



ES2660 COMMUNICATING IN THE INFORMATION AGE

SMART TALKING STUDENTS ENABLING IDEAS TO TAKE FLIGHT

TI: INTRODUCTION:-

“THE ANSWER IS 42”

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TO DO, TODAY

- Ask questions
- Communicate your expectations of the course
- Talk and think about critical thinking and communication
- Navigate through the ES2660 course site

THE ANSWER TO LIFE, THE UNIVERSE AND EVERYTHING



- <https://www.youtube.com/watch?v=aboZctrHfK8>

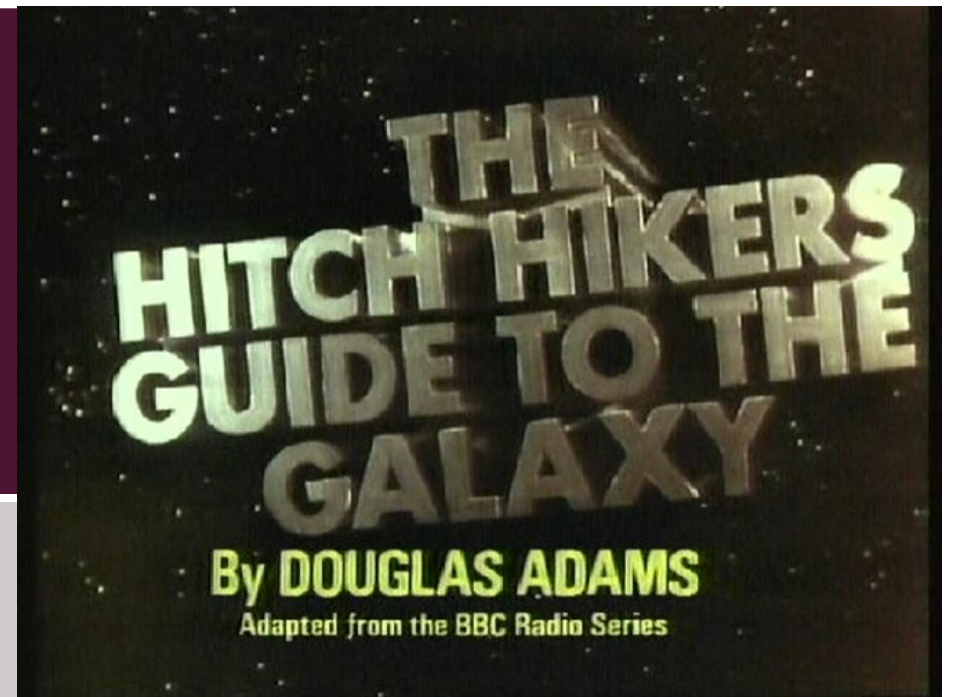


THE ANSWER IS 42



"Everything in life, the world and the universe is known except the question."

- Douglas Adams



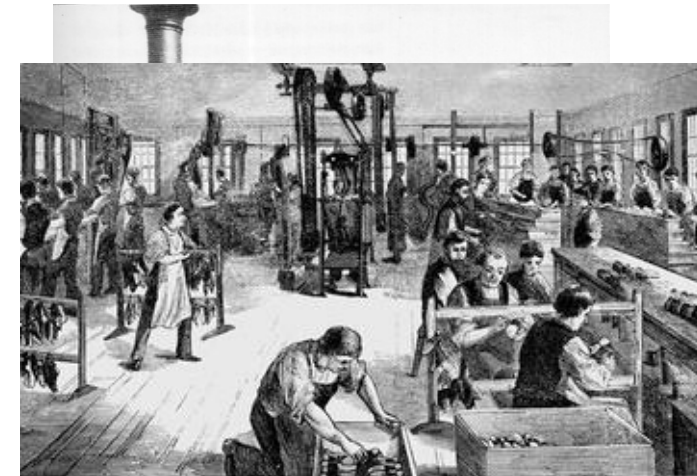
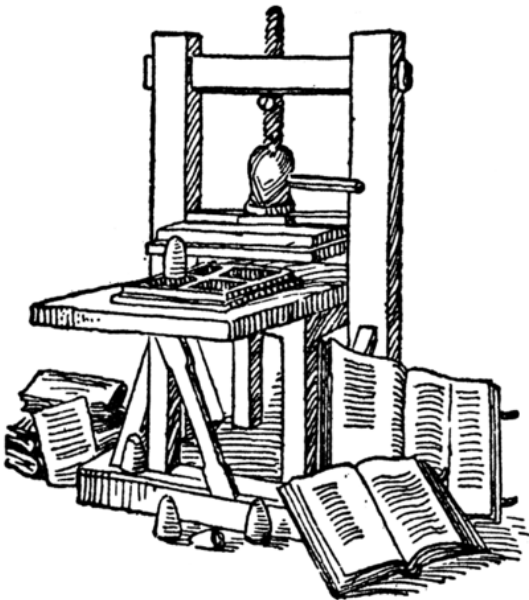
WHAT DO SOME QUESTIONS LEAD TO?



- In history, the answers to some questions, have significant consequences, why?

Clue: What changed when the printing press, fireworks and machine manufacturing were invented?

- In IT, questions are really important, because of the answers that may be found. Why?

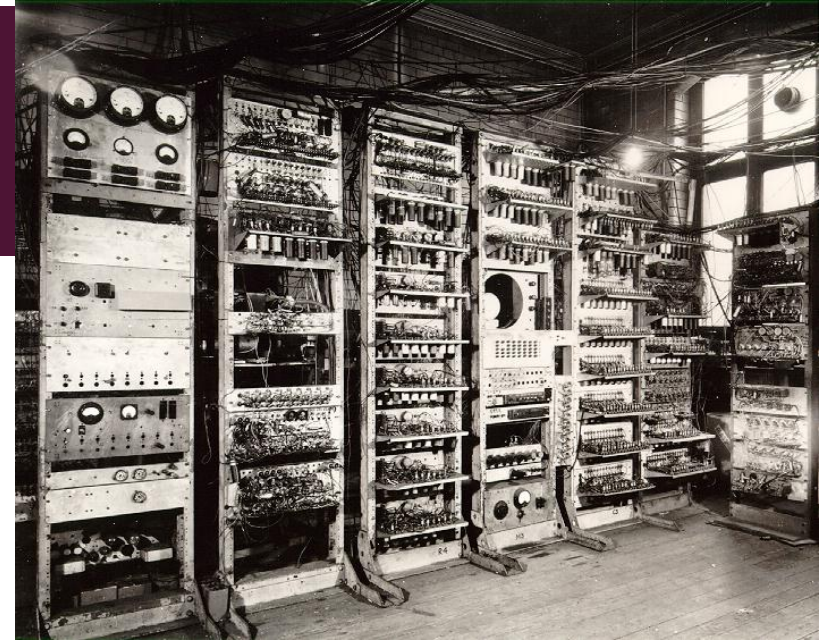


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WHAT QUESTIONS TO ASK?



- How do you know what to ask?
- What questions might lie behind each of the innovations shown?



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IF YOU ONLY LEARN ONE THING ON THIS COURSE,

- Learn how to ask questions!
- Ask “live” questions.

<https://www.bbc.com/news/technology-45043406>

Deepmind co-founder Shane Legg gives London teen top AI tips

By Jane Wakefield
Technology reporter

🕒 2 August 2018

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ES2660 TRAILER



- What forms do “communication” come in, in the information age?
- What sorts of “information” are communicated?
- What helps to sort out useful, relevant, exciting information from the rest?
- What are the main elements of “communication”?

ARTICULATING & EVALUATING THOUGHT

- Accurately
- Cogently
- Creatively
- Imaginatively
- Persuasively
- Precisely
- Sensitively
- Confidently
- Consistently
- Immediately
- Systematically
- Habitually

5 W AND I H & ES2660

- Why
- What
- When
- Where
- Who
- How

Using this rubric, formulate questions you may have about the course.



Note: 5 Ws and I H is an example of a **rubric**. What is the function of a rubric?

WHY DO WE EVEN HAVE TO LEARN FORMALLY?

- Systematic – always comprehensive, reliable, habitual - skills
- Academic conversation conventions – knowledge
- Academic argumentative conventions – ability

WHY DO WE HAVE TO LEARN CT? STEM TRADITION

- As a STEM major, you need to be able to communicate the way you think, in these ways:

E.g. Feisel-Schmitz Technical Taxonomy of Intended Learning Outcomes,

Judge:	To be able to critically evaluate multiple solutions and select an optimum solution
Solve:	Characterize, analyze, and synthesize to model a system (provide appropriate assumptions)
Explain:	Be able to state the outcome/concept in their own words
Compute:	Follow rules and procedures (substitute quantities correctly into equations and arrive at a correct result, Plug & Chug)
Define:	State the definition of the concept or is able to describe in a qualitative or quantitative manner

WHAT WILL YOU BE LEARNING?

	Communicating thought
Systems	<ul style="list-style-type: none">• Ennis Taxonomy of Critical Thinking Skills and Dispositions• Barret's Taxonomy of Comprehension levels
Conventions	<ul style="list-style-type: none">• Academic conversations – oral and written• Academic argumentative conventions – oral and written
Mental tools	<ul style="list-style-type: none">• Metacognitive terms to express analysis

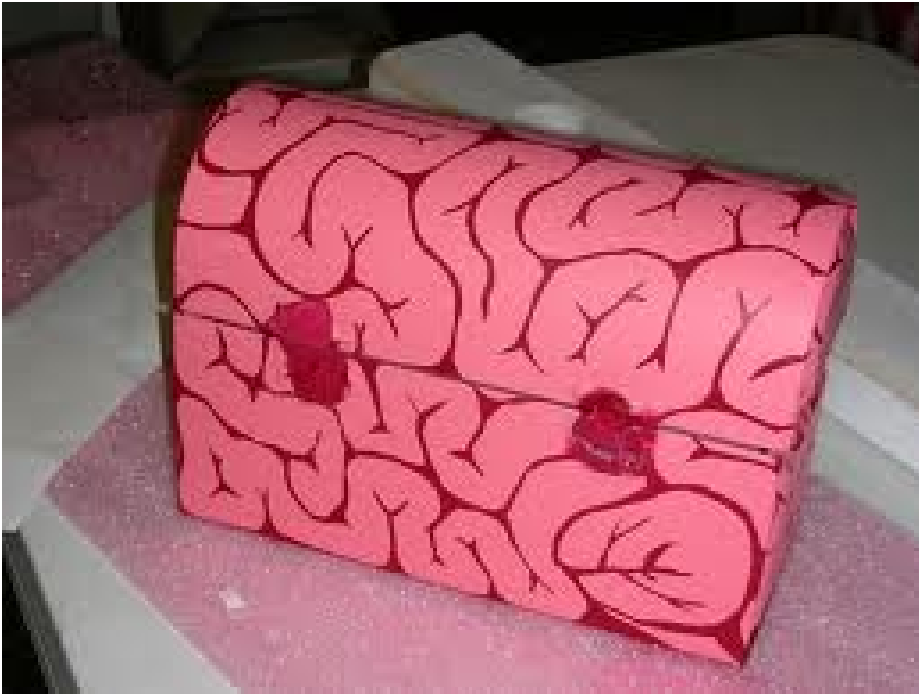
HOW WILL YOU BE LEARNING?

Scaffolded approach:

- Mini lectures
- Tutorial exercises
- Formative assessments on target skills + feedback
- Summative assessment on target skills + feedback

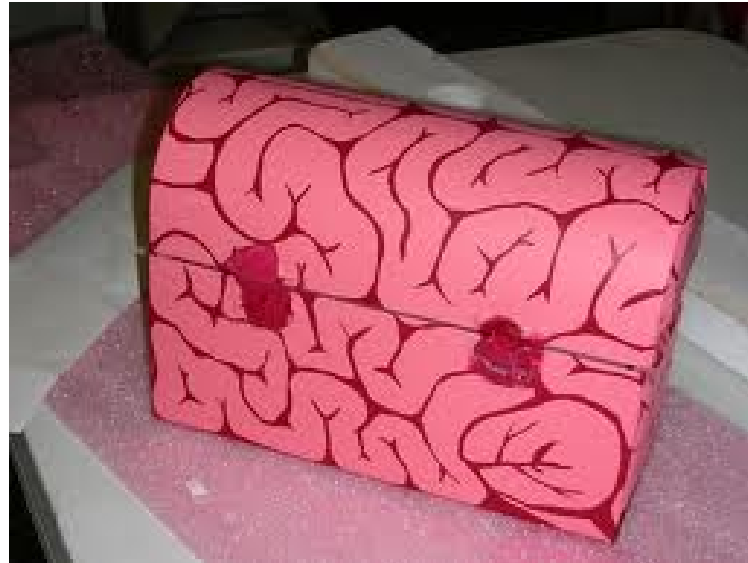


HOW DO WE TALK ABOUT THINKING?



MENTAL TOOL BOX – BASIC TOOLS

- Alternative views
- Anecdotal evidence
- Authorial voice
- Authorial bias
- Evidence
- Factual evidence
- Generalizations
- Straw man
- Non sequitur
- Stereotypes



(There is a glossary on LumiNUS that explains these and other terms used in the course – remember that you can use the glossary for reference)

WHO WILL YOU BE LEARNING WITH?

- By **yourself** – independently, e.g. readings, impromptu talks, mastering CT and communication skills
- **Tutor-led** – mini lectures, Socratic questioning
- **Group** work – in class exercises, project
- **Team** work – working with others, but bringing in your own work – Panel discussion, Oxford Tutorial

ROAD SIGNS IN YOUR TUTORIAL NOTES

ICONS TO HELP YOU NAVIGATE THE COURSE HANDOUTS



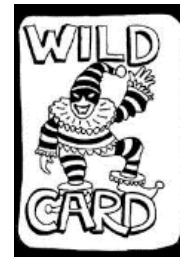
Whole class
discussion



Teams/Groups
discussion



Take/make notes

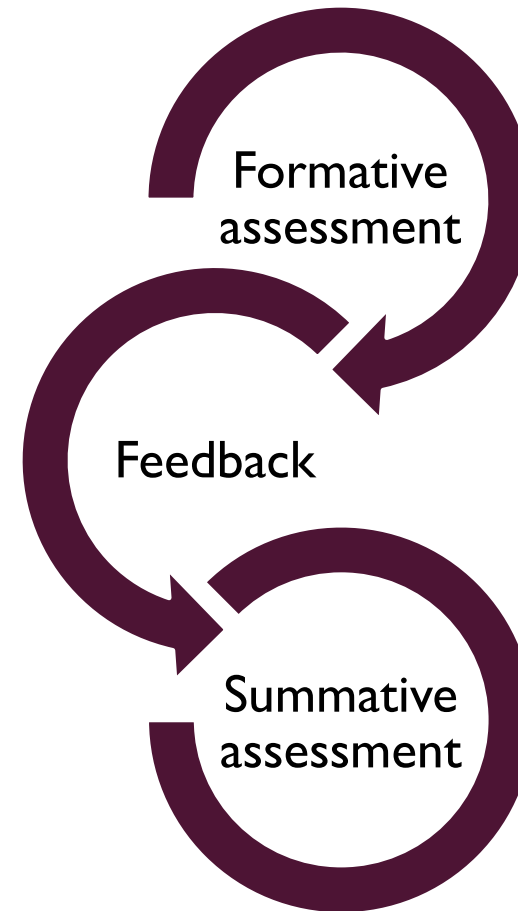


Impromptu talk topic
(speak for 1 min)

HOW IS ASSESSMENT DONE?

ES2660 Assessment Philosophy

- We teach what we test
- We test what we teach
- You try what you learn (formative assessment, you get evaluative comments) before you try a test (summative assessment, you get evaluative comments and a mark that counts towards the CA)



WHEN WILL YOU NEED TO SHOW YOU HAVE LEARNED ANYTHING?

Formative – feedback, no marks

1. The Welcome – CT skills + comprehension levels + language skills
2. Mr Brown “Criminal Minds: Beyond Borders” (2017) – academic argumentative writing
3. Fishbowl Discussion
4. Short talks with decreasing preparation time

Summative feedback + marks (CA 100%)

1. **Story-retelling** (Gp) 5%
2. (a) **Critical reflection** and application of CT framework (Gp) 15%
(b) **Oral Presentation** (Gp) 10%
3. (a) **Oxford Tutorial discussion** (Ind) 10%
(b) **Oxford Tutorial essay** (Ind) 30%
4. **Wild cards** (Ind) 15%
5. **Class participation** (Ind) 15%
– evidence of the CT habit of mind in action

ES2660 – CLASS PARTICIPATION (IN BODY, MIND AND SPIRIT)

In Body 10%	In Mind 40%	In Spirit 50%	
		The Welcome	Panel Discussion
Throughout the course: <ul style="list-style-type: none"> • Comes to class • Comes on time • Does online exercises and quizzes 	Throughout the course: <ul style="list-style-type: none"> • Participates in class • Shows interest by asking or answering questions • Picks up on points raised in class and elaborates, clarifies, supports, brings related materials – appositely and without hogging • Treats others or the POVs of others with kindness and respect 	<ul style="list-style-type: none"> • Hands in homework • Shows a degree of engagement e.g. not just answering the questions, but also showing some CT value add e.g. own view supported by examples from video, or cross reference to other sources of information, showing some understanding of the ramifications or implications of paradigm shifts in thinking on social issues 	<ul style="list-style-type: none"> • Shows a degree of engagement e.g. not just answering the questions, but also showing some CT value add • Contributes to the discussion as evidenced by content knowledge • Shows effort in applying academic conversation skills

THINK AND SAY



- What questions can you think of as you watch this dance, https://www.youtube.com/watch?v=95307LC_lc4
- You have three minutes to list out all your questions.
- **Homework** – Wild card practice – answers to your questions, nicely packaged in one minute.



Joe and Katya Argentine Tango to 'Human' by Rag n' Bone Man - Strictly Come Dancing 2017

SYSTEM & SPEED; CT SKILLS & DISPOSITIONS

- Did you cover all that there could have been said about the dance?
- Could you explain how the cantilevered movement worked?
- Were you curious about what an Argentinian tango was?
- What is remarkable about this dancing partnership?
- How much of the 2-minute video did you manage to deconstruct in the planning time?
- How ready are you to speak at the drop of a hat?
- How fast can you think?
- What's the connection between thinking and speaking?

SO WHAT? SO HOW?

- So what's the big deal about thinking on your feet?
- So how is the ability to evaluate some information quickly helpful?
- So what's the real point of that exercise in general? In particular to an IT professional in the making?

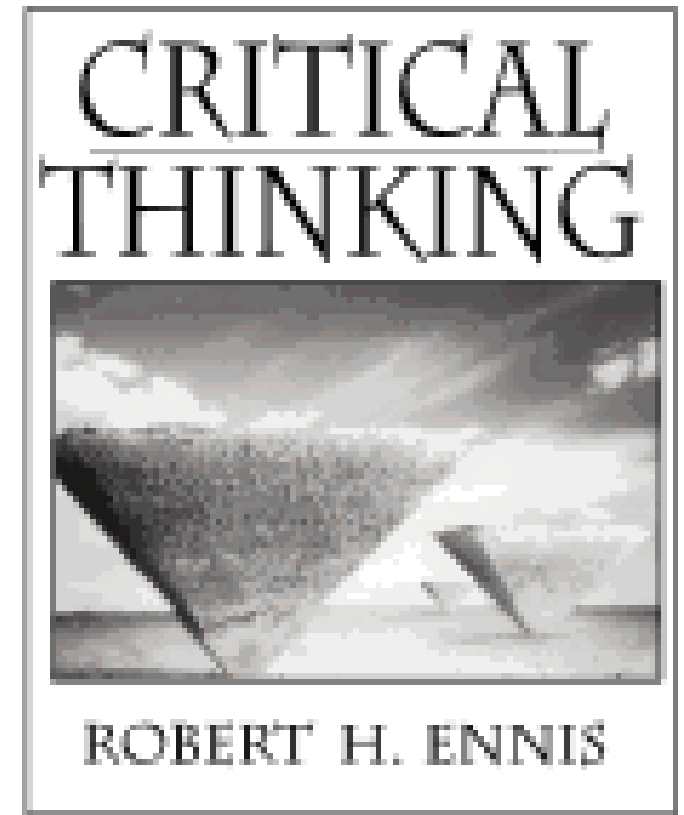
HOW DOES ENNIS FIT INTO ES2660?

- Ennis' taxonomy of critical thinking skills and dispositions is our underlying framework.

- Ennis' says:

“Critical thinking is reasonable, reflective thinking that is focused on deciding what to **believe or **do**.”**

- The mind of a critical thinker uses a system to assess information and to shape a systematic response.



ENNIS' TAXONOMY OF CT SKILLS & DISPOSITIONS

- A taxonomy is a method of categorization.
- Not only a **categorization of thinking tools** needed decisions or actions, but
- also emphasizes that such tools must be **habits of the mind**
- Helps you to **communicate your ideas** in such a way that these CT skills are clearly evident
- **Articulation** = accurate word use + fluency + substance in content + cogency + CT quality

KEY LEARNING POINTS FROM ENNIS



- A **critical thinking framework** allows you to develop a **systematic** way of assessing information so that decisions and actions are reasonable and ethical.
- There are some “**tools**” that you can use to assess and evaluate bits of information, such as identifying assumptions, non-sequiturs etc.
- There are some **strategies** that you can use to assess and evaluate information more holistically, such as asking questions about the author’s message and intentions and your own responses and doing so systematically.

NAVIGATING LUMINUS FOR ES2660

Course materials on LUMINUS

- Overview, **Schedule** and Assessments (structure and rubrics)
- Tutorials pdf
- Lecture slides pdf
- Readings
- Extra materials e.g. glossary, optional readings, additional practice exercises
- Class workbins – for all submissions
- Weekly workflow

HOMEWORK

- Read Ennis (2011).

QUESTIONS

- Any questions?