

BLOOM'S TAXONOMY

THINKING SKILLS

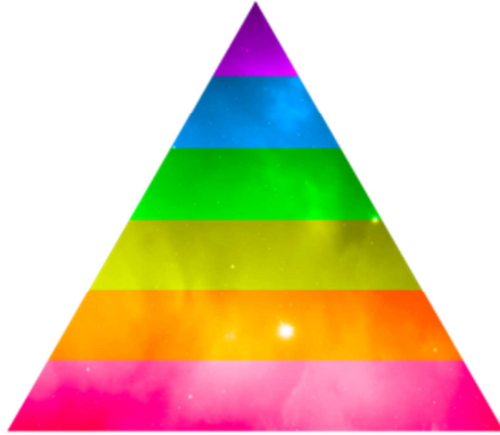
Tutors of this course are advised to read through the slides and notes and familiarise themselves with the presentation set-up. Tutors should also go through the lesson plan (by following the notes in the slides) and may need to research the subject area. Suggested examples are provided, but tutors can give their own examples or ask/ elicit examples from participants.

History: Devised by Benjamin Bloom in the mid-20th century *Bloom's Taxonomy of Educational Goals* originally culminated in 'Evaluation', but was revised at the turn of the century to include 'Create'. The idea is to start at the bottom of the pyramid and work through the lower order of cognitive domains mastering each level before progressing on to the higher orders. As each level is mastered and activities become more complex the student is ready to tackle the tasks in the next level.

What will we cover: This presentation and the information in the 'Fact Pack' has been designed to provide scaffolding, chunking and vocabulary that CLIL teachers can adopt and insert directly into their lessons and planning. They can adapt questions and structures for each class changing/inserting single words/phrases. The Bloom model is best implemented over the course of a term or year, progressing through and mastering each level in turn. However, it can also be used in its entirety in the course of a single lesson.

Use in differentiation: Students who struggle in lessons can be restricted to tasks from the lower orders. Fast finishers and strong students can accelerate to the higher order tasks.

Bloom's Model

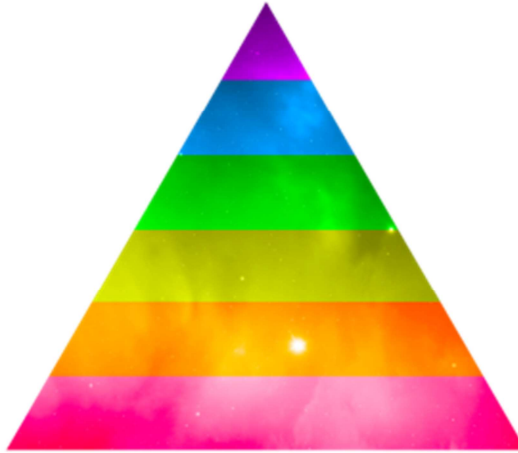


Most people who work in education are aware of Bloom's Taxonomy of Thinking Skills.

1. Show this slide and ask participants what they know about Bloom's Taxonomy.
They may prefer to work in pairs or a trio to brainstorm before feeding back to the group.
2. Feedback/discuss what they already know.
DO NOT discuss how they apply this in class (if they already do) as we will discuss this later.

Bloom's Model

Applying
Evaluating
Remembering
Analysing
Creating
Understanding



Here are the headings which are applied to Bloom's model. THEY ARE NOT IN THE CORRECT ORDER.

1. Ask participants to put them in order.

If participants know the model well they may do this quickly together.

If not, allow them to work together and guide them by asking them to start at the bottom with more simple skills, getting more difficult as it moves up.

Bloom's Model

Higher Order
Thinking Skills



Lower Order
Thinking Skills



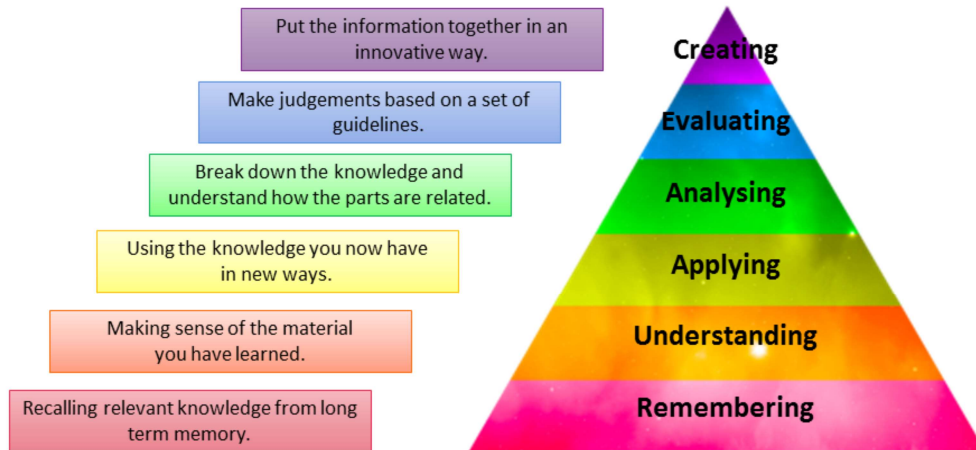
Here are the solutions.

1. If this is new for participants, ask them to discuss why the model is organised in this way.

The model starts at the bottom with the lower order thinking skills (LOTS) and rises to the top with higher order thinking skills (HOTS).

Students must be able to master the LOTS before they are able to move on to the HOTS.

Bloom's Model



Now go through a short explanation of what each level of Bloom's model implies.

At elementary level a basic example would be that students first learn the alphabet by heart, without engaging in its meaning.

They then understand that these are individual sounds which students then begin to recognise.

They start to see them in words and begin to 'sound out' to put words together.

They are able to make corrections.


By the end they are able to write their own words/phrases/sentences.

Applying Bloom's Taxonomy

Applying Bloom's Taxonomy in Your Classroom

<p>1. REMEMBER</p> <p>Students are expected to retrieve information from memory, but aren't expected to change it in any way.</p> <p>In-Class Instruction Students memorize a definition of an associative property.</p> <p>Assessment Students are given a multiple choice question and asked to recognize the answer, or are asked to recall the answer and fill in a blank.</p>	<p>2. UNDERSTAND</p> <p>Students are building new connections in their minds.</p> <p>In-Class Instruction Students identify the key characteristics needed for an organism to survive in a particular ecosystem.</p> <p>Assessment When given the description of a fictitious animal, students explain whether the animal will survive in a given ecosystem.</p>
<p>3. APPLY</p> <p>Certain procedures or steps are expected to be followed in order to answer new problems.</p> <p>In-Class Instruction Students learn about Newton's three laws.</p> <p>Assessment Students are asked to examine the information about a car crash and determine which if any of Newton's laws apply to the situation.</p>	<p>4. ANALYZE</p> <p>Students utilize lower-level thinking skills to identify key elements and examine each part.</p> <p>In-Class Instruction Students read a student lab report and identify the evidence to support the finding.</p> <p>Assessment Read the results of the scientific study and find supporting statements for each conclusion or finding.</p>
<p>5. EVALUATE</p> <p>Informational sources are examined to assess their quality and decisions are made based on identified criteria.</p> <p>In-Class Instruction Students read about the physical effects of exercise on humans.</p> <p>Assessment Read an article about a famous athlete. Identify one piece of information in the article that fails to support the author's case that hard work was the main reason for the athlete's exceptional athletic skills.</p>	<p>6. CREATE <i>new!</i></p> <p>Learners organize information in a new or different way.</p> <p>In-Class Instruction Students research the role of economics in business.</p> <p>Assessment Students brainstorm reasons for a problem and generate suggested solutions, and design and implement a campaign designed to solve the identified problem.</p>

Adapted from:
Assessing Critical Thinking in Middle and High Schools: Meeting the Common Core and
Assessing Critical Thinking in Elementary Schools: Meeting the Common Core




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Assessment
Students are given a multiple choice question and asked to recognize the answer, or are asked to recall the answer and fill in a blank.

2. UNDERSTAND
Students are building new connections in their minds.
In-Class Instruction
Students identify the key characteristics needed for an organism to survive in a particular ecosystem.
Assessment
When given the description of a fictitious animal, students explain whether the animal will survive in a given ecosystem.

3. APPLY
Certain procedures or steps are expected to be followed in order to answer new problems.
In-Class Instruction
Students learn about Newton's three laws.
Assessment
Students are asked to examine the information about a car crash and determine which if any of Newton's laws apply to the situation.

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In-Class Instruction
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In-Class Instruction
Students read about the physical effects of exercise on humans.
Assessment
Read an article about a famous athlete. Identify one piece of information in the article that fails to support the author's case that hard work was the main reason for the athlete's exceptional athletic skills.

6. CREATE
Learners organize information in a new or different way.
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Students research the role of economics in business.
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U.S. DEPARTMENT OF EDUCATION

2. UNDERSTAND



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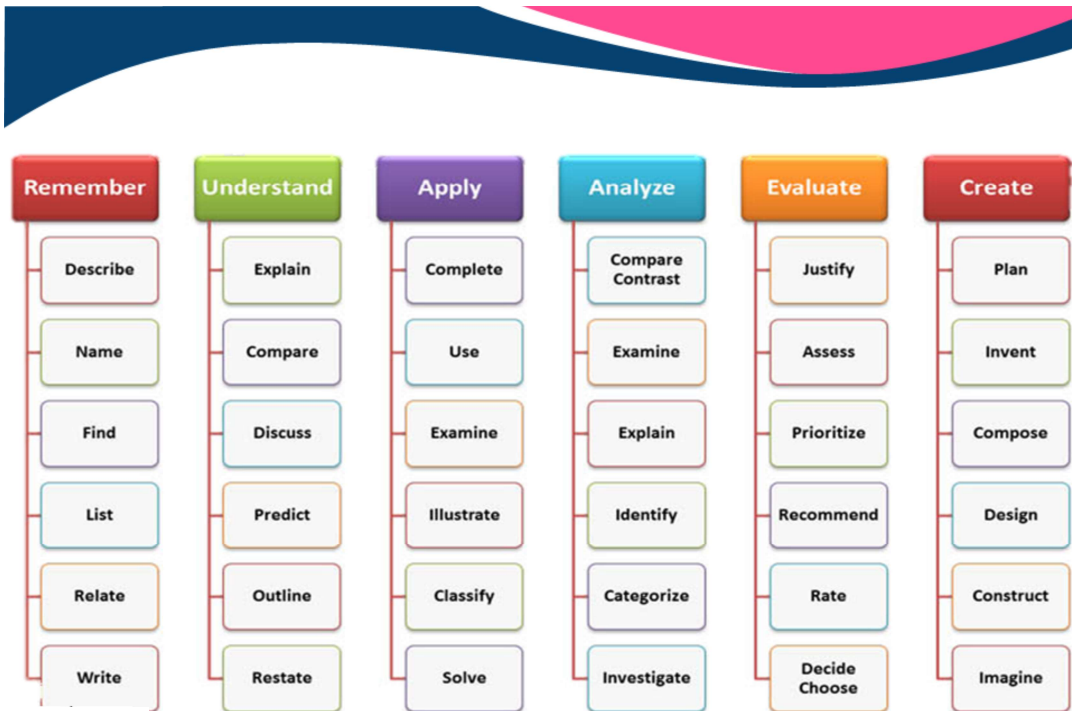
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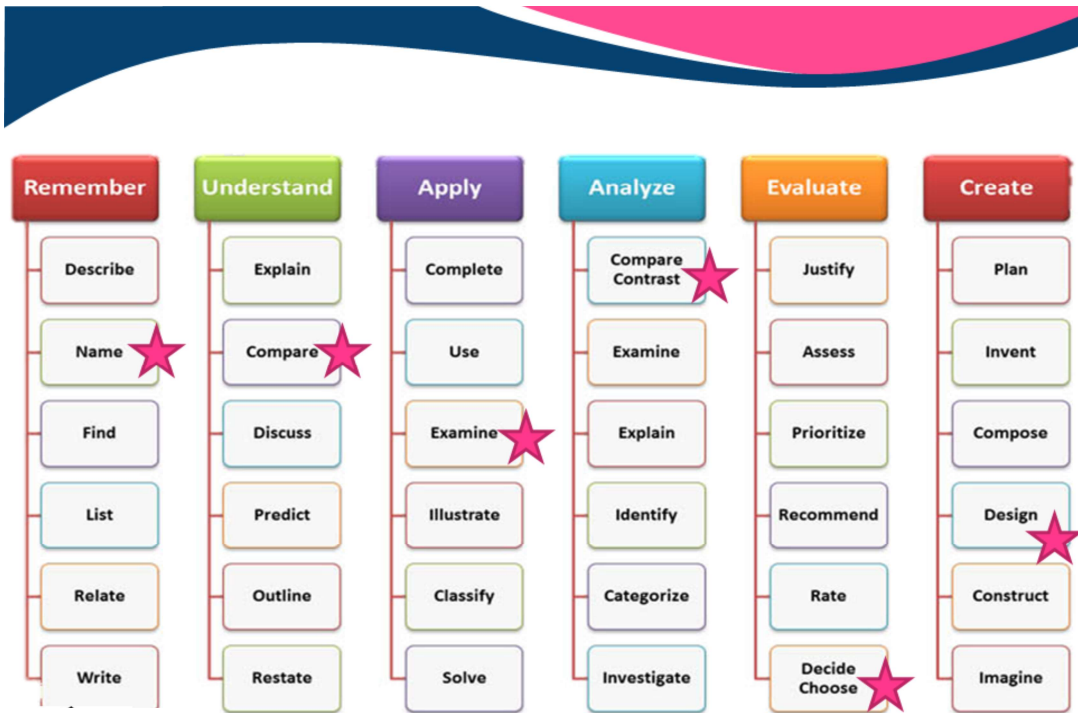
Now it's the turn of the participants.

1. Ask them to choose a subject area in groups of 2 or 3 (or you could ask them to choose a subject area by pulling a piece of paper out of a hat).
2. Ask them to put together a simple plan based on Bloom's Taxonomy.
3. Show them this slide to help them with ideas for wording questions. They can choose one word from each of the categories above to devise a task

FOR EXAMPLE: History

1. As they are working monitor and make suggestions offering language support as necessary.

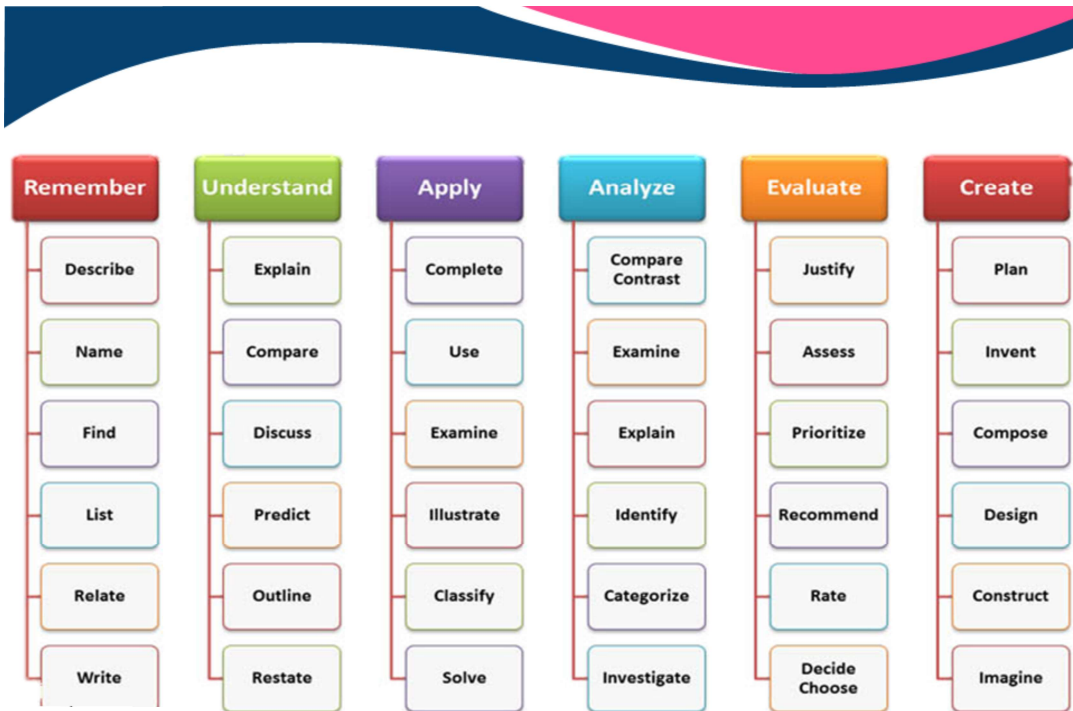
Depending on how quickly participants go through the session up to this point you could ask them to feedback their information by splitting the groups and sharing, rather than doing a whole class feedback.



FOR EXAMPLE: History

1. NAME – As many of the queens of England as you can
2. COMPARE – Two from the list that you have made (e.g. age, length of reign, family background, etc...)
3. EXAMINE – The differences in England during their reigns
4. COMPARE/CONTRAST – Their successes
5. DECIDE/CHOOSE – Which was the best ruler and JUSTIFY your choice
6. DESIGN – A poster/leaflet promoting this queen as your choice for next ruler of England

NB: You can move the stars around if you would like to give a different example.



Leave this image on the board and allow participants to work.

1. As they are working monitor and make suggestions. Offer English language support as necessary.

Depending on how quickly participants go through the session up to this point you could ask them to feedback their information by splitting the groups and sharing, rather than doing a whole class feedback.



Get Personal

- Using Bloom helps with CLIL because it gives us command words which we can adapt to any lesson.
- Now use Bloom's Taxonomy of Thinking Skills applying it to your subject area.
- Think about how you could use it for different groups of different levels.
- Use the question prompts and word wheels in the 'Bloom Fact Pack' to help you.

Distribute the 'Bloom Fact Pack' to participants, asking them to look at section 1, and give them time to brainstorm ways in which they can apply this model to their own teaching areas.

The items in the 'Bloom Fact Pack' have been chosen as they provide scaffolding, chunking and language support for CLIL teachers to enable them to phrase questions and stimulate ideas for classwork and projects in English. However, offering more specific English language support will be fundamental.

The amount of time you allow should depend on how well the participants already know Bloom's Taxonomy of Thinking Skills and how quickly you have been through the session up to this point. However, an absolute minimum of 20 minutes should be allowed. 30-45 minutes would be preferable.

Participants should work individually or, where possible, they may choose to work in subject areas (i.e. all the history teachers working together).

At the end they could share their ideas with teachers from other subject areas as they might be able to share suggestions and improvements.



In Conclusion

- Bloom's Taxonomy process can be used in a single lesson or over a whole year period.
- It enables students and teachers to recognise a path of progression.
- Students should feel confident with the LOTS before they attempt the HOTS!
- Bloom's model is great for differentiation using LOTS items for weaker students and giving tasks based on the HOTS for stronger students and fast finishers.

Go through the points above in order.

Allow participants to discuss/ask questions and encourage peer response.

Show participants that in section 2 of the 'Bloom's Fact Pack' there are more tools which they can use to help include Bloom in CLIL lesson planning.

They are provided with lots of vocabulary, chunking and scaffolding in order to ask questions and design tasks based on Bloom's model.



Any comments?

You can brainstorm any comments/feedback here.



THANK YOU FOR LISTENING

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LANGUAGE POINT
International Education Group

