## 1. Introduction

The aim of this work is to prepare methodological and didactic materials for teaching the subject of the Exercise from English, ICT at the High School of Design and Art, Book Culture and Economics Náhorní. For the purpose of the thesis, the thematic part Computer and Peripheral Devices was selected.

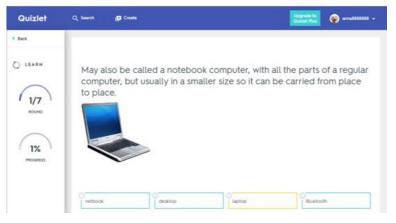
## 2. Preparation for lesson

This document includes the preparation of the first lesson English language course for ICT field of study. Its aim is to inform students about generally known terms (words) from ICT, especially hardware and software. The preparation for the lesson was prepared in the form of a table (attachment no.1). This table includes the phases of the lesson, including the time schedule, the content and objectives of the phases, the form and methods of teaching, the description of the used study material and the description of the outputs.

## 3. Teaching material for lesson phases

3.1 Introduction - no materials necessary3.2 ICT Basic Vocabulary - list of 56 terms with description (attachment no.2)

Forma: PC Quiz using www.quizlet.com



## 3.3 Computer parts – 10 cards with part names (attachment no.3)

Lesson phase organization:

- 1. Each student pulls one card from the set of 10 cards.
- 2. Student with card no.1 will come in front of the chalkboard.
- 3. Student with card no.1 describes the function and location of the component. There is only component name on the card.
- 4. Other students (with cards 2-10) are guessing the name of the part in card
- 5. Student with card no.1 draws the part on a chalkboard after guessing the part name (e.g. box for computer case).
- 6. Students with card no.2 and so on will continue with same procedure. Each student draws their part to the correct place inside the computer case box. Incorrectly placed part will be discussed in the group and replaced to correct position.
- 7. After last step complete computer with proper part location will be drawn on the chalkboard.

#### Cards with pictures:

- 1. Computer case
- 2. Motherboard
- 3. Power source
- 4. CPU
- 5. CPU fan
- 6. RAM
- 7. Graphic card
- 8. Sound card
- 9. Hard drive
- 10. Blue-ray

3.4 Tests - ICT Basic Vocabulary - 8 tests, 4x group A, 4x group B (attachment no.4)

## 4. Conclusion

The work includes preparation for one lesson of the subject of the exercises from English in the range of 45 minutes. The preparation includes vocabulary quizzes, work in the group, and 4 different forms of tests for repeating the curriculum.

| <b>School:</b> Secondary School of Design and Art, Book<br>Culture and Economics Náhorní | Field of study:  |
|--|--|
| ( 1266.  | <b>Course:</b> Exercise from English - Computer and Peripheral Devices |
| Place: SŠ Náhorní  | <b>Objectives:</b> Basic ICT Vocabulary and computer parts             |

Abbreviations: VL – teacher's interpretation, SD – group discussion, SS – group competition, SP – working in a group, IS – individual competition, IP – individual work, B – brainstorming, D – working in pairs

| Phase  | Content and objectives   | Form and methods  | Equipment                              | Outputs   |
|--|--|---|--|---|
|  | •  | •   | • • • • • • • • • • • • •              | • • • • • • • • • • • • • •   |
| 1. Introduction 5 minutes                          | Attendance<br>Introduction to<br>the course and the<br>lesson  | <ul> <li>VL</li> <li>Verbal teaching method.</li> <li>Registration of attendance, informing students about the course, the extent of the curriculum and the continuity of the course.</li> </ul>          | PC + projector<br>Presentation         | students get basic<br>information about<br>course   |
| 2. ICT Basic<br>Vocabulary<br>15 minutes           | Training of familiar<br>ICT vocabulary –<br>hardware, software,<br>internet,   | <ul> <li>SD + SS</li> <li>Web based quiz         Computer Vocabulary -         56 terms     </li> <li>Read description, answer         it and check answer     </li> </ul>                                | PC + projector<br>PC Quiz              | students get<br>information about<br>56 basic terms<br>from ICT   |
| 3. Computer parts 10 minutes                       | Understand<br>functionality and pla-<br>cement of computer<br>parts  | <ul> <li>SP</li> <li>Describe functionality<br/>and placement of parts</li> <li>Drawn part to assembly<br/>on chalkboards</li> </ul>  | Chalkboard<br>Cards with part<br>names | Students gets in-<br>formation's about<br>computer assem-<br>bling  |
| 4. Test – ICT<br>Basic<br>Vocabulary<br>10 minutes | Repeating of vocabula-<br>ry from lesson   | <ul> <li>IP</li> <li>Training tests</li> <li>5 written questions</li> <li>5 matching questions</li> <li>5 multiple choice questions</li> <li>5 true and false questions</li> <li>A and B group</li> </ul> | Test Printout<br>Test A1-A4,<br>B1-B4  | students will repeat the voca- bulary from the lesson outputs for stu- dents, these tests stay for students |
| 5. Conclusion 5 minutes                            | Checking of test results A brief summary of the curriculum discussed on that lesson and information or plans for the next lesson | <ul> <li>VL + SP</li> <li>A brief summary of the curriculum discussed and answers of student's questions + information about the plans for the next lesson.</li> </ul>                                    | 1xPC<br>+ Projector                    | verification of correct answers from test students get information about organization of next lesson        |

#### **Computer Vocabulary 56 terms**

#### Computer

A programmable electronic device for storing and processing information called "data"

#### Keyboard

A board made of keys which, along with a mouse, serves as the primary input device for a computer

#### Home row

The keys on the keyboard to which the index finger of each hand should return as a base when touch typing.

#### Menu bar

The horizontal strip that contains lists of available menus for a certain program.

#### Mouse

A hand operated pointer device that, along with a keyboard, serves as a primary input device for a computer.

#### **Program**

Executable software that runs on a computer. Also known as an application.

#### Website

A collection of webpages.

#### **Internet**

An international computer network used for many kinds of electronic communications.

#### **Software**

Lines of a computer code written by programmers that tell the computer what to do. Also known as a program or application.

#### Hardware

Physical parts of a computer and all related devices.

#### Intranet

An internal privet network that is only available in one geographic location.

#### MP<sub>3</sub>

A popular compressed file format for digital music downloads.

#### **Email**

Messages sent electronically over a computer network.

#### **Byte**

A series of 8 binary bits that digitally represents a single character to the computer. Example:

00000001 = 1

#### Kilobyte

Approximately 1,000 bytes.

#### Megabyte

Approximately 1,000,000 bytes. (one million)

#### Gigabyte

Approximately 1,000,000,000 bytes. (one trillion!)

#### Drag and drop

Using a cursor and mouse to select and then move an object on the computer screen to a new location.

#### **Printer**

An output device that produces a paper hard copy from a computer.

#### **RAM**

Random Access Memory. Running programs from the computer's RAM allows for it to function without any lag time. Typically, the more RAM, the faster your program will run.

#### DOC

The file extension for a Microsoft Word Document. Google also calls their documents "DOC"s.

#### Social networking

Using the internet to create a virtual community by sharing messages, comments and other information using websites designed for that purpose.

#### Desktop

The primary user interaction with the computer. The place where you can see all the applications, programs, files and folders.

#### Netbook

A small laptop, typically less expensive, that is designed primarily for web surfing, not word processing.

#### Laptop

May also be called a notebook computer, with all the parts of a regular computer, but usually in a smaller size so it can be carried from place to place.

#### **Tablet**

A portable computer that uses a touchscreen as the primary input device instead of a keyboard and/or mouse.

#### Smartphone

A mobile phone with advanced functions beyond making phone calls and sending text messages.

#### URL

Stands for Uniform Resource Locator. It is the address of a specific website or file on the internet. The URL is the web address of a site.

#### Webcam

Type of camera that allows you to capture video and still images

#### E-reader

a device or computer program used for reading electronic books

#### World Wide Web

Allows computer users to easily access and share information on the internet

#### **WYSIWYG**

"What You See Is What You Get" means that what you see on the screen is what your printed document will look like.

#### **Operating System**

Software that manages and controls the resources and activities of the computer.

#### **Privacy Rights**

A person's right to control access to his or her personal information.

#### **Touchscreen**

a visual output device that can also be touched and used for input

#### **Spreadsheet**

A row and column arrangement of data.

#### **ISP**

Internet Service Provider the company that the school contracts with to allow us to use the internet.

#### **Hard Drive**

A stack of disks, usually inside the computer that allows us to store data magnetically.

#### Spam

To indiscriminately send a message to a large number of people over the internet.

#### GUI (pronounced "gooey")

the Graphic User Interface it refers to the graphics on a screen that allows the user to click and drag and drop with the mouse instead of the keys.

#### **PDF**

Portable Document Format - file format which preserves all document formatting

#### JPG (J-Peg)

Stands for "Joint Photographic Experts Group" which was the name for the committee that developed this format for digital pictures

#### **USB**

Stands for Universal Series Bus and refers to the most common type of computer port used to connect other devices to the computer.

#### **DVD**

Refers to a Digital Versatile
Disc and generally refers to a
disc that looks similar to a CD
but has a much greater storage
capacity and can be used for
videos or movies

#### **GPS**

Stands for Global Positioning System and it involves navigating using 24 satellites which are positioned over the earth.

#### Blog

web-based journal entries that provide an editorial and news outlet for citizens

#### **QWERTY**

A term used to describe the standard keyboard and refers to the top left row of keys

#### WiFi

a standard for wireless network

# HTML (Hyper Text Markup Language)

The computer language that web pages are written in.

#### Bluetooth

Wireless technology enables communication between Bluetooth-compatible devices

### **Identity theft**

The crime of stealing someone's private information and using it for criminal activity.

#### **Pixel**

Stands for "picture element" and refers to the small dots that make up the images on a computer display.

#### MAC

Short for Macintosh and refers to a specific operating system for a line of computers developed by the Apple Company

#### PC

Stands for "Personal Computer" and refers to a specific computer format developed by the IBM Company.

#### Webinar

An online seminar; a talk on a subject which is given over the Internet

#### **Javascript**

Language used to add special effects to a website



#### Test A1

#### 5 Written questions

 Stands for Universal Series Bus and refers to the most common type of computer port used to connect other devices to the computer.



TYPE THE ANSWER

2. language used to add special effects to a website



TYPE THE ANSWER

3. A term used to describe the standard keyboard and refers to the top left row of keys



TYPE THE ANSWER

4. A stack of disks, usually inside the computer that allows us to store data magnetically



TYPE THE ANSWER

5. Messages sent electronically over a computer network.



TYPE THE ANSWER

#### 5 Matching questions

| 1  | _ Keyboard |
|----|------------|
| 2  | internet   |
| 3  | WYSIWYG    |
| 4  | Webinar    |
| 5. | netbook    |

A. "What You See Is What You Get" means that what you see on the screen is what your printed document will look like.



B. A board made of keys which, along with a mouse, serves as the primary input device for a computer



C. an online seminar; a talk on a subject which is given over the Internet



D. An international computer network used for many kinds of electronic communications.



E. A small laptop, typically less expensive, that is designed primarily for web surfing, not word processing.



## Test A<sub>3</sub>

#### 5 Multiple choice questions

| I. short for Macintosh and refers to a specific operating system for a line of computers developed by the Apple Company  |
|--|
| Mac OS   |
| ○ MAC  |
| Opoc   |
| O PC   |
| USB  |
| 2. Portable Document Format -  |
| file format which preserves all document formatting  |
| PDF  |
| O DOC  |
| PDF  |
| O PC   |
| spam   |
| 3. The computer language that web pages are written in.  |
| World Wide Web   |
| HTML (Hyper Text Markup Language)  |
| gigabyte   |
| hardware   |
| A portable computer that uses a touchscreen as the primary input device instead of a keyboard and/or mouse.  |
|  |
| intranet   |
| ○ Tablet   |
| netbook  |
| mouse  |
| <ol><li>the Graphic User Interface - it refers to the graphics on a screen that allows the user to click and<br/>drag and drop with the mouse instead of the keys.</li></ol> |
|  |
| GUI (pronounced *gooey*  |
| O Identity theft   |
| ocial networking   |
| Home row   |

## Test A4

#### 5 True/False questions

| A popular compressed file format for didgital music downlodes.   |
|--|
|  |
| → MAC  |
| True   |
| ○ False  |
| 2. Executable software that runs on a computer. Also know as an application.   |
| With the land to |
| True   |
|  |
| False  |
| 3. The keys on the keyboard to which the index finger of each hand should return as a base when touch tyoing.  |
|  |
| → Home row   |
| ○ True   |
| ○ False  |
| 4. An internal privet network that is only avalible in one geographic location.  |
|  |
| → internet   |
| True   |
| O False  |
| 5. An output device that produces a paper hard copy from a computer.   |
|  |
| → internet   |
| ○ True   |
| ○ False  |
|  |

#### Test B1

#### 5 Written questions

1. the Graphic User Interface - it refers to the graphics on a screen that allows the user to click and drag and drop with the mouse instead of the keys.



TYPE THE ANSWER

2. The keys on the keyboard to which the index finger of each hand should return as a base when touch tyoing.



TYPE THE ANSWER

3. The horizontal strip that contains lists of available menus for a certain program.



TYPE THE ANSWER

4. Stands for Universal Series Bus and refers to the most common type of computer port used to connect other devices to the computer.



TYPE THE ANSWER

5. The primary user interaction with the computer. The place where you can see all the applications, programs, files and folders.



TYPE THE ANSWER

#### 5 Matching questions

| 1 | printer |  |
|---|---------|--|
| 2 | Tablet  |  |
| 3 | PC      |  |
| 4 | pixel   |  |
|   |         |  |

5. \_\_\_\_ ISP

A. Stands for "picture element" and refers to the small dots that make up the images on a computer display



B. Internet Service Provider - the company that the school contracts with to allow us to use the internet



C. A portable computer that uses a touchscreen as the primary input device instead of a keyboard and/or mouse.



**D.** An output device that produces a paper hard copy from a computer.



E. Stands for "Personal Computer" and refers to a specific computer format developed by the IBM company.



## Test B<sub>3</sub>

O internet

## 5 Multiple choice questions 1. Approximately 1,000 bytes. 1,000,000,000 gigabyte megabyte Nickyte byte O Keyboard O kilobyte O hardware website 2. An international computer network used for many kinds of electronic communications. O Tablet O internet O printer O e-reader 3. A series of 8 binary bits that digitally represents a single character to the computer. Example: 00110101 byte (#-bits) ORROROGENOROGENOR O Blog O pixel O byte O mouse 4. A board made of keys which, along with a mouse, serves as the primary input device for a computer O Menu bar O netbook O Webinar 5. An internal privet network that is only avalible in one geographic location. O Tablet O intranet

### Test B4

# 5 True/False questions 1. software that manages and controls the resources and activities of the computer → Operating System O True O False 2. A term used to describe the standard keyboard and refers to the top left row of keys → QWERTY O True O False 3. Messages sent electronically over a computer network. O True O False 4. a person's right to control access to his or her personal information. → Hard Drive O True 5. Random Access Memory. Running programs from the computer's RAM allows for it to function without any lag time. Typically, the more RAM, the faster your program will run. → RAM O True

- [1] Web source https://translate.google.com/
- [2] Web source https://quizlet.com/

O False