

# Flipped Learning

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## Instructions

- 1: Print this document and take it with you to Lisbon
- 2: Complete all the exercises, in the order given - before conference
- 3: Look at the image on page 2. Write down the first six words that come to mind. \*Prepare to talk with a partner .... **5 mins**
- 4: \*Prepare to discuss Exercise 6 with a partner .... **10mins**

*\*You will be asked to talk about your chosen words, with a partner, for the first five minutes of Frank Mc Girr's presentation. After we go over answers to all the exercises, you will be asked to discuss Exercise 6 with another partner*

**Exercise1:** Write down the first six words that come to mind

1. \_\_\_\_\_

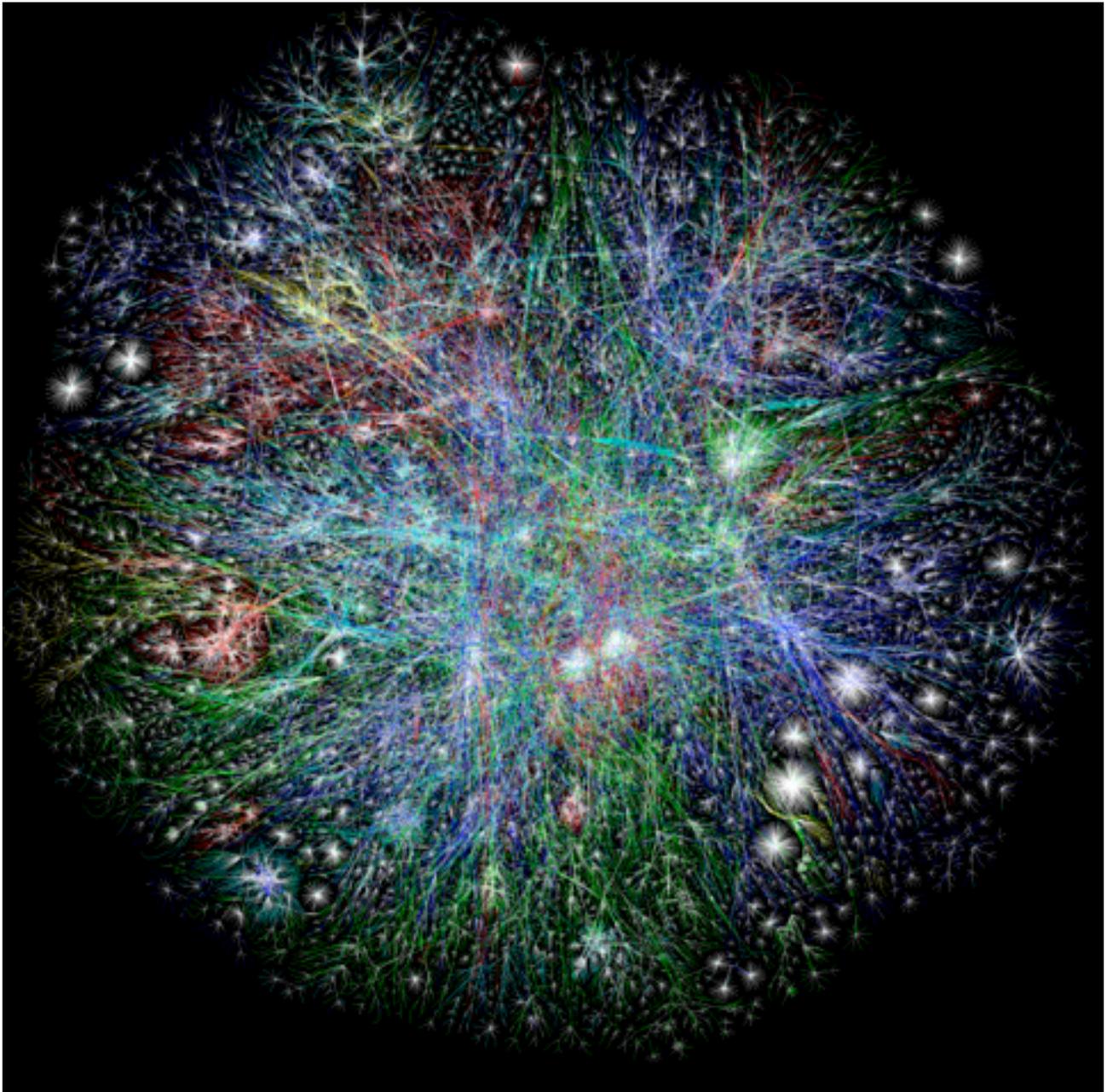
4. \_\_\_\_\_

2. \_\_\_\_\_

5. \_\_\_\_\_

3. \_\_\_\_\_

6. \_\_\_\_\_



**Prepare to talk about your words.** Think about: what? where? why?when? how?

**Exercise2: Match these key words from the text with their meaning.**

*robust(2)      scope      to reshape      array      exponentially      to bypass(2)*  
*protocol(3)      hypertext      an aggregator      bricks and mortar      to adapt (2)*

\_\_\_\_\_ is a set of rules that control the way data is sent between computers

\_\_\_\_\_ is the range of things that a subject, an organisation, an activity, etc. deals with

\_\_\_\_\_ is a group or collection of things or people, often one that is large or impressive

\_\_\_\_\_ is text stored in a computer system that contains links that allow the user to move from one piece of text or document to another

\_\_\_\_\_ is strong; able to survive being used a lot and not likely to break

\_\_\_\_\_ is to ignore a rule, an official system or somebody in authority, especially in order to get something done quickly

\_\_\_\_\_ is to change your behaviour in order to deal more successfully with a new situation

\_\_\_\_\_ is to change the shape or structure of something

\_\_\_\_\_ is an Internet company that collects information about other companies' products and services and distributes it through a single website

\_\_\_\_\_ is in a way that becomes more and more rapid

\_\_\_\_\_ is a business that operates in the physical world rather than over the Internet

**Exercise 2a Find and highlight the keywords in the text (see example: **robust**)**

### Exercise 3:

### Reading

The Internet is the global system of interconnected computer networks that use the Internet protocol suite (TCP/IP) to link devices worldwide. It is a network of networks that consists of private, public, academic, business, and government networks of local to global scope, linked by a broad array of electronic, wireless, and optical networking technologies. The Internet carries an unlimited range of information resources and services, such as the inter-linked hypertext documents and applications of the World Wide Web (WWW), electronic mail, telephony, and file sharing.

The origins of the Internet date back to research commissioned by the United States Federal Government in the 1960s to build **robust**, fault-tolerant communication via computer networks. The linking of commercial networks and enterprises in the early 1990s marked the beginning of the transition to the modern Internet, and generated rapid growth as institutional, personal, and mobile computers were connected to the network. By the late 2000s, its services and technologies had been incorporated into virtually every aspect of modern life.

Most traditional communications media, including telephony, radio, television, paper mail and newspapers are being reshaped, redefined, or even bypassed by the Internet, giving birth to new services such as email, Internet telephony, Internet television, online music, digital newspapers, and video streaming websites. Newspaper, book, and other print publishing are adapting to website technology, or are reshaped into blogging, web feeds and online news aggregators.

The Internet has enabled and accelerated new forms of personal interactions through instant messaging, Internet forums, and social networking. Online shopping has grown exponentially both for major retailers and small businesses and entrepreneurs, as it enables firms to extend their "bricks and mortar" presence to serve a larger market or even sell goods and services entirely online. Business-to-business and financial services on the Internet affect supply chains across entire industries.

Educational material at all levels from pre-school to post-doctoral is now available on the Internet. For distance education, help with homework and other assignments, self-guided learning, or just looking up more detail on an interesting fact, it has never been easier for people to access educational information at any level from anywhere. The Internet in general and the World Wide Web in particular are having a profound effect on both formal and informal education.

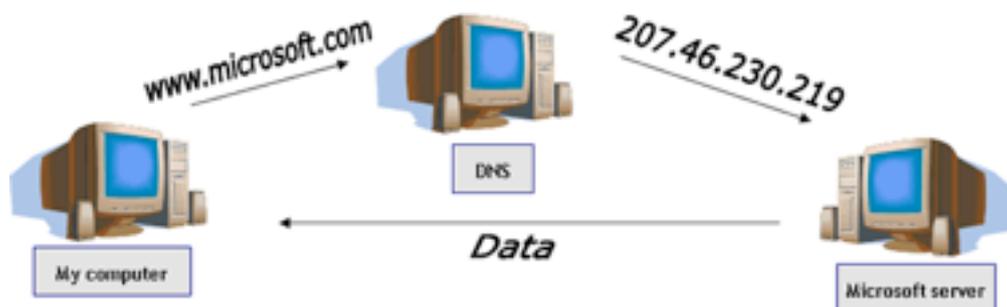
## How the Internet Works

All computers that are connected to the Internet must speak the same language. It is called TCP/IP (Transmission Control Protocol/ Internet Protocol). and makes sure that information sent by one computer arrives at a certain destination.

Every computer on the Internet has an IP address. It is made up of 4 groups of up to 3 numbers, separated by a dot. For example: 207.46.230.219 . Such an IP number can only occur once in the whole world. Because such numbers are difficult to remember, some computers have names like `bbc.co.uk` or `theimageconfernece.com`

If we want to get information from a certain computer we must type in its name. Special computers on the net have the job of turning names into numbers which computers can understand. Such computers are called Domain Name Servers (DNS).

When a computer sends data to another computer it is broken up into many small packets . These small packets can travel on their own . When they get to their destination , the packets are put together again in the right order . Each of them may take different routes and they pass by many other computers to get there.



What is the image on page 2 ?

**Exercise 4: Listening**

Harvard University Prof. Eric Mazur on the difficulties of beginners, teaching each other, and making sense of information

<https://www.youtube.com/watch?v=Z9orbxoRofI>

Click on the link and listen for answers to these questions

**Exercise 5 Comprehension**

1. What course was Eric Mazur asked to teach when he joined Harvard University?
2. What event challenged Mazur’s ideas on the process of teaching and learning?
3. Why were students performing so poorly with the multiple choice questions?
4. How did all of Mazur’s students finally come to understand Newton’s third law?
5. Why is *Mary* able to explain Newton’s third law better than Professor Mazur?
6. What changes (3) did Professor Mazur make in his approach to teaching?
7. How does Professor Mazur say we learn?
8. What two-step process is involved in learning?
9. What is the current standard approach to teaching?
10. Which is the harder part?

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_
7. \_\_\_\_\_
8. \_\_\_\_\_
9. \_\_\_\_\_
10. \_\_\_\_\_

**Exercise 6 Discussion**

Prepare to discuss the following question with a partner

**What is the purpose of flipped learning? .....10mins**