the questions together.

I play the record of the dialogue for the second time.

After the end of the dialogue, I pick up a name of a student and ask him/her to answer the question. The exercise is easy and it's multiple choice, so I expect that the student will do it without much trouble.

Ok, now we move on to another dialogue. This time you need to answer open questions for which you do not have the answers in front of you. Read the questions first and think about the information you will be looking to hear.

<http://www.learning-english-online.net/skills/listening-comprehension/exercises/inviting-someone/>

Let's listen. It's a dialogue between two friends talking about a party.

I play the record of the dialogue.

Cool, do we have at least some of the answers we need? Let's listen for the second time.

I play the record of the dialogue for the second time.

After the end of the dialogue, I pick up a name of a student and ask him/her to answer the question. If someone faces difficulties, I encourage the rest of the students to help.

Check for understanding: *Ok, guys, what was the most difficult thing about doing this listening?* – I ask to see what is difficult for them so I can help there during the independent practice.

INDEPENDENT PRACTICE

Now, before we do the final test, let's just do individual practice with one dialogue that you are going to work on by yourselves and then we are going to check it as a class.

Take 30 seconds to read the questions.

<http://learnenglishteens.britishcouncil.org/skills/listening-skills-practice/interview-swimmer>

I run the record of the dialogue twice and let the students work independently. Ok, guys, now let's check the answers.

Does anyone have the answer to number 1/2/3/4/5? Thumbs up if we all agree!

If someone has another answer, we discuss the issue and help that student understand the right answer.

CLOSING

After the end of the assessment we have this short discussion.

How did you do?

Do you feel more confident about listening comprehension?

What else do you think you can do to improve your listening skills?

(For example – to listen to songs in English and to search for the lyrics online and to watch movies in English without using translated subtitles ☺)

Exit slip **LISTENING COMPREHENSION**

Name:

Exercise 1.

Listen to the following conversation between a girl and a librarian. Then answer the multiple questions below.

1. Lucy's surname is ...

- a) More
- b) Moor
- c) Moore

3. How old is Lucy?

- a) 13
- b) 14
- c) 15

2. Lucy is in class

- a) 1C
- b) 1B
- c) 4B

4. The librarian asks for Lucy's ...

- a) address
- b) photo
- c) passport

Exercise 2.

Listen to the following conversation between two friends. Then answer the following questions.

1. Jem is Hannah's

2. Who is Lucy and what is her hair?

3. How old are Alex and Jem?

4. Alex and Jem have both got,
.....

hair, eyes and
..... ears.

LISTENING COMPREHENSION – exercises during the lesson

Exercise 1.

1. **What is the name of the restaurant?**
 - A) Apple Tree Restaurant
 - B) Apple Inn Restaurant
 - C) Appeal Restaurant

2. **What day would he like to make a reservation for?**
 - A) Saturday
 - B) Friday
 - C) Thursday

3. **What is the date?**
 - A) 12th
 - B) 2nd
 - C) 22nd

4. **What time would he like to make the reservation for?**
 - A) 6 o'clock
 - B) 8 o'clock
 - C) 9 o'clock

5. **How many people does he make a reservation for?**
 - A) 5
 - B) 4
 - C) 3

6. **What is his surname?**
 - A) Leavens
 - B) Liavens
 - C) Leavins

Exercise 2.

Listen to the dialogue between two friends. Then answer the following questions in **COMPLETE** sentence.

1. When is the birthday party going to take place?

2. Is the girl going to go to the party?

3. What time does the party start?

4. Where is the birthday party going to take place?

5. Who is the girl going to go to the party with?

Exercise 3.

1. What does Dan do every day at 5 o'clock in the morning?

2. What does Dan have for breakfast?

3. What does Dan study at university?

4. What time does Dan have lunch at?

5. What does Dan do before going to bed?

5 step lesson plan

Date:

Vision and objectives	<p>OBJECTIVE Students give arguments.</p>	<p>KEY POINTS Words:</p> <ul style="list-style-type: none"> - Argument - Explain / Explanation - True - False - Answer - Agree - Sweating <p>Introductory phrases.</p> <ul style="list-style-type: none"> - I think - In my opinion - I believe - From my point of view - I agree <p>Connecting phrases:</p> <ul style="list-style-type: none"> - Also - In addition to that - Lastly - I think so because - I believe so as <p>Other phrases:</p> <ul style="list-style-type: none"> - Complete an exercise <p>Questions:</p> <ul style="list-style-type: none"> - Do you think - What do you think <p>Is it true or false</p>
	<p>ASSESSMENT (EXIT TICKET) "I am a good student."</p> <p>Please tell me if this statement is True or False for you. Give me 3 arguments why you think so. Each argument will give you 1 point. Each full and grammatically correct sentence will also give you 1 point. You get one additional point for starting your answer with an introductory phrase. You have 7 minutes to complete this exercise.</p> <p>Maximum point: 7.</p>	
	<p>CONNECTION TO THE BIG GOAL Hello everyone!</p> <p>Today we are going to learn how to express our opinion and how to motivate it. What does it mean?</p> <p>Student: To explain Why you think that.</p> <p>Great! In other words – how to build an argument.</p> <p>What does an argument mean? – Please find this word in your Dictionary handout.</p>	

	<p>Student: It means “Argument” in native language.</p> <p>Great!</p>		
	Teacher’s actions	Students’ actions	MATERIALS
Selection of methods	<p>OPENING</p> <p>Hello everyone!</p> <p>Today we are going to learn how to express our opinion and how to motivate it. What does it mean?</p> <p>Student: To explain Why you think that.</p> <p>Great! In other words – how to build an argument.</p> <p>What does an argument mean? – Please find this word in your Dictionary handout.</p> <p>Student: It means “Argument” in native language.</p> <p>Great!</p>		
	<p>INTRODUCTION TO NEW MATERIAL</p> <p>Now, how do we share our opinion? We start with an introductory phrase or intro phrase. Who knows what intro means?</p> <p>Student: Intro, beginning, entrance.</p> <p>Super. In that case, if somebody asks us “Do you think it is hot or cold outside?” what would you answer?</p> <p>Student: It is hot outside.</p> <p>Well, that answer stops the conversation. You want to sound smarter. 😊</p> <p>You need to use an intro phrase.</p> <ul style="list-style-type: none"> - I think - In my opinion - I believe - From my point of view <p>What else do you need to say apart from you thinking it’s hot? You need to say why you think it’s hot, right? So what would your answer be?</p> <p>Student: In my opinion it is hot outside (again, use the whole phrase from the question) because I am sweating.</p>		

	<p>If you want to add another argument, how do you start the next question? Student: Also, In addition to that.</p> <p>Super!</p>	
	<p><i>EVIDENCE OF PROGRESS</i></p> <p><i>EVIDENCE OF DIFFERENTIATION</i></p>	
	<p>GUIDED PRACTICE So in our case, how would we write our response?</p> <p>Exercise 1:(1) (intro phrase) it is (2) outside. I think so because (3) . Also, I believe so as And lastly, I think because</p>	
	<p>INDEPENDENT PRACTICE <i>Who knows who Justin Bieber is?</i></p> <p><i>Great!</i></p> <p>Now, as you are seated, please tell me if you agree with this statement or not. Give me 3 arguments why do so.</p> <p>“Justin Bieber is awesome”.</p> <p>You have 5 minutes for this exercise. When you are done, you can go to the beach.</p> <p>Now let’s see who wants to share their opinion? (3 minutes).</p>	
	<p>CLOSING Ok, what did we learn today? Why is it useful for us?</p> <p>Student: We learned how to share our opinion and give arguments.</p> <p>Legendary!</p> <p>Have a wonderful day every one! You were phenomenal today.</p>	

5 step lesson plan



Date:

Vision and objectives	OBJECTIVE	KEY POINTS	
	ASSESSMENT (EXIT TICKET)		
	CONNECTION TO THE BIG GOAL		
	<i>Teacher's actions</i>	<i>Students' actions</i>	MATERIALS
Selection of methods	OPENING		
	INTRODUCTION TO NEW MATERIAL		
	<i>EVIDENCE OF PROGRESS</i>		
	<i>EVIDENCE OF DIFFERENTIATION</i>		
	GUIDED PRACTICE		
	INDEPENDENT PRACTICE		
CLOSING			

Workshop Module	Workshop Objectives	Activities and Resources	Resources	Outcomes
Module 2 Teaching and Learning Option 2 Differentiation	<i>Teachers use different techniques to address different learning styles in the classroom.</i>	1) Communicate the what, why, and how of the session. Brainstorming: <ul style="list-style-type: none"> - What types of learning styles do teachers know? - What are multiple intelligences? - What is the connection between learning styles and multiple intelligences? 	<i>Flipchart</i>	Teachers are aware of the goals of the session.
		2) Presenting Gardner's Theory of Multiple intelligences <ul style="list-style-type: none"> • Description of all types of intelligence according to that theory. <ul style="list-style-type: none"> - Verbal-linguistic intelligence refers to an individual's ability to analyze information and produce work that involves oral and written language, such as speeches, books, and emails. - Logical-mathematical intelligence describes the ability to develop equations and proofs, make calculations, and solve abstract problems. - Visual-spatial intelligence allows people to comprehend maps and other types of graphical information. - Musical intelligence enables individuals to produce and make meaning of different types of sound. - Naturalistic intelligence refers to the ability to identify and distinguish among different types of plants, animals, and weather formations found in the natural world. - Bodily-kinesthetic intelligence entails using one's own body to create products or solve problems. - Interpersonal intelligence reflects an ability to recognize and understand other people's moods, desires, motivations, and intentions. - Intrapersonal intelligence refers to people's ability to recognize and assess those same characteristics within 	<i>PowerPoint presentation</i> Multiple intelligences handout	Teachers are familiar with Gardner's Theory of Multiple intelligences.

		themselves.		
		<p>3) Presenting some of the techniques that help students with different learning styles to learn.</p> <p>- Teachers identify some techniques in a demonstrated short lesson.</p> <p>The activity could be created according to the specifics of the group. The aim is to demonstrate how different techniques are implemented in 1 lesson in order to present the new material in several different ways.</p>	<p><i>A short video that could be played or used as an inspiration to play a simulated lesson.</i></p> <p><u>Link to the video</u></p>	<p>Teachers discuss an example of a lesson incorporating different learning styles techniques.</p>
		<p>4) Planning a lesson with different learning techniques.</p> <p>Teachers have to create a lesson plan in which they are planning at least 4 different activities that help representatives of different learning styles to</p>	<p><i>Learning Techniques Handout may be used to help teachers</i></p>	<p>Teachers create lesson plans with different activities to help students with different learning styles learn better.</p>
				<p>Trainers are aware of the level of understanding of the covered material</p>



Trainee to Trained Teacher Module 2 – Teaching and Learning

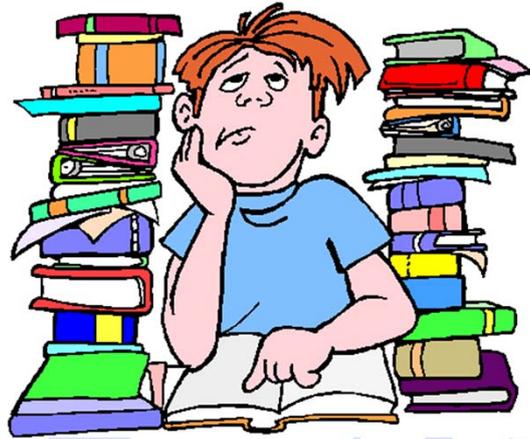
Differentiation



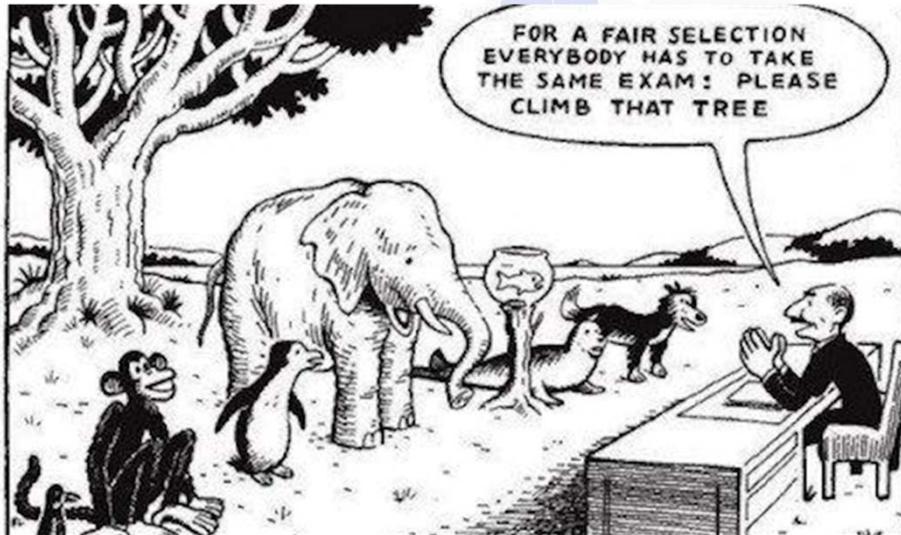
Warm up activity

- Please split into groups of 5
- Each group will receive a text
- You have 20 minutes to:
 - Read the text out loud
 - Draw a Venn diagram with the info from the text
 - What % of the day do we use the left side of the brain?
 - Write a song using the info from the text
 - Make a figure with your bodies representing the info from the text
 - Draw a picture using elements from nature to describe the info from the text
 - Each member of the group has one min to decide which hemisphere of the brain is more developed
- Each group will have 3 minutes to present all of the work

How do you learn best?

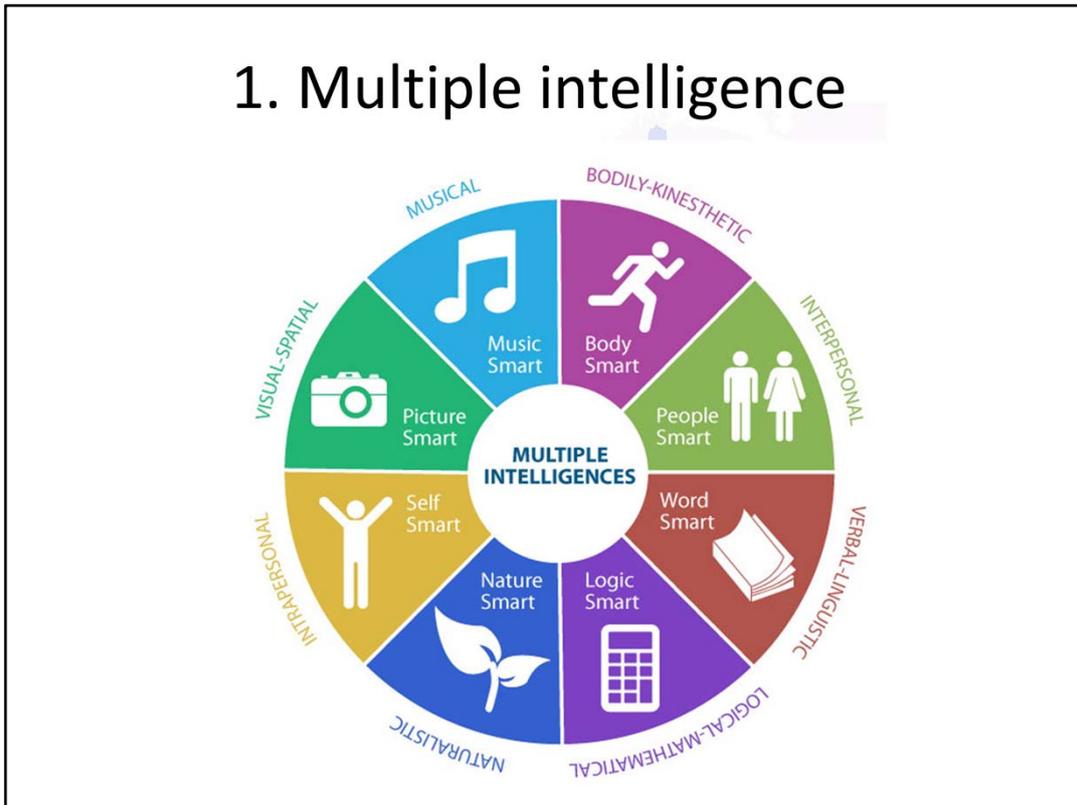


Learning styles. The theory



Why do we need to use different methods in order to help students to learn?

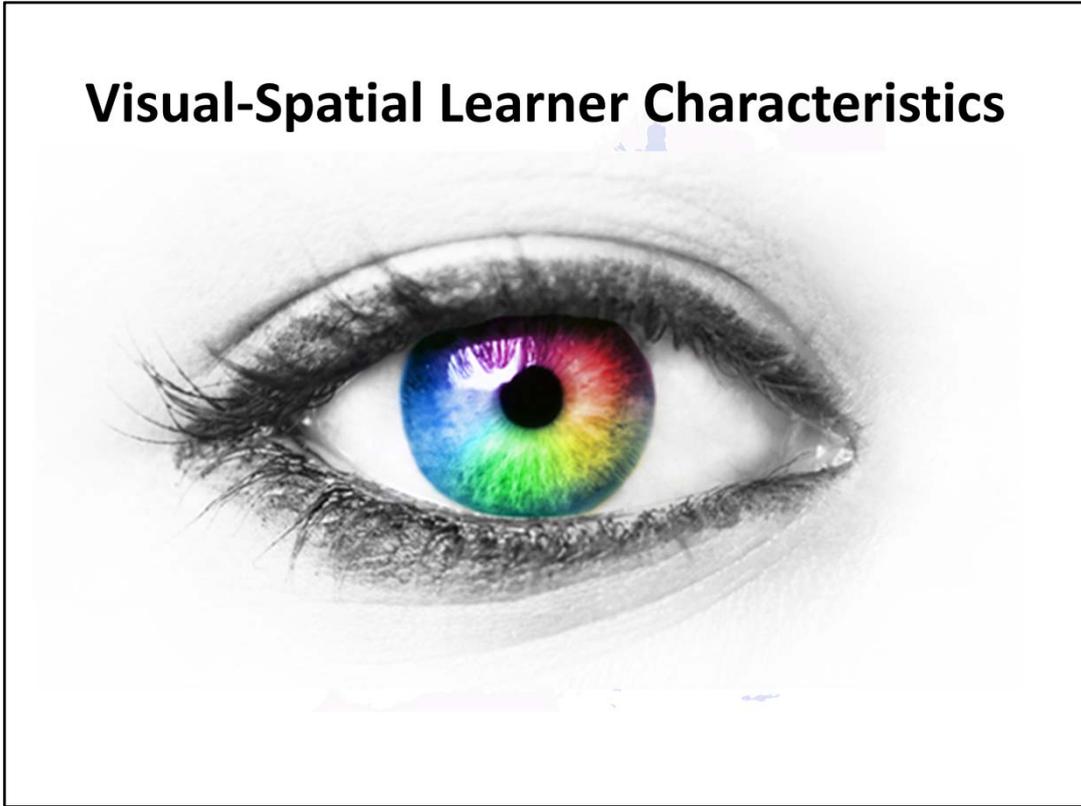
1. Multiple intelligence



Howard Gardner of Harvard has identified seven distinct intelligences. This theory has emerged from recent cognitive research and "documents the extent to which students possess different kinds of minds and therefore learn, remember, perform, and understand in different ways," according to Gardner (1991). According to this SELECTION/SELECTION theory, "we are all able to know the world through language, logical-mathematical analysis, spatial representation, musical thinking, the use of the body to solve problems or to make things, an understanding of other individuals, and an understanding of ourselves. Where individuals differ is in the strength of these intelligences - the so-called profile of intelligences -and in the ways in which such intelligences are invoked and combined to carry out different tasks, solve diverse problems, and progress in various domains."

Gardner says that these differences "challenge an educational system that assumes that everyone can learn the same materials in the same way and that a uniform, universal measure suffices to test student learning. Indeed, as currently constituted, our educational system is heavily biased toward linguistic modes of instruction and assessment and, to a somewhat lesser degree, toward logical-quantitative modes as well." Gardner argues that "a contrasting set of assumptions is more likely to be educationally effective. Students learn in ways that are identifiably distinctive. The broad spectrum of students - and perhaps the society as a whole - would be better served if disciplines could be presented in a numbers of ways and learning could be assessed through a variety of means."

Visual-Spatial Learner Characteristics



Visual-Spatial - think in terms of physical space, as do architects and sailors. Very aware of their environments. They like to draw, do jigsaw puzzles, read maps, daydream. They can be taught through drawings, verbal and physical imagery. Tools include models, graphics, charts, photographs, drawings, 3-D modeling, video, videoconferencing, television, multimedia, texts with pictures/charts/graphs.

Musical Learner Characteristics



Musical - show sensitivity to rhythm and sound. They love music, but they are also sensitive to sounds in their environments. They may study better with music in the background. They can be taught by turning lessons into lyrics, speaking rhythmically, tapping out time. Tools include musical instruments, music, radio, stereo, CD-ROM, multimedia.

Bodily-kinesthetic Learner Characteristics



Bodily-kinesthetic - use the body effectively, like a dancer or a surgeon. Keen sense of body awareness. They like movement, making things, touching. They communicate well through body language and be taught through physical activity, hands-on learning, acting out, role playing. Tools include equipment and real objects.

Interpersonal Learner Characteristics



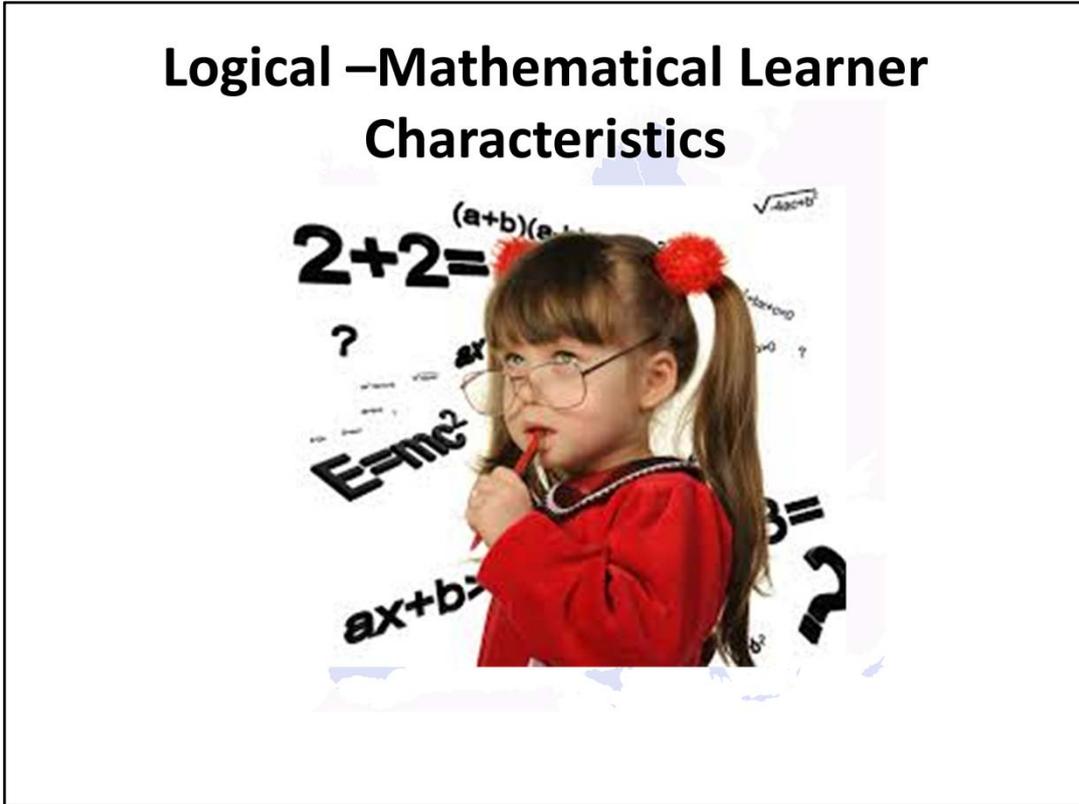
Interpersonal - understanding, interacting with others. These students learn through interaction. They have many friends, empathy for others, street smarts. They can be taught through group activities, seminars, dialogues. Tools include the telephone, audio conferencing, time and attention from the instructor, video conferencing, writing, computer conferencing, E-mail.

Intrapersonal Learner Characteristics



Intrapersonal - understanding one's own interests, goals. These learners tend to shy away from others. They're in tune with their inner feelings; they have wisdom, intuition and motivation, as well as a strong will, confidence and opinions. They can be taught through independent study and introspection. Tools include books, creative materials, diaries, privacy and time. They are the most independent of the learners.

Logical –Mathematical Learner Characteristics

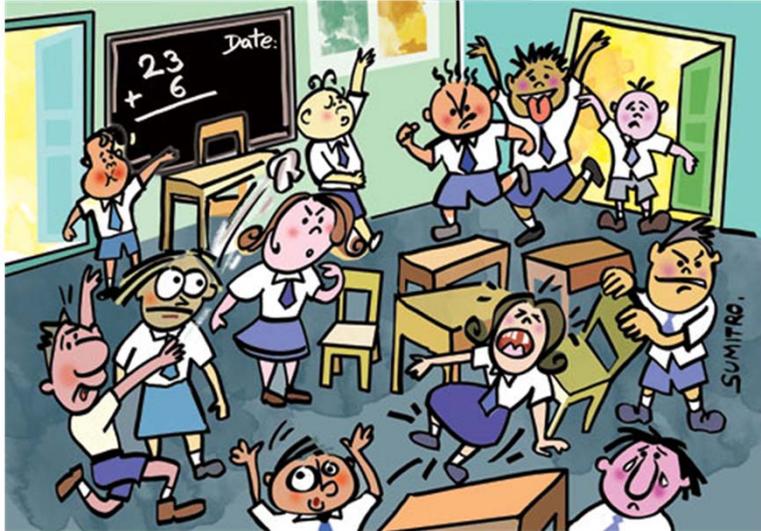


Logical -Mathematical - reasoning, calculating. Think conceptually, abstractly and are able to see and explore patterns and relationships. They like to experiment, solve puzzles, ask cosmic questions. They can be taught through logic games, investigations, mysteries. They need to learn and form concepts before they can deal with details.

Welcome to our classroom



How to respond to different learning styles in the classroom?



Individual activity

- Please refer to your lesson plan from the previous session
- You have 30 mins to include activities for at least 3 of the intelligences
- You will have 2 mins to present your lesson adjustments

The Brain

How many brains do you have - one or two? Actually, this is quite easy to answer...you have only one brain. However, the cerebral hemispheres are divided right down the middle into a right hemisphere and a left hemisphere. Each hemisphere appears to be specialized for some behaviours. The hemispheres communicate with each other through a thick band of 200-250 million nerve fibres called the corpus callosum. (A smaller band of nerve fibres called the anterior commissure also connects parts of the cerebral hemispheres.)

Right Side - Left Side

The right side of the brain controls muscles on the left side of the body and the left side of the brain controls muscles on the right side of the body. Also, in general, sensory information from the left side of the body crosses over to the right side of the brain and information from the right side of the body crosses over to the left side of the brain. Therefore, damage to one side of the brain will affect the opposite side of the body.

In general, the left and right hemispheres of our brain process information in different ways. While we have a natural tendency towards one way of thinking, the two sides of our brain work together in our everyday lives. The right brain of the brain focuses on the visual, and processes information in an intuitive and simultaneous way, looking first at the whole picture then the details. The focus of the left brain is verbal, processing information in an analytical and sequential way, looking first at the pieces then putting them together to get the whole.

Left brain thinking is verbal and analytical. Right brain is non-verbal and intuitive, using pictures rather than words. The best illustration of this is to listen to people give directions. The left brain person will say something like "From here, go west three blocks and turn north on Vine Street. Go three or four miles and then turn east onto Broad Street." The right brain person will sound something like this: "Turn right (pointing right), by the church over there (pointing again). Then you will pass a McDonalds and a Walmart. At the next light, turn right toward the Esso station."

Cerebral Dominance

Each hemisphere of the brain is dominant for other behaviours. For example, it appears that the right brain is dominant for spatial abilities, face recognition, visual imagery and music. The left brain may be more dominant for calculations, math and logical abilities. Of course, these are generalizations and in normal people, the two hemispheres work together, are connected, and share information through the corpus callosum. Much of what we know about the right and left hemispheres comes from studies in people who have had the corpus callosum split - this surgical operation isolates most of the right hemisphere from the left hemisphere. This type of surgery is performed in patients suffering from epilepsy. The corpus callosum is cut to prevent the spread of the "epileptic seizure" from one hemisphere to the other.

Learning techniques

Visual – Spatial learning style. If you have visual learners, use images, pictures, colour and other visual media to help them learn. Incorporate much imagery into your visualizations.

You may find that visualization comes easily to your students. Make sure that the new material is obvious among all the other visual images you are using during your teaching.

- Use colour, layout, and spatial organization in your associations, and use many 'visual words' in your assertions while you are teaching.
- Use mind maps. Use colour and pictures in place of text, wherever possible. If you don't use the computer, make sure you have at least four different colour pens.
- Systems diagrams can help your students visualize the links between parts of a system, for example major engine parts or the principle of sailing in equilibrium. Replace words with pictures, and use colour to highlight major and minor links.
- The visual journey or story technique helps your students to memorize content that isn't easy to 'see.' The visual story approach for memorizing procedures is a good example of this.
- Peg words and events come easily to your students, however they need to spend some time learning at least the first ten peg words. Afterwards, your students' ability to visualize helps them peg content quickly.
- The swish technique for changing behaviours also works well for your students, as it relies on visualization.

Aural learner style. If you have aural learners, use sound, rhyme, and music in your teaching. Focus on using aural content in your association and visualization while teaching new material.

- Use sound recordings to provide a background and help your students get into visualizations. For example, use a recording of an aircraft engine running normally, playing loudly via a headset, to practice flight procedures. Use a recording of the sound of wind and water when visualizing sailing manoeuvres. If you don't have these recordings, consider creating them while next out training.
- When creating mnemonics or acrostics, make the most of rhythm and rhyme, or set them to a jingle or part of a song.
- Use the anchoring technique to recall various states that music invokes in your students. If you know that your students have some particular music or song that makes them want to 'take on the world,' play it back and anchor their emotions and state. When your students need the boost, they can easily recall the state without needing the music.
-

Verbal (Linguistic learner) If you have verbal learners in your classroom, try the techniques that involve speaking and writing. Find ways to incorporate more speaking and writing in techniques. For example use recordings of your content for repetition.

- Make the most of the word-based techniques such as assertions and scripting. Use rhyme and rhythm in your assertions where you can, and be sure to read important ones aloud. Set some key points to a familiar song, jingle or theme.
- Mnemonics are your friends for recalling lists of information. Acronym mnemonics use words, focusing on the first letter of the word to make up another word or memorable sequence. You can also make up phrases using the items you want to memorize. Scripting is also powerful for you. You don't just have to write them down. Record your scripts using a tape or digital audio recorder (such as an MP3 player), and use it later for reviews.
- When you read content aloud, make it dramatic and varied. Instead of using a monotone voice to go over a procedure, turn it into a lively and energetic speech worthy of the theatre. Not only does this help your recall, you get to practice your dramatic presence!

Try working with others and using role-playing to learn verbal exchanges such as negotiations, sales or radio calls.

Bodily-kinaesthetic learning style. If your students use a physical style, use touch, action, movement and hands-on work in the learning activities you create. For visualization, focus on the sensations you would expect in each scenario. For example, if you are visualizing a tack (turn) on a sailboat, focus on physical sensations. Make your students feel the pressure against their hand as they turn the rudder, and the tension lessening on the ropes. Make them feel the wind change to the other side, feel the thud as the sail swaps with the wind, and feel the boat speed up as they start the new leg.

- For assertions and scripting, describe the physical feelings of the actions. For example, a pilot might script as follows: 'I feel the friction as I push the throttle forward to start my take off run. The controls start to feel more responsive as I check the airspeed, oil pressure and temperature. At take off speed, I pull back slightly, and I feel the vibrations of the wheels stop as the plane leaves the ground. After a few moments, I reach down and set the gear selector to up. I feel the satisfying bump as the gear stops fully up.'
- Use physical objects as much as possible. Make your students to physically touch objects as they learn about what they do. Flashcards can help your students memorize information because they can touch and move them around.
- Keep in mind as well that writing and drawing diagrams are physical activities, so don't neglect these techniques while teaching. You may use big sheets of paper and large colour markers and make students draw diagrams as they get more action from the drawing.
- Teach your students to use breathing and relaxation to focus their state while they learn and perform. Teach them how to stay focus on staying calm, centred, relaxed and aware.
- Use role-playing in your teaching, either singularly or with someone else, to make students practice skills and behaviours. Find ways to make your students to act out or simulate what they are learning.

Logical – Mathematical Learning style. If you have logical learners, aim to help them understand the reasons behind their content and skills. Don't just rote learn. Understanding more detail behind the compulsory content helps them memorize and learn the material that they need to know. Explore the links between various systems, and note them down in order to help these students.

- Teach your students to create and use lists by extracting key points from the material while they are studying. They may also want to use statistics and other analysis to help them identify areas they may want to concentrate on.
- Pay attention to your students' physical state, for example their breathing and stress level. It's possible that they isolate their own body from your rational thought. Help them understand that they are just as much a part of the 'system' as any equipment they may be using.
- In your scripting though, highlight logical thoughts and behaviours. Teach your students the ability to pick up systems and procedures easily, and that they can detect when they need to change a set procedure.
- Make your students to use 'systems thinking' to help them understand the links between various parts of a system. An important point here is that system thinking helps them understand the bigger picture. Often the whole is greater than the sum of the parts. For example, they may understand the individual aircraft systems and flight surfaces, but they may not have a view of how all those systems support flight in equilibrium. Systems diagrams can help them gain that understanding.
- Your students may sometimes overanalyse certain parts of their learning or training. This can lead to analysis paralysis. They may be busy, but not moving towards their goal. If you find that they are overanalysing which task to start with, or you are over-planning their course maps, stop

them and help them refocus on activities that move them forward. If your students often focus from analysis paralysis, write 'Do It Now' in big letters on some signs or post-it notes. Place them in strategic places around the classroom.

Interpersonal (social) learning style. If your students are social learners, aim to make them work with others as much as possible. Try to organize the study with groups of students. Consider forming different study groups with students at a similar level. They don't have to be from the same school or class. If you like, introduce them to some of the techniques from this book.

- Role-playing is a technique that works well with others, whether it's one on one or with a group of people. You can use it creatively in your teaching. For example, in aviation training, role-play the aerodrome area. Have people walking around in 'circuits' making the right radio calls with the tower co-ordinating everyone. Another example might be to role-play with one person being the instructor and the other being the student.
- Work on some of your students' associations and visualizations with other people. Make sure they understand the principles of what you are doing though, otherwise you may get some interesting responses! Others often have different perspectives and creative styles, and so the group may come up with more varied and imaginative associations compared to the ones you might create yourself.
- Encourage your students to share their reviews, review checklists and 'perfect performance' scripts with those in their group as well. By listening to how others solve their issues, your students may get further ideas on how to solve their own issues. Try sharing the work of the students by creating a 'perfect performance' script. Each student writes the script for the areas they want to work on the most, and then the group brings all the scripts together.
- Mind maps and systems diagrams are great to work on in class. Have one person be the appointed drawer, while the rest of the class works through material and suggests ideas. The group may have varied views on how to represent some ideas, however this is a positive part of learning in groups. If someone can't agree on something, just take a copy of what the group has worked on and add that person's thoughts. Often there is no right answer for everyone, so teach your students to agree to disagree!
- Working in groups to practice behaviours or procedures helps your students to understand how to deal with variations. Seeing the mistakes or errors that others make can help learners avoid them later. Whether it's via role-playing, a simulator or other technique doesn't matter too much. Be imaginative. Two chairs in the middle of a classroom to simulate an aircraft cockpit can be just as good as computer simulation and the real activity.
- Lastly, if you are organising your classes with a group work, it may help to have everyone do the [learning styles](#) questionnaire. This may help everyone understand why each person has different viewpoints. It can also help with assigning activities to people. Individuals may volunteer for activities based on either the styles they currently have, or the styles they want to learn. Remember the classroom is a risk-free environment. It's often safer to experiment, try out new techniques and make mistakes in the classroom than in the real activity.

Intrapersonal Learning style. You have students who prefer to learn alone using self-study. They may dislike learning in groups. Teach your students to not be afraid to ask questions like 'What's in this for me?' 'Why does this matter?', 'How can I use this idea?' Be aware of their inner thoughts and feeling towards various topics. This is because these inner thoughts have more of an impact on their motivation and ability to learn than they do in the other styles. Here are a few ideas to help this along:

- Spend more time on the 'Target' step of the Memletic Approach. Teach your students to set their goals, objectives and plans. Define ultra-clear visualizations or scripts of what life is like once they've achieved their goals. Understand their reasons for undertaking each objective, and

ensure that you are happy with your learning goals.

- Teach your students to align their goals and objectives with personal beliefs and values. If there is misalignment, they may run into issues with motivation or confidence. It's not always obvious what the underlying cause is. If you suspect a misalignment, try some of the techniques like 'five whys' and 'seventy by seven' to flush these issues out. Scripting and assertions also help highlight issues.
- Create a personal interest in the topics. An example for pilots might be to learn more about other aviators, both current and past. Why do others find aviation interesting? What is in it for them? What keeps them motivated? Why do they work in the field?
- Keep in mind that your students may also want to look at the people behind your books or material. What was their motivation to create it? Why do you think they organized the material in the way they did? Can you help your students ask them?
- Teach your students to keep a log or journal. Your students may want to keep one separate from their normal journal or training log. They may include some extra information about their thoughts and feelings. Outline their challenges, ideas on how to overcome them, and what worked. Advise them to write down what works well and doesn't work well for them.
- Assertions are important for your students of this group. They drive themselves by the way they see themselves internally. Assertions are a good way to ensure their internal self-image matches their learning objectives. This also applies to the scripting techniques, so teach them to include their internal thinking and feelings in their scripts.
- Modelling is a powerful technique for your students. Don't just make them model behaviours and appearance. Try to teach them to get 'inside their heads' and model the thought patterns and feelings they believe others have in various circumstances. Remind them they don't have to find a single perfect model, they can create a model that combines several people.
- Be creative with role-playing. You don't always need to organize groups to a role-play. Make your students create plenty of people using visualization! For example, you can make them visualize their instructor beside them or a colleague and they practicing a procedure or skill. An advantage of this form of role-playing is that your students can control the behaviour of their visualizations!

Source:

learning-styles-online.com



Name _____

Organisation & Country _____

Please would you complete this questionnaire to enable us to assess the quality of the training and to improve the draft resources.

For the question with a scale, please **put a cross X on the number that suits you. Remember that 1 is low and 6 is high.**

I am...			
Male	<input type="checkbox"/>	Female	<input type="checkbox"/>

My role is...	
Trainee Teacher	<input type="checkbox"/>
Newly Qualified Teacher	<input type="checkbox"/>
Fully Qualified Teacher	<input type="checkbox"/>
Other – please specify	<input type="checkbox"/>

	Comments
Were you satisfied with the organisation and pre-event information/communication?	
Were you satisfied with the relevance of the workshop in relation to your professional activity?	
Were your expectations of the workshop addressed?	
Were you actively participating in the workshop?	

Part 1 – Lesson planning

Following the workshop, how do you assess your understanding in the following areas?

	1	2	3	4	5	6	Comments
I understand the difference between Planning and Backwards planning	<input type="checkbox"/>						
I understand what makes a good lesson plan	<input type="checkbox"/>						
I feel able to plan backwards	<input type="checkbox"/>						
I feel able to set big goal and lesson goals using Blooms Taxonomy	<input type="checkbox"/>						
I feel able to create objective-driven lesson plans	<input type="checkbox"/>						

Any comments about the resources provided to support your enquiry?



Part 2 – Differentiation

Following the workshop, how do you assess your understanding in the following areas?

	1	2	3	4	5	6	Comments
I can identify different types of learning styles	<input type="checkbox"/>						
I understand the importance of dealing with different learning styles in the classroom	<input type="checkbox"/>						
I feel more confident in using different techniques to address different learning styles	<input type="checkbox"/>						
I understand the importance of multiple intelligences and the way they affect learning	<input type="checkbox"/>						

Any comments about the resources or activities used in this module?

.....

Any other comment about the workshop you wish to add:

.....

Many thanks for taking time to complete this form.