

## 2. HIGHER EDUCATION

### DISCUSSION

**In small groups present each other the information about a foreign university that you have prepared as your homework.**

The listeners can ask questions about details of studies there.

After you have discussed your information, choose which university would be the most attractive place to study and present the information about it to the whole class.

### SKILLS

**1. Which of the following skills do you think are the most important for your future career?**

- having technical ability
- being creative
- being able to communicate well
- being good at solving problems
- dealing with people
- giving presentations

**2. Watch the video about the skills the graduate engineers say they need in their current jobs. What are their priorities?**

<http://www.careerplayer.com/tips-and-advice/engineering/key-skills-for-engineering/>

### LISTENING

**You will listen to a woman talking about higher education.**

**B) Listen for the first time. Decide whether the statements are true or false (T/F)**

- a. Each university has a separate entrance exam. T/F
- b. National school-leaving exams are called A levels in Scotland. T/F
- c. Students choose the universities they are interested in by looking at booklets. T/F
- d. The prospectuses are available only in the school careers offices. T/F
- e. UCCA stands for Universities Central Council on Admissions. T/F
- f. Students apply directly to the universities themselves. T/F
- g. You can apply for admission to more than 5 universities. T/F
- h. The academic year starts in September. T/F

**A) Listen for the second time and decide what purpose the programme has.** (only 1 answer is correct)

- to inform about the process of entering universities in Britain
- to explain why it is best to study at Oxford or Cambridge
- to instruct on communication with UCCA who help students

## BRITISH AND AMERICAN UNIVERSITIES

Having read the texts on British and American universities (IS, study materials: Higher education UK, US, USxUK) try to complete the tables.

Who would say the following sentences? An American (A) or a British (B) student?

Are you faculty or student?	
The faculty will have to come to a decision on this?	
I attended Masaryk University.	
I went to university in Slovakia.	
She graduated from university in 2011	
They took some fascinating courses at college.	
I went to secondary school in Boskovice, then I went to university in Brno.	
Paul went to school at Stanford.	
He is a freshman.	
sophomore, junior, senior	
first year student, second-year student, third-year student, fourth-year student	

Type of study US	Degree awards	Length of the course	Courses	Abbreviation (science)	Degree in full (science)
undergraduate	community college →		terminal → employment		
		2 years	academic → transfer to a 4-year college/univ.	A.S.	Associate in Science
		4 years freshman sophomore junior senior	<ul style="list-style-type: none"> <li>• core (1-2) (general basic/ distribution requirements)</li> <li>• major (3-4)</li> <li>• elective</li> </ul>	B.S.	Bachelor of Science
	Master's degree	1-2			Master of Science
	Doctorate degree			Ph.D. (Sc.D.)	Doctor of Philosophy

Type of study UK	Degree awards	Length of the course	Abbreviation (science)	Degree in full (science)
		3-4	B.Sc	Bachelor of Science
Postgraduate	Master's degree	1-2		Master of Science
		3-more	Ph.D	

### SCIENTIFIC DISCIPLINES

1. Write a few examples of disciplines that can be studied at Masaryk University.

How would you put them into groups?

Which of the categories does your own area of study fit into?

Adapted from E. de Chazal, S. McCarter, Oxford EAP, OUP, 2012

**2. Chemistry can be divided into several branches. Read the descriptions and supply names of branches.**

**a.** focuses on chemical and biochemical phenomena that occur in natural places. It should not be confused with green chemistry, which seeks to reduce pollution. It can be defined as the study of the sources, reactions, transport, and effects of chemical species in the hydrosphere, atmosphere and lithosphere.

**b.** describes the nature of matter, solutions and gases; introduces concepts such as stoichiometry, prediction of reaction products, thermodynamics, nuclear chemistry, and chemical kinetics.

**c.** chemistry of materials from non-biological origins; typically, this refers to materials not containing carbon-hydrogen bonds.

**d.** practical application to solve problems, usually in industry; design, construction and operation of machines and plants that perform chemical reactions to solve practical problems or make useful products.

**e.** branch that applies physical principles and measurements to understand the properties of matter, this includes the applications of thermodynamics and quantum mechanics to chemistry.

**f.** the study of the chemistry of matter and the development of tools for measuring properties of matter, it includes the identification of compounds & mixtures (qualitative analysis) and the determination of the proportions of the constituents (quantitative analysis).

**g.** studies compounds containing carbon (originally defined as the chemistry of substances produced by living organisms but now extended to substances synthesized artificially).

**h.** is concerned with the structure and chemical processes of proteins, carbohydrates, lipids, nucleic acids and other molecules found in or produced by organisms.

*help*

General Chemistry	Inorganic Chemistry	Organic Chemistry	Analytical Chemistry
Environmental Chemistry	Chemical Engineering	Biochemistry	Physical Chemistry

**What is the name of your discipline? Prepare a definition.**

**TYPES OF LEARNERS**

<http://www4.ncsu.edu/unity/lockers/users/f/felder/public/ILSdir/styles.htm>

**Questions**

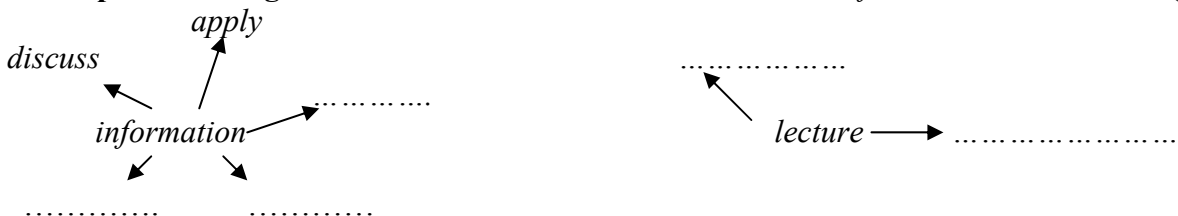
1. What different learning styles do you know?
2. What works for you when you have to learn things?
3. Give an example of your learning experience, e.g. when you learned something difficult or when you applied a really effective way.

Read the text below and complete the table with typical features for each type.

<b>Active learner</b>	<b>Reflective learner</b>
<b>Sensing learner</b>	<b>Intuitive learner</b>
<b>Visual learner</b>	<b>Verbal learner</b>
<b>Sequential learner</b>	<b>Global learner</b>

**Vocabulary from reading**

1. Complete the diagrams with verbs used in connection with *information* and *lecture*. (1<sup>st</sup> part)



2. Write three things Sensors dislike:

3. Write three things Intuitors dislike:

4. In the fourth part find words which mean: 1) unsystematically, without specific purpose  
2) in small stages, one thing at a time

**LEARNING STYLES AND STRATEGIES**

## ACTIVE AND REFLECTIVE

- Active learners tend to retain and understand information best by doing something active with it - discussing or applying it or explaining it to others. Reflective learners prefer to think about it quietly first.
- "Let's try it out and see how it works" is an active learner's phrase; "Let's think it through first" is the reflective learner's response.
- Active learners tend to like group work more than reflective learners, who prefer working alone.
- Sitting through lectures without getting to do anything physical but take notes is hard for both learning types, but particularly hard for active learners.

## SENSING AND INTUITIVE

- Sensing learners tend to like learning facts, intuitive learners often prefer discovering possibilities and relationships.
- Sensors often like solving problems by well-established methods and dislike complications and surprises; intuitors like innovation and dislike repetition. Sensors are more likely than intuitors to resent being tested on material that has not been explicitly covered in class.
- Sensors tend to be patient with details and good at memorizing facts and doing hands-on (laboratory) work; intuitors may be better at grasping new concepts and are often comfortable with abstractions and mathematical formulations.
- Sensors tend to be more practical and careful than intuitors; intuitors tend to work faster and to be more innovative than sensors.
- Sensors don't like courses that have no apparent connection to the real world; intuitors don't like courses that involve a lot of memorization and routine calculations.

## VISUAL AND VERBAL

- Visual learners remember best what they see - pictures, diagrams, flow charts, time lines, films, and demonstrations. Verbal learners get more out of words - written and spoken explanations. Everyone learns more when information is presented both visually and verbally.

## SEQUENTIAL AND GLOBAL

- Sequential learners tend to gain understanding in linear steps, with each step following logically from the previous one. Global learners tend to learn in large jumps, absorbing material almost randomly without seeing connections, and then suddenly "getting it."
- Sequential learners tend to follow logical stepwise paths in finding solutions; global learners may be able to solve complex problems quickly or put things together in novel ways once they have grasped the big picture, but they may have difficulty explaining how they did it.

## Homework

Go to <http://www.engr.ncsu.edu/learningstyles/ilsweb.html> , answer the questionnaire and find your results.

Then take the handout "*What type of learner...*" and find your result here as well. Compare the two results in a written comment (about 60 words). Say how much they are similar/different and to what extent you agree with them. Be prepared to share your comment with classmates during next class.