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Faculté DE SNV

Socle Commun Sciences de la Nature et de la Vie

1^{ère} année

Cours

Techniques de communication d'expression
(TCE)

2021/2022

Semestre : 2^{ème} Semestre

UE: Unité d'Enseignement Méthodologique

Matière 2: TECHNIQUES DE COMMUNICATION ET D'EXPRESSION 2 (Anglais)

Objectifs de l'enseignement (*Décrire ce que l'étudiant est censé avoir acquis comme compétences après le succès à cette matière – maximum 3 lignes*).

Cette matière complète l'apprentissage de la compréhension et la rédaction de documents scientifiques en anglais.

Connaissances préalables recommandées (*descriptif succinct des connaissances requises pour pouvoir suivre cet enseignement – Maximum 2 lignes*).

Sans prés-requis

Contenu de la matière :

1. Terminologie Scientifique
2. Etude et compréhension de texte
3. Technique d'expression écrite et orale (rapport, synthèse, utilisation des moyens de communications modernes)
4. Expression et communication dans un groupe. Etude de textes proposés (observer, analyser, faire le point, expression écrite)

Travaux dirigés :

Proposition d'exercices en rapport avec les points de langue jugés les plus importants.

Mode d'évaluation :

Contrôle continu et Examen semestriel

I. Terminology

consists of the study of the choice and using terms that are part of the vocabularies solely of the specialty, which can be found in all areas of knowledge: computer science, grammar, linguistics, mathematics, philosophy, Medicine, music...etc.". And which can also come from everyday language and in the various dictionaries, which lexicographers are responsible for.

Example:

the term table comes under both the furniture terminology and agronomic terminology

I.2 Main terms used in Biology

Français	English	Définition
Tissu	Tissues	are groups of cells that have a similar structure and act together to perform a specific functions.
ADN	DNA	Deoxyribonucleic acid, or ADN is a biological macromolecule present in almost all cells as well as in many viruses. ADN contains all the genetic information, called genome, allowing the development, functioning and reproduction of living beings.
La génétique	Genetics	is the study of the transmission of hereditary characteristics in living beings. It aims to determine the modes of transmission and to document the variations in genes between individuals of the same person. It also aims to carry out the study of gene function.
atome	atom	a basic unit of matter that cannot be broken down by normal chemical reactions
Mitose	Mitosis	is the step in the cell cycle that the newly duplicated DNA is sepavoled, and low new cells are formed .this process is important in single_celled eukaryotes as it's the process of asexual reproduction.
Méiose	Meiosis	is a process where a single cell divides twice to produce four cells containing half the original amount of genetic information. These cells are our sexuelle_sperm in males eggs in femates.
Noyau	nucleuse	the nucleuse is a membrane bound organelle that contains genetic material DNA of Eukaryotic organisms, a such it serves to maintain the integrity of the cell by facilitating transcription and replication processes.

cytoplasme	cytoplasm	refers to the fluid that fills the cell. Which includes the cytosol along with filaments protein ions and macromolecular structure as well as the organelle suspended in the cytosol.
Empreinte génétique	Genetic imprint	fine structural characteristics of a specific region of DNA allowing the identification of a cell and its filiation.
épitope	epitope	part of a molecule capable of stimulating the production of an antibody.
Géminine	geminine	protein of multicellular animal organisms. which contributes to a single DNA replication taking place during the cell cycle
Histone	histone	basic protein major constituent of the nucleosome.
liaison génétique	Genetic Link	Gene Associations located on the same chromosome .What is usually transmitted en bloc to the offspring.
Enzyme	Enzyme	any of numerous complex proteins that are produced by living cells and catalyze specific biochemical reactions at body temperatures.
Cytologie	Cytology	is a discipline of biology studying cells and their organelles, the vital processes that take place there as well as the mechanisms allowing their survival (reproduction, metabolism).
Histologie	Histology	a branch of anatomy that deals with the minute structure of animal and plant tissues as discernible with the microscope.
Nucléotide	Nucleotide	A compound consisting of a nucleoside bound to phosphoric acid and it is the group of chemical compounds found in living cells in nucleic acids such as DNA and RNA.
molécule	molecule	a group of two or more atoms that form the smallest identifiable unit into which a pure substance can be divided and still retain the composition and chemical properties of that substance.
ribosome	ribosome	ribosome is a complex of RNA and ribosomal proteins associated with a membrane or free in the cytoplasm
mitochondrie	mitochondrion	A mitochondrion is an organelle, possessing all the characteristics of a prokaryotic organism, surrounded by a double membrane each composed of a double phospholipids layer, and found in most eukaryotic cells.
la membrane plasmique	cell membrane	is a biological membrane separating the interior of a cell, called the cytoplasm, from its external environment.

la bactérie	the bacterium	The bacterium is a ubiquitous, unicellular and nucleusless micro-organism (prokaryote) whose genome consists of DNA. This consists of a single chromosome, and the presence of plasmids may be noted.
virus	virus	A virus is an infectious agent requiring a host, often a cell, whose constituents and metabolism trigger replication.
Cellule	Cell	the smallest structural and functional unit of an organism, which is typically microscopic and consists of cytoplasm and a nucleus enclosed in a membrane.
protéines	Proteins	are large biomolecules and macromolecules that comprise one or more long chains of amino acid residues
		Mutation :Mutation: a change in the genetic material (DNA) that may lead to a change in the characteristics of the offspring.
microscope	Microscope	an optical instrument used for viewing very small objects, such as mineral samples or animal or plant cells, typically magnified several hundred times.
chromosome	Chromosome	a threadlike structure of nucleic acids and protein found in the nucleus of most living cells, carrying genetic information in the form of genes.
ARN	RNA	Ribonucleic acid (RNA) is a polymeric molecule essential in various biological roles in coding, decoding, regulation and expression of genes.
phagocyte	phagocyte	a type of cell within the body capable of engulfing and absorbing bacteria and other small cells and particles.
botanique	botany	branch of biology that deals with the study of plants, including their structure, properties, and biochemical processes. Also included are plant classification and the study of plant diseases
neurone	neuron	a neuron is a cell of the nervous system specialized in communication and information processing
ATP	ATP	Adenosine triphosphate (ATP) is often called the energy currency of the cell because this molecule plays a key role in metabolism, particularly in transporting energy within cells. The molecule doubles the energy of the processes of exogenous and energizing energy, making strongly unfavorable chemical reactions able to proceed.
immunologie	Immunology	biological science that studies immunity or the immune system.
Eucaryotes	eukaryote	any cell or organism that possesses a clearly defined nucleus. The eukaryotic cell has a nuclear membrane that surrounds the nucleus, in which the well-defined

		chromosomes (bodies containing the hereditary material) are located.
exocytose	exocytosis	is the process of moving materials from within a cell to the exterior of the cell . this process requires enrgy and is therefore a type of active transport .exocytosis is an important process of plant and animal cells as it performs the opposite function of endocytosis

I.3 Translation

The word **Translate** comes from Latin:

Trans: Across

Late : bear or carry

It is the act of transferring the linguistic entities from one language in to their equivalents in to another language. Good translation should be informative, communicative accurate.

Example:

Shall I compare thee to a summer's day?

هل اشبهك بيوم الصيف

Compare to : اشبه ب

يقارن به : Compare with

There are various types or methods of translation that adaptes, above them **scientific translation**.

I.3.1 Scientific translation

Is the translation of scientific texts, thus a special knowledge will be required. These texts require a deep knowledge of both the source and target languages, as well as a proper understanding of the subject.. Sometimes the scientists have developed a high degree of linguistic knowledge, which they apply to the translation of texts in their field of expertise. **Scientific translation** focuses on scholarly materials, including journal articles, academic theses, research papers, science webinars, etc. Here are some fields of study that often require translation:

- **Medicine and pharmacology:** clinical trials, legal documents, research results.
- **Life sciences:** papers on biology, astronomy, zoology, chemistry, geology, physics;
- **Social science:** papers on anthropology, sociology, psychology, political science, economics;
- **Mathematics**

It's never easy to translate **domain-specific terms** and **jargon**, but in scientific translation, this problem sprouts even more nuances and challenges. Scientists often introduce new terms in their research papers, and for the translator, it is quite a challenging task to choose a correct way to adapt the new word to the target language. To solve this problem, a specialist require both **experience** and **expertise or a scientific translator**, which has to be:

- Fluent in the source language;
- Fluent in the target language;
- Well-educated in translation techniques;
- An expert in the chosen field of study.

The expertise of professional translators in the field is enormous. Becoming an expert in scientific translation is a challenge within itself..

I.4 techniques of translation

how to translate terminology in the first place? Translation experts use a variety of methods to ensure the terminology in the target language perfectly matches one in the source. Take a look at some of them:

A/ Transliteration: النقحرة The original term is described in letters of the target language. The expert must explain the term, especially if it was never used in the target language before.

Example:

Methodology: ميثولوجي

جغرافيا: geography

Example of nouns that have not equivalents in target language :

B/ Borrowing. In this method, the translator uses the word in the target text in the same form as it was in a source text. This technique is used when there is no equivalent to the word in a target language or it's a new word introduced by the author of the original document.

borrowed words usually written in italics

example,

Technique :

Pizza :

Mechanism :

Internet :

Transposiotion :

It is a method of translation that involves replacing one word class with another without changing the the meaning of the message

Example:

He acknowledged that he **was wrong** :

She got **seriously** ill last night :

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C/ Equivalence. التكافؤ

Is a strategy to describe the same situation by using structural methods for producing equivalent text, or a technique uses a completely different expression to transmit the same meaning. Used in proverbs and sayings idioms (التعابير الاصطلاحية)

Example of idiom :

To have no stomach :

To take the gloves off :

Examples proverbs and saying

Better be in silent than speak ill :

To err is human :

The **final** and correct **translation version should** meet the following criteria:

- **A separate term**/phrase is appropriately translated within the context;
- Every term is compliant to a **specific term system** used in the original text (translator takes into account the chosen field of study);
- The similarities/differences of specific terms are accounted for **based on source material**.

These methods alone won't allow just everyone to translate the scientific text, but in the hands of the professionals, they are a sharp weapon.

Be clear and concise

Clarity and concision are the main stylistic goals of scientific translation, which must convey the exact meaning of the original text. Finding the right words can be a struggle sometimes and it can also create repetitiveness in the text, as synonyms of certain words can be rather ambiguous and more suitable for literary work. Avoiding repetitions can sometimes be extremely hard. This is why the translator must have a scientific background that allows her or him to play with the terminology without changing the meaning of the text.

Keep an eye on the mistakes in the original text

What is also common among scientific translators is their ability to correct the small mistakes in the original text, as they will be the persons that will read the document most attentively. Common mistakes in scientific work include: inconsistencies between numbers listed in tables, accompanying diagrams showing something else than they should or tables referred to by non-obvious symbols. In this case, the translator is advised to correct such mistakes in brackets or footnotes.

Play with structure and meaning

If the syntactic and lexical features of the language differ, it is sometimes necessary to completely recast certain sentences. In this case, the translator will have some work to do in terms of structure and meaning. This is one of those times when keeping the sense of a sentence intact can be a real challenge

Pay attention to numbers and symbols

In science you will come across a lot of numbers, formulas, diagrams and symbols, which must not be ignored in the process of translation. The sense of a whole page or even chapter can be altered if the translator adds the wrong number or symbol. To avoid this, he must understand very well the topic. Afterwards, he must pay a lot of attention to all the little things. This requires patience and analytical skills, qualities that are indispensable for a scientific translator.

Always proofread your translation

At the end of your translation, you should always proofread the texts yourself first and then ask a second translator to proofread your work as well. Ideally, ask other translators who have experience in the field. This way, all the mistakes that you did not notice will be corrected. In case some concepts from the original text are really unclear to you, you can communicate this to the author (if possible) or with the client. It is always better to ask for clarifications, than leaving your work unclear.

Adapt your style to the type of document

In science, you will come across different types of documents that require different degrees of formality. If you are translating academic work, you will need to find a very elevated style with complex phrases and less common words. On the other hand, if we are talking about manuals or drug instructions, the translation must be less formal. This type of documents is going to be read by normal people or beginners in the field of science. This is why the language must be more accessible and easy to understand.