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# Thinking Skills in ICT

— Kemahiran Berfikir dalam ICT —  
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# WHAT ARE THINKING SKILLS?

- Enable us to integrate each new experience into the schema that we are constructing of "how things are".
- Better thinking will help us to learn more from our experience and to make better use of our intelligence.
- It is the central aim of education to improve the quality of thinking



Thinking Skills are the mental processes we use to do things like:

- **solve problems**
- **make decisions**
- **ask questions**
- **make plans**
- **organise information**
- **create new ideas**



# Elements in Critical Thinking

# 6

Critical thinking has **6** elements:

- Interpretation - Ability to understand info & communicate with others about it
- Analysis - Ability to connect pieces of info together
- Inference - Ability to understand & recognize what elements needed
- Evaluation - Ability to evaluate the credibility of statements
- Explanation - Ability to not only restate info but add clarity & own perspectives
- Self-regulation - Awareness of our own thinking abilities



# WHAT IS ICT?

- Stands for **Information and Communication Technologies**
- Provide access through communications
- Focus on communication services ; internet, smartphones, and wireless network
- As well as the various services and applications associated with them, such as video conferencing and distance learning
- Often spoken of in a particular context, such as ICTs in education, health care, or libraries



# ADVANTAGES OF ICT

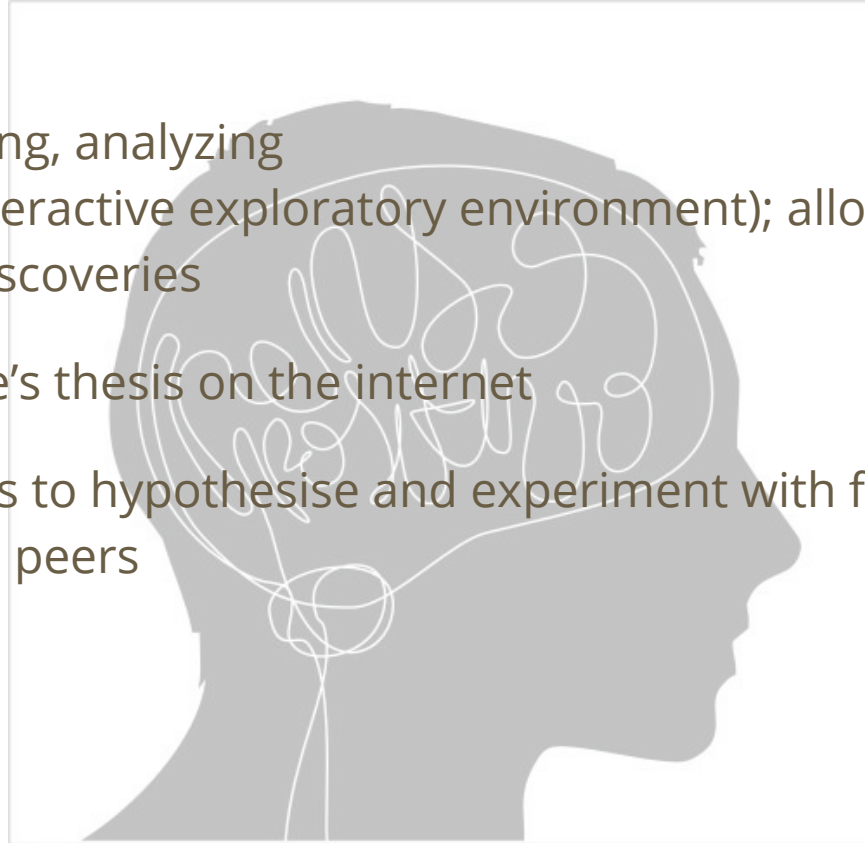


## In Education

- helps the students to do their assignments
- improving student learning and better teaching methods
- images can easily be used in teaching and improving the retentive memory of students
- teachers can easily explain complex instructions and ensure students' comprehension.
- teachers are able to create interactive classes and make the lessons more enjoyable, which could improve student attendance and concentration.

# ROLE OF ICT IN DEVELOPING THINKING SKILLS

- Decisions making, analyzing
- Microworld (interactive exploratory environment); allow to direct own learning and discoveries  
eg. reading one's thesis on the internet
- enable students to hypothesise and experiment with feedbacks in the discussion with peers



# HOW THINKING SKILLS AND ICT ARE RELATED ?

- Thinking skills & ICT in education simply means **practising thinking skills by implementing ICT into all area of curriculum**; National Curriculum Thinking Skills (Information processing, reasoning, enquiry, creative thinking and evaluation))
- Thinking Skills in ICT also helps in developing the students in the 5 key competencies through their use of e-learning.
  - **thinking**
  - **using language, symbols, and texts**
  - **managing self**
  - **relating to others**
  - **participating and contributing**

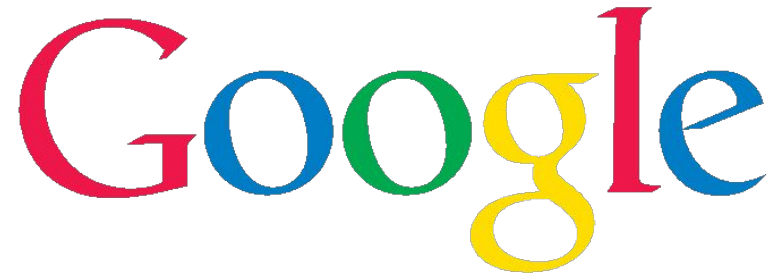




# WHY DOES IT BRING HARM TO OUR THINKING SKILLS ?

- Lacked of knowledge
- Dependencies on ICT
- Declining in critical thinking and analysis





- <http://www.slideshare.net/aisyapunyer/thinking-skills-and-ict>
- [http://www.brainboxx.co.uk/a3\\_aspects/pages/ThinkingSkills.htm](http://www.brainboxx.co.uk/a3_aspects/pages/ThinkingSkills.htm)
- <http://www.rasmussen.edu/student-life/blogs/main/critical-thinking-skills-you-need-to-master-now/>
- <http://webarchive.nationalarchives.gov.uk/20130401151715/http://www.education.gov.uk/publications/eOrderingDownload/QCA-04-1374.pdf>
- <http://newsroom.ucla.edu/releases/is-technology-producing-a-decline-79127>
- <http://nzcurriculum.tki.org.nz/The-New-Zealand-Curriculum/Key-competencies>

# Q and A

1. In your opinion, how do you think ICT helps on our thinking skills?
2. Do you prefer ICT or reading as your main resource? Why?
3. How to overcome the problem caused by dependencies of ICT?
4. Why does ICT brings harm to our thinking skills?
- 5.

