

APSS – Online classes

Activity 1

Description

MATERIALS	Workbook. Module 2. Listening 5 (video) Watching a vídeo, taking notes and summarizing. History of the Internet
LEARNING OBJECTIVES	Listening strategies for semantic markers and note-taking
METHOD AND OBJECTIVES	Answer Key / self- correcting + submission
ASSESMENT	Self- assessment and teacher's assessment

Taking notes

THE HISTORY OF THE INTERNET

Task 1. Reflect about the following.

In your opinion, what are the elements of discourse organization that can help you to get notes most effectively in a narrative presentation?

In my opinion, one of the best ways to take notes is to write in a structured way (for instance, with bullets or lists). This way, it is so clear what the main theme is and the sub-topics that make it up.

I also think it's very important for the speaker to use a lot of connectors in order to have structured speech. If the speech is not structured, it is very difficult to structure the notes you can take.

In addition to this, I think it is also so important when taking notes to write down the key words of the speech. This will make it much easier to understand the message the narrator wants to give.

Task 2. Now, watch the video and take notes to get the most important facts and dates.

(<https://www.youtube.com/watch?v=9hIQjrMHTv4>)

Take your notes....

- The internet - 2009
- Things to do over the internet
 - Send emails
 - Make calls
 - Discuss topics we take an interest in
 - Bank (now virtual)
- What we now take for granted today (2009) → vague idea 50 years ago
- Go to the start: 1957 (to understand where we are now)
 - Before 1957:
 - 1 computer → 1 task at the time (**batch processing** → ineffective)
 - Computers were getting bigger → had to be stored in special cooled rooms → the developers couldn't work directly on the computers anymore (specialists had to be called in to connect them)
 - Programming (at that time)
 - → a lot of manual work
 - → indirect connection → a lot of bugs → wasting time and fraying developers' nerves
 - Year 1957: Big change
 - **Remote connection** had to be installed → developers can work directly on computers
 - **Time-sharing** idea: *share the processing power of one computer with multiple users*
 - Oct 4th 1957 (cold war) → Sputnik 1 (1st unmanned satellite) sent to orbit by Soviet Union
 - → *Missile Gap* fear emerged
 - → to secure America's lead in technology
 - → **[DARPA]** US founded "Defense Advanced Research Project Agency" Feb 1958

- DARPA
 - Before: knowledge transferred by people
 - Planned: large-scale computer network to...
 - Accelerate knowledge transfer
 - Avoid doubling up
 - Name: **ARPANET** (scientific network)
 - 3 other concepts:
 - RAND Corporation (military network) [America]
 - NPL - national physical laboratory (commercial network) [England]
 - Cyclades (scientific network) [France]
 - Arpanet, rand, npl and cyclades → foundations for our modern internet
- ARPANET
 - Development 1966
 - Universities cautious about sharing their computers → **small** computers put on front of the **mainframe**
 - [small] IMP (interface message processor)
 - → network activities
 - → interface for the mainframe
 - [mainframe] → initialization of programs and data files
 - Only IMPs interconnected in the network (IMP subnet)
 - First connections → the network working group create the network control protocol (ncp)
 - Later → NCP replaced by TCP (transmission control protocol, more efficient)
 - TCP: verification of file transfer
- NPL
 - Commercial bases → users and file transfer expected
 - To avoid congestion of lines → files divided into smaller packets (put together at receiver) → **packet-switching**
- 1962: atomic
 - Americans found missiles in Cuba → could reach US → fear of atomic conflict
 - At that time → centralized network architecture
 - Avoid breakdown during attack → had to develop decentralized network architecture (still operative if a node is lost)
 - Communication through radio waves → cause problems if atomic attack
 - Ionosphere affected
 - Long-wave radio waves wouldn't work anymore
 - Had to use direct waves (not a long range)
 - Better solution: **distributed network model** → long distances covered with minimum of interferences
- Cyclades
 - Smaller budget than ARPANET and fewer nodes → focus: **communication with other networks**
 - **INTER-NET** term was born
 - Concept went further: 1 computer can only be a transfer node (go through computers with physical layer implemented into the hardware)
 - Direct connection to receiver: end-to-end structure
 - So famous everywhere
 - Phone companies: X.25 protocol → enables communication through their servers in exchange of charge (monthly)
- DARPA's TCP was to connect computers through gateways and the ISO designed the Open System Interconnection reference model

- → standarize network
- → channel's division into layers
- Tcp assimilated preferences of osi reference model → gave way to TCP/IP protocol (standard which guaranteed compatibility between networks, and merged them, creating the internet)
- February 28th 1990 → arpanet hardware removed, but internet up and running

Task 3. Now, with the help of your notes, try to choose the correct facts for the dates.

Before 1957 - Time sharing / Batch processing / Remote connection (one task at a time). It was ineffective. Computers were stored in large rooms to be cooled off.

1957 - A time sharing / batch processing / remote connection was installed and the concept of time sharing / batch processing / remote connection came up. On October 4, 1957, during the Cold War, the first unmanned satellite was sent into orbit by the Soviet Union.

1958 - The DARPA / ARPANET / CYCLADES (Department of Defense's Advanced Research Projects Agency) was a military project created in the USA to ensure America's leading role in technology. They planned a distributed network / decentralized network / large-scale computer network to accelerate knowledge transfer: the ARPANET. Three other concepts that are the foundations for our modern Internet were developed: the RAND (commercial / military / scientific network in the USA), the NPL (commercial / military / scientific network in England), the CYCLADES (commercial / military / scientific network in France).

1961 - Development of the concept of packet switching / batch processing / IMPs (a network communications method). The sent files were divided into smaller packets and then put together again at the receiver.

1962 - The US discovered Cuba had atomic missiles that could reach American soil, so the US Air Force asked a team of researchers at the RAND Corporation to create a military communication network that could withstand a nuclear strike. Because information systems had a centralized network architecture, a CYCLADES / decentralized / phone companies network architecture had to be developed to avoid a breakdown during an attack. The use of radio waves would have caused problems in case of an atomic missile / war / atomic attack because the ionosphere would be affected and long way radio waves would not work anymore. Using direct waves was not a good solution because they don't have long range. The best solution was to use the model of a distributed network / decentralized network / large-scale computer network because long distances could be covered without causing interference.

1969 - Creation of ARPANET - OSI / TCP/IP protocol / IMPs (computers) took over control of the network activities and the mainframe was in charge of initializing programs and data files.

Early 1970s - Development of the DARPA / ARPANET / CYCLADES network in France. The purpose was laid on the communication with other networks. During communication between sender and receiver, the computers only served as a transfer node. The hosts were responsible for the reliable delivery of data using associated end-to-end protocol mechanisms. This French protocol went through all machines using a physical layer that was implemented into the hardware.

1974-1976 - X.25 created the basis for a network between British academic and research sites. Later, IMPs / phone companies / OSI developed their X.25 protocol which enabled communication through their servers in exchange for a monthly basic charge.

1977 - The OSI / TCP/IP protocol / IMPs (Open Systems Interconnection) reference model was created to standardize the network for information exchange.

1978 -The TCP (Transmission Control Protocol), which is used to verify file transfer, assimilated the preferences of the OSI reference model. The TCP gave way to the OSI / TCP/IP protocol / IMPs, a standard which guaranteed compatibility between networks and finally merged them, thus creating the Internet.

1990 - The ARPANET hardware was removed, and the Internet was running.

Summarizing

Task 1. Reflect about the following.

What is a summary? Can you define it?

What do you think you need to avoid in order to write a good summary?

I think that a summary is a an abstract, a brief text that talks about the main points of whatever it is summarizing.

To write a good summary, it should be avoided the most common mistakes:

- Not having focus
- Too lengthy
- Put dialogue

Task 2. Visit this site:

<http://www.uefap.co.uk/writing/writfram.htm>, and go to “Reporting”, where you’ll find information on summarizing.

Now list the seven stages involved in the process of writing a summary:

Steps in summary writing

1. Read and understand the text carefully
2. Think about the purpose of the text
 1. Ask what the author's purpose is in writing the text?
 2. What is your purpose in writing the summary?
 3. Are you summarising to support your points?
 4. Or are you summarising so you can criticise the work before you introduce your main points?
3. Select the relevant information. This depends on your purpose.
4. Find the main ideas - what is important
 1. They may be found in topic sentences.
 2. Distinguish between main and subsidiary information.
 3. Delete most details and examples, unimportant information, anecdotes, examples, illustrations, data etc.
 4. Find alternative words/synonyms for these words/phrases - do not change specialised vocabulary and common words.
5. Change the structure of the text.
 1. Identify the meaning relationships between the words/ideas - e.g. cause/effect, generalisation, contrast.
 2. Change the grammar of the text: rearrange words and sentences. Change nouns to verbs, adjectives to adverbs, etc., break up long sentences, combine short sentences.
 3. Simplify the text. Reduce complex sentences to simple sentences, simple sentences to phrases, phrases to single words.
6. Rewrite the main ideas in complete sentences. Combine your notes into a piece of continuous writing. Use conjunctions and adverbs such as 'therefore', 'however', 'although', 'since', to show the connections between the ideas.

Task 3. Writing a summary

Go back to the video on "The History of the Internet" and summarize the contents using your notes (150 - 200 words).

Summary of the history of internet

Before 1957, there was what we call batch computing (a computer could only do one task at a time). In addition, which meant that specialists had to connect remotely to computers.

In 1957 remote connection to computers was possible and the concept of time-sharing was created. This consists on that the processing power of a computer can be shared among multiple users.

America created DARPA due to missile gap fear, which also created ARPANET. It was a network that accelerated the transfer of knowledge. Besides, three more networks emerged: RAND (military), NPL (commercial) and Cyclades (scientific).

DARPA had IMPs and mainframes. IMPs did network activities, and were interface to the mainframe, which initialized programs and data files. To communicate IMPs with each other Transmission Control Protocol was created. NPL, meanwhile, created: packet-switching: split sent files into parts to avoid line congestion. With fear of an atomic attack, America decided that a decentralized network was needed. This means that if a node is lost, the network will not fail. Researchers on the Cyclades network focused on communication between other networks.

Here we first heard the term "Inter-net".

An ISO was created to standardize the networks, and DARPA created the TCP / IP protocol, which has: packet-switching, TCP, and obviously communication between other networks.