

DEVELOPING THINKING QUESTIONS USING YouTube Videos



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OVERVIEW

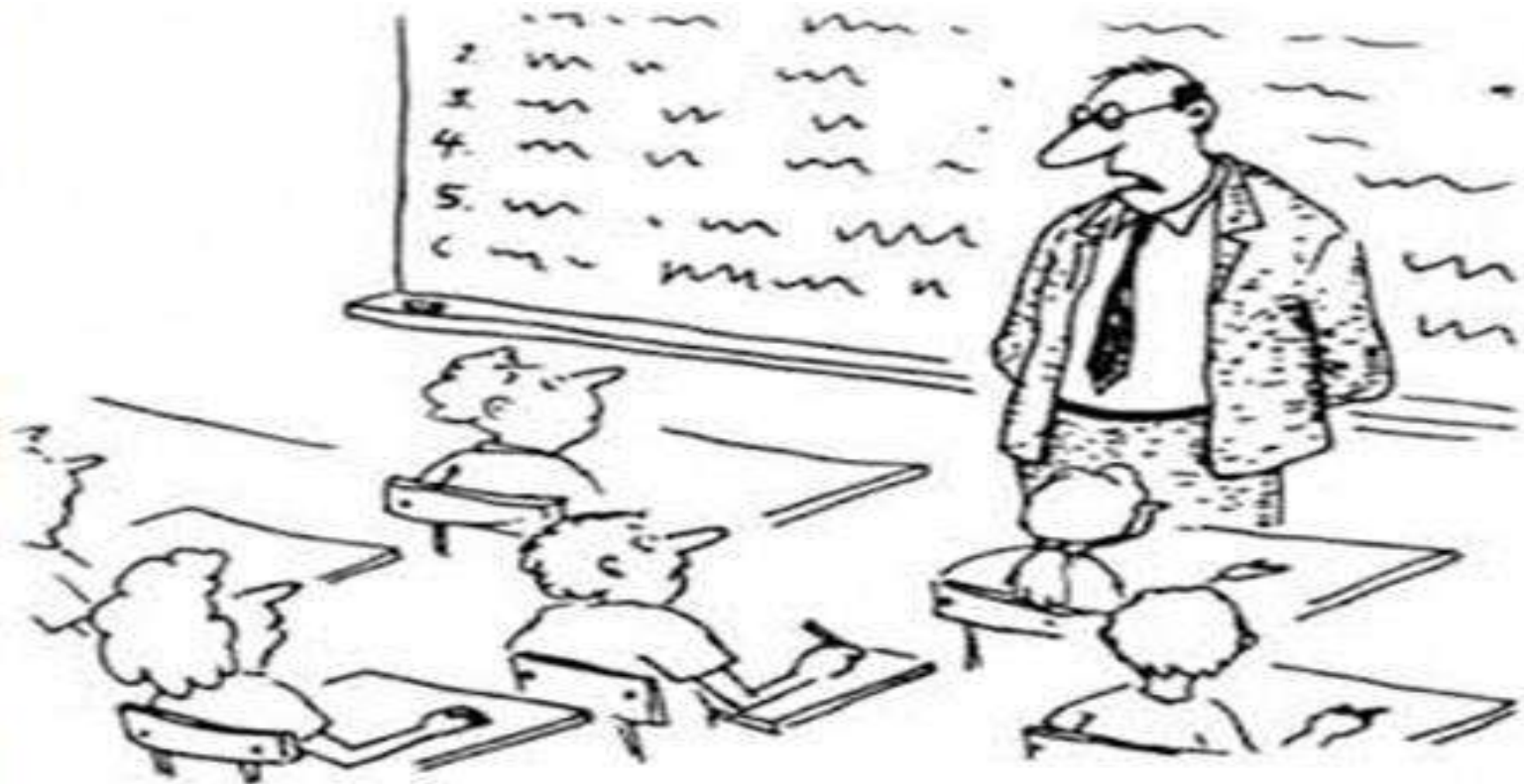
1. Role of questions in teaching/learning
2. Definitions of 'higher-order thinking skills'
3. Their value for language teaching and learning
4. Examples of their use-using a Youtube video
5. Concluding remarks, bibliography.



Do you know that.....

- research reveals teachers ask hundreds of questions every day
- 80 percent of all the questions teachers ask tend to be factual, literal, or knowledge-based questions
- students tend to read and think based on the kinds of questions they anticipate receiving from the teacher





“I expect you all to be independent, innovative, critical thinkers who will do exactly as I say!”

Do you agree that.....

“The way we work and live today is much different than in the recent past.”

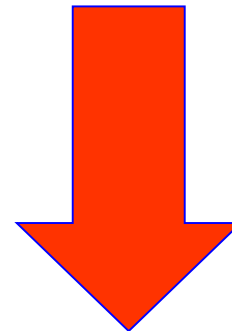
“Our knowledge base is increasing at a high speed.”

“This millennium is marked by enormous changes: new discoveries, new inventions, new technologies, new jobs.”

“Many of our students will be employed in positions we can only imagine.”



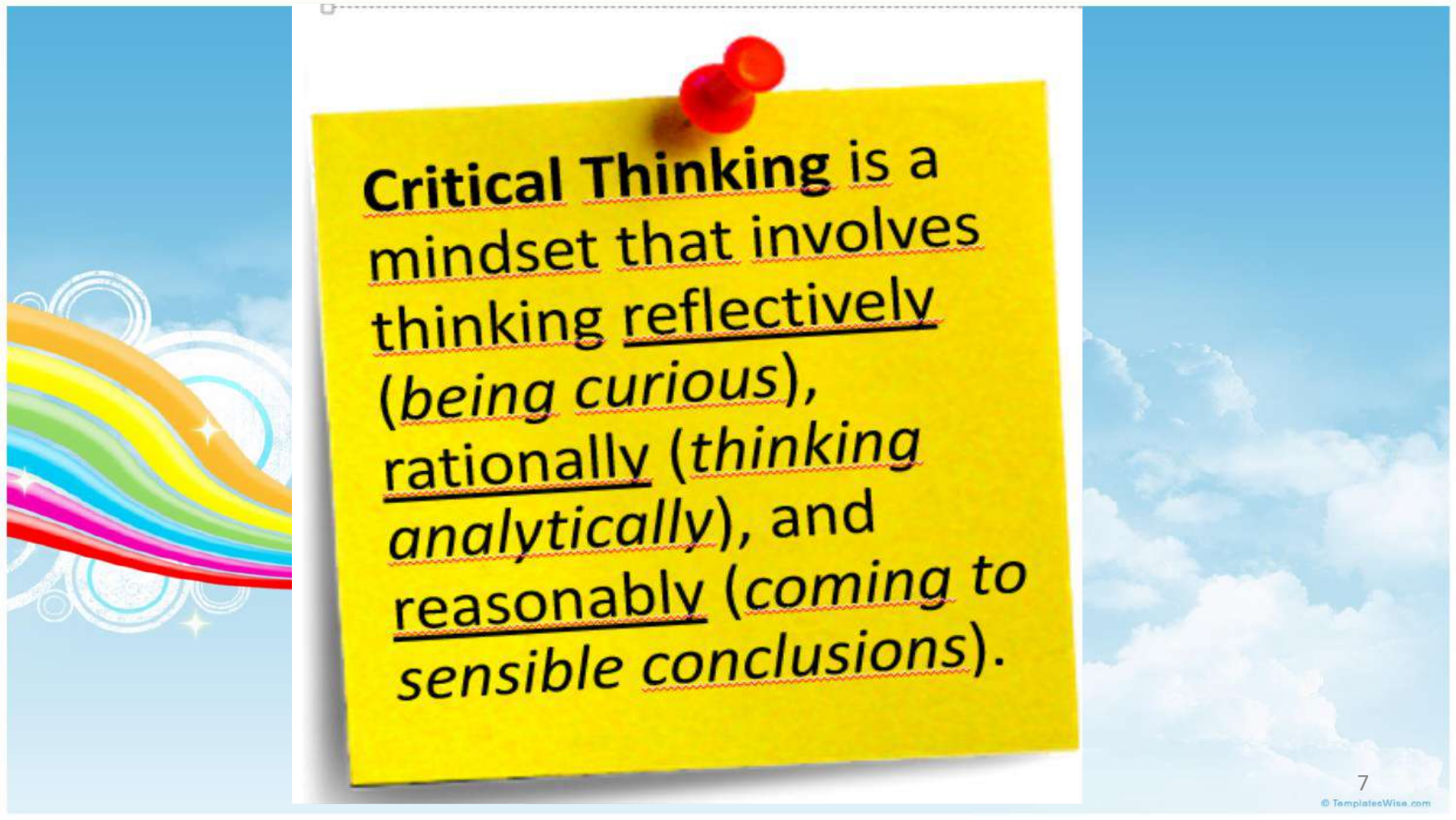
We live in an information explosion



information
becomes
obsolete

How do we best prepare our students for this uncertain
future?

Developing our students' higher thinking skills.



Critical Thinking is a mindset that involves thinking reflectively (*being curious*), rationally (*thinking analytically*), and reasonably (*coming to sensible conclusions*).

SONG



Who are these people? What do they do?

**Sheldon
Cooper**
theoretical
physicist



**Leonard
Hofstadter**
experimental
physicist

Penny
waitress and aspiring actress

- <https://www.youtube.com/watch?v=mlhHTdDqoBc>



1. What did Penny give Sheldon?
2. What happened after Sheldon got his present?



3. What is this piece of video about?
4. Can you summarize what happened between Penny and Sheldon?

KNOWLEDGE

1. **What did Penny give Sheldon?**
2. **What happened after Sheldon got his present?**
 - How many...?
 - What is...?
 - Who was it that...?
 - Can you name ...?
 - Find the definition of...
 - Describe what happened after...

Questions are asked solely to test whether a student has gained specific information from the lesson.



Comprehension

1. What is this piece of video about?
2. Can you summarize what happened between Penny and Sheldon?
 - Can you clarify...?
 - Can you illustrate...?
 - Can you explain why...?
 - Can you write in your own words?
 - How would you explain...?
 - Can you write a brief outline...?
 - What is the main idea.....?

Understanding the information, and able to interpret the facts.



Higher-order thinking skills

Higher-order thinking skills:

- mental effort
- a wide variety of processes:
- ... comparing, prioritizing, categorizing, defining.
- ... problem-solving, creating, criticizing,

Lower-order thinking skills:

- little mental effort
- ...mainly recalling or identifying facts or forms



APPLICATION

- How would you deal with Sheldon's stomach problem?
- List the sequence of events in the video.
- Draw 3 pictures showing the beginning, middle and ending of the story.

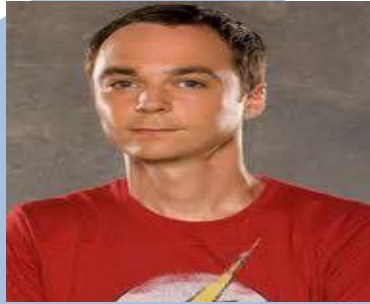
Students have to actually apply, or use, the knowledge they have learned. They might be asked to **solve a problem** with the information they have gained.

ANALYSIS

- **Complete the chart, differences and similarities among....**
- **Inferences**
- **Facts vs opinions**
- **Conclusions**
- What were some of the motives behind..?
- What was the turning point?

- Students will be required to go beyond knowledge and application and actually see patterns that they can use to analyze a problem.

Compare / Contrast Organizer



SYNTHESIS

- **What changes would Sheldon have to make to the way he looks to become your friend?**
- **What would Penny have to learn to become like the rest?**
- **Predict how Penny's and Leonard's relationship will turn.**
- **What would happen if Penny became interested in Sheldon? Role play**

Refers to the ability to put parts together to form a new whole. Learning outcomes at this level stress creative behaviors with a major emphasis on the formulation of new patterns or structures.

EVALUATION

- **How would you justify the way Sheldon is?**
- **Do you agree with the kinds of gifts Penny gave Sheldon and Leonard? Why?**
- **What didn't you like about the story? Why?**
- **Debate**

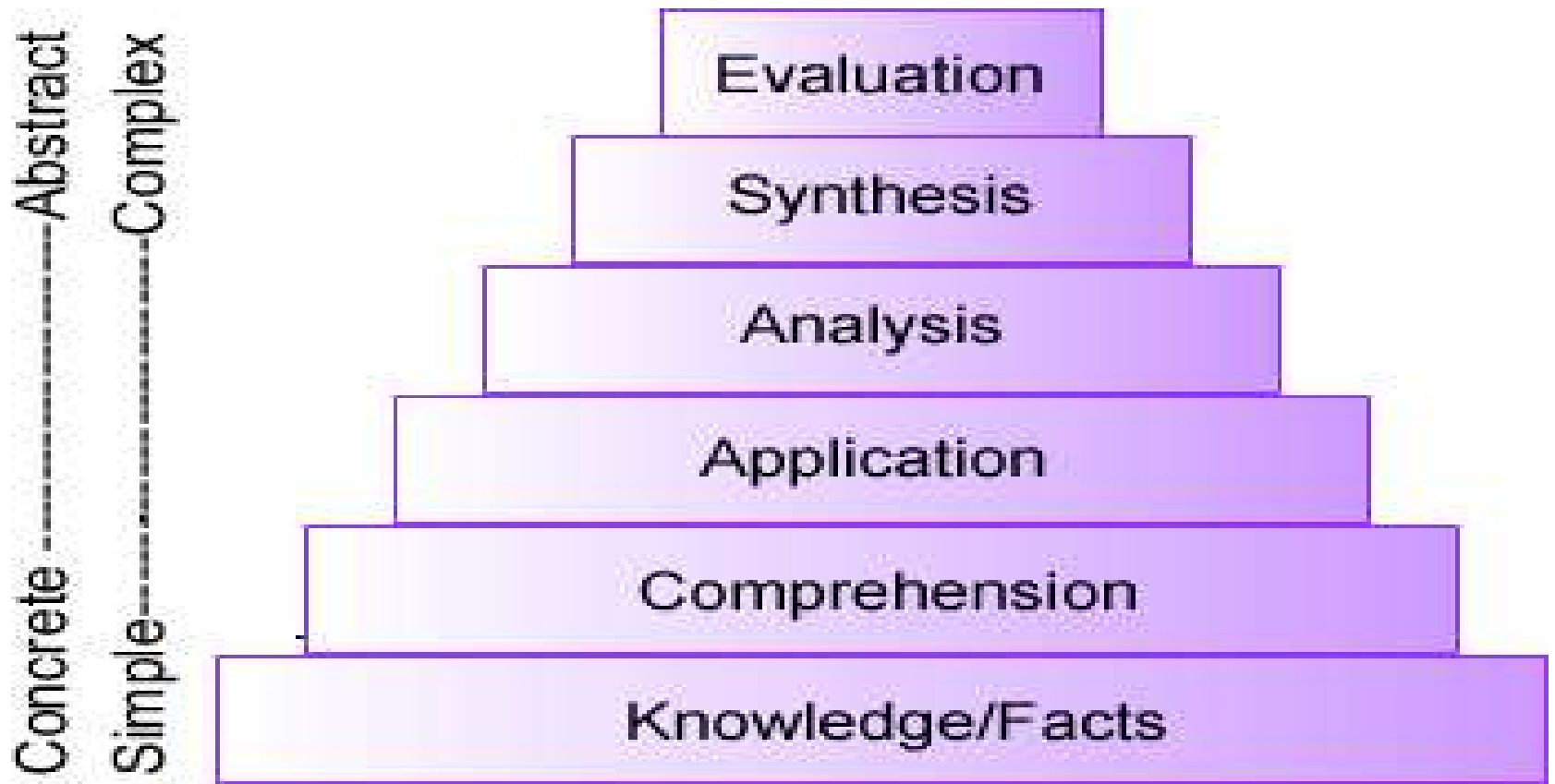
- Students are expected to assess information and come to a conclusion such as its value or the bias behind it.

*Staying within
the information
given*

- **Knowledge**
- **Comprehension**

*Staying beyond
the information
given*

- **Application**
- **Analysis**
- **Synthesis**
- **Evaluation**



- Minimize the use of **LOTS** (simple ‘recall-based’) exercises: closed-ended matching, gapfills,
- Use tasks that get learners to use **HOTS**: think critically or creatively
 - Ask them to connect, contrast, classify, criticize, prioritize, identify causes / results, invent, problem-solve, innovate...

"Once you have learned how to ask relevant and appropriate questions, you have learned how to learn and no one can keep you from learning whatever you want or need to know."

(Neil Postman and Charles Weingartner)

What is it like?
How does it work?
How is it changing?
How is it connected to
other things?
What are the points of view?
Why is it like it is?
What is our responsibility?
How do we know?

Reasons for using higher-order thinking in language teaching

- ❑ Language learning
- ❑ Intellectual development
- ❑ Educational values
 - ❑ Interest



Language learning

- New language items are better imprinted on our memory if we use *deep processing*.
- This means relating the item meaningfully to its meanings and to other items previously learned.
- Deeper processing involves higher-order thinking skills e.g. connecting, contrasting, creating etc.



Intellectual development

The learning of facts and concepts.

+

The ability to relate these to each other, criticize, draw conclusions, create new ideas etc.



Educational values

- The ability and willingness to think for oneself.
- As distinct from the unthinking acceptance of facts, values, directives etc. laid down by an authority.



Interest

- Activities based on simple recall or knowledge of isolated forms and meanings tend to be boring.
- Activities based on higher-order thinking skills are likely to be more interesting.



Some concluding comments 1

- There is no strict dividing line between lower- and higher-order thinking skills. It's a continuum.

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Some concluding comments 2

- The use of higher order thinking skills in language teaching materials contribute to good learning, and are important..

However:

- Knowledge of facts and lower-order thinking skills are basic and essential.

Some concluding comments 3

- It is easier to implement higher-order thinking skills in more advanced materials in the upper grades.

However:

- It is just as important, and perfectly feasible, to implement them in beginner and intermediate materials, or in courses for elementary and middle school.



<https://www.youtube.com/watch?v=c-es6fU-8A>

Bloom on the Internet

- ***Taxonomy of Technology Integration***

<http://education.ed.pacificu.edu/aacu/workshop/reconcept2B.html>

This site compiled by the Berglund Center for Internet Studies at Pacific University, makes a valiant effort towards linking ICT (information and communication technologies) to learning via Bloom's Revised Taxonomy of Educational Objectives (Anderson, et. al., 2001). The taxonomy presented on this site is designed to represent the varying cognitive processes that can be facilitated by the integration of ICT into the teaching and learning process.

- ***Critical and Creative Thinking - Bloom's Taxonomy***

<http://eduscapes.com/tap/topic69.htm>

Part of Eduscapes.com, this site includes a definitive overview of critical and creative thinking as well as how Bloom's domains of learning can be reflected in technology-rich projects. Many other links to Internet resources to support Bloom's Taxonomy, as well as research and papers on Thinking Skills. Well worth a look.

- <http://www.tedi.uq.edu.au/Assess/Assessment/bloomtax.html>

- <http://www.acps.k12.va.us/hammond/readstrat/BloomsTaxonomy2.html>

- <http://www.teachers.ash.org.au/researchskills/dalton.htm>

cont.....

- <http://www.officeport.com/edu/blooms.htm>
- <http://www.quia.com/fc/90134.html>
- <http://www.utexas.edu/student/utlc/handouts/1414.html> Model questions and keywords
- <http://schools.sd68.bc.ca/webquests/blooms.htm>
- <http://www.coun.uvic.ca/learn/program/hndouts/bloom.html>
- http://caribou.cc.trincoll.edu/depts_educ/Resources/Bloom.htm
- http://www.kent.wednet.edu/KSD/MA/resources/blooms/teachers_blooms.html
- <http://www.hcc.hawaii.edu/intranet/committees/FacDevCom/guidebk/teachtip/questype.htm>
- <http://www.nexus.edu.au/teachstud/gat/painter.htm> Questioning Techniques that includes reference to Bloom's Taxonomy.
- <http://scs.une.edu.au/TalentEd/EdSupport/Snugglepot.htm>

Language-learning task design: Using higher-order thinking skills by Penny Ur - TESOL, 2012

- Bloom, B. S. (ed.). *Taxonomy of Educational Objectives. Vol. 1: Cognitive Domain*. New York: McKay, 1956.
- Thinking and language learning by Alan Waters
<https://sites.google.com/site/ourownjournal/Home/thinking-and-language-learning>