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# Module 2: Modern Communication Technology

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	<b>Topic</b>	<b>Theory (hours)</b>	<b>Practice: exercises+seminars (hours)</b>
1	Introduction to e-learning	14	4
2	Communication Technologies	6	2
3	Tools for Content: Google Drive disk	12	4
4	Tools for Audio and Video Conference: Skype, Google Hangouts	14	4
5	Media Relations	12	3
6	New Media Social Networks and Online Communication	12	6
7	Publicity in Education	12	2+2
8	Techniques and Tools	14	4
9	Multimedia Teaching	14	4
	<b>Total:</b>	<b>110</b>	<b>35</b>

## 1. Introduction to e-learning

**HOURS:** 18 (theory 14; practice 4 (exercises))

**The main goals:** To have the knowledge how to define e-learning and know the main aspects of implementing proper e-learning process. To be able to understanding main theories and methods of using ICT in contemporary society. To have the skills to to operate main ICT concepts and apply them.

### THEORY

**What is e-learning.** The definitions of e-learning. The main advantages of e-learning (no time and place boundaries; engaging; cost effective; fits the personal needs). Risks of e-learning (isolation; health related concerns; personal data protection). Motivating features of e-learning (supportive community; clear expectations; effective usage of available resources).

**E-learning approaches.** Instructor led vs Self-Paced: Advantages and Disadvantages (Brooke, 2013). Synchronous e-learning and it's functions (live chat, audio and video conference, data sharing, joint virtual "hand raising", joint view of multimedia presentations). Asynchronous e-learning (emails; threaded discussions; newsletters; file attachments). Blended learning.

### The differences between e-learning and traditional learning

	Traditional learning	E-learning
Environment	Classroom	Home, work (e-learning adoptable to any environment)
The role of the teacher	Teacher usually is the main source of information and central figure of education process.	Student is in the center. He can adopt educational process to his pace. Teacher is the moderator of the education.
Content	PowerPoint Textbooks Video Collaboration	Multimedia Digital library Various ways of communicating

**Choosing appropriate communication technologies.** The criteria for choosing ICT (financial resources; understandable for students; enrich the educational process; flexible; raise the productivity; no negative impact on environment). Revision of educational plan and integration of ICT where necessary. Evaluation of the needs and capacities of the learner.

### **PRACTICE**

1. Compare Synchronous and Asynchronous ways of e-learning. Make a motivated decision which suits you the best according to the personal needs.
2. Discuss the personal profit of e-learning and personal possible risks.
3. Make a checklist of the characteristics of the environment and the learners for the purpose of choosing the right ICT for the particular lesson.

### **EXAMPLE OF PRACTICAL EXERCISE**

Learning to integrate audio and video tools to education.

Discuss the situations where the audio records can be used:

- the excerpt of musical performance in music or history lessons;
- record of dialogue in learning foreign language;
- in geography - the sounds of nature.

Think of the possible usage of the audio and make a record for educational purpose.

## 2. Communication technologies

**HOURS:** 8 (theory 6; practice 2 (exercises))

**The main goals:** To know the main concepts of information and communication technologies. To know basic functions of personal computers and operating systems. To be capable of differentiating technologies according to their features and potentials.

### THEORY

**The concept of communication technologies.** The variety of definitions of communication technologies. The main kinds of communication technologies (computer based devices; traditional paper based technologies - documents, letters, mass media; techniques of connection - telephone, fax; etc.). Main features of communication technologies (usually computer based and/or net based; used in educational, work, home settings; transmitting information).

**The evolution of communication technologies.** Short history of evolution of communication technologies (telegraph; telephone; wireless telegraph; fax; computer; mobile phone; smart phone). The role of internet on the evolution of communication technologies. The contemporary communication technologies in educational settings (PC, tablet, projector, interactive smartboard, display, digital camera, digital recorder, smart phone).

**The main tools of communication technologies (personal computer; notebook; smart phone; smartboard; tablet).** The definition of personal computer. Main features of personal computer (hardware: processor, motherboard, I/O devices, random access memory, etc.; software: operating system, applications). The most popular operating systems and their comparison. Differences of personal computer and notebook (cost, portability, keyboard, purpose). The history, functions and spread of smartphones. Smartboard functions and advantages (enrich the possibilities of learning process, makes pace of learning faster, helps visualize learning materials). Functions and purpose of tablets.

### PRACTICE

1. Discuss the main features computer need to have in order to meet needs of the average user. Have in mind the impact of the computer work on the health of the user, safety and environment.
2. Name and explain the device of communication technology that would reflect your personal needs best.
3. Name the advantages of operating systems for smartphones: IOS (Apple), Android, Windows Phone. Discuss why it is important to know the differences.

### EXAMPLE OF PRACTICAL EXERCISE

- Make a presentation about the evolution of communication technologies, answering the questions:
  - What has inspired such a fast development of communication technologies?

- What are the needs of users which are addressed by evolving technological processes?
- How, in your opinion, future evolution of communication technologies will look like?

### 3. Tools for Content: Google Drive Disk

**HOURS:** 16 (theory 12; practice 4 (exercises))

**Main goals:** To have the knowledge how to define cloud computing and name its main attributes. To form competencies of creating and sharing files with the help of cloud-computing, especially Google Drive disk.

#### **THEORY**

**The concept and diversity of cloud computing.** The definitions of “clouds” and their variety (Google Drive, OneDrive, DropBox). The advantages of cloud computing (flexibility, no hardware upgrades, no maintenance, disaster recovery, security, mobile access). Risks of cloud computing (possible downtime; privacy and security issues; difficulties of conversion of information).

**Google drive-disk and it’s features: folders; documents; forms; sharing.** The uniqueness of Google Drive disk (integration of all google apps and services; good integration; great search possibilities; synchronizing; collaboration; cost effective). Folders (organization of information according to the topic; fully reachable any place any time; sharing options). Documents (easy to create, edit, format; choice of fonts and styles; editable via smartphone or tablet; offline editing options; mass editing possibilities). Forms (variety of functions: registration; scheduling events; prepare survey; gathering emails; automatic graphical analysis). Sharing (different options of sharing - can view, can edit, can comment; downloading folders; sharing with non-google users; contact groups for simplified sharing).

#### **PRACTICE**

1. Discussing and evaluating the pros and cons of information storage with the help of cloud computing and on hard disk(s).
2. Naming everyday and work tasks which can be made with the help of the Google Drive disk.

#### **EXAMPLE OF PRACTICAL EXERCISE**

Working with Google Drive disk profile for testing it’s features. Create a profile, create a folder, create a document in the folder, share a document with a friend with the possibility to edit.

#### 4. Tools for audio and video conference: Skype, Google Hangouts

**HOURS: 18 (theory 14 hours; practice 4 (exercises))**

**Main goals:** To have the knowledge to name advantages and disadvantages of popular audio and video conference tools. To be competent to apply tools for audio and video conferences in different contexts.

#### **THEORY**

**The aims and advantages of video and audio conferences.** The main purposes of video and audio conferences. The importance of video and audio conferences in business. The advantages of video and audio conferences (time saving; cost effective; document sharing; easier scheduling; face-to-face communication). Disadvantages of video and audio conferences (high requirements for internet and devices for high quality communication).

**The basic requirements of hardware for video and audio conferences.** Defining video conferencing requirements. Types of video and audio conferences - on premises, cloud and hybrid. Aspects of successful video and audio conference (clear objectives; adequate budget; choosing right hardware and software). The basic requirements of hardware for video and audio conferences (webcam requirements; computer requirements; network connection requirements)

**Useful tools for video and audio conferences: Skype, Google Hangouts.** Skype functions (calling, video, messaging, sharing). Advantages of Skype (building relationships; instant messaging; low cost; flexibility). Main steps to begin using Skype. Google Hangouts features (HD video meetings; screen sharing; chat). Google HAngouts functions (employe engagement; client consultation; product demonstration; customer support; webinars; interviews).

#### **PRACTICE**

- Discuss the pros and cons of video conferences and live conferences.
- Create a checklist for successful video conference.
- Create a video conference by yourself. Take the step -by-step approach. Test the possibilities of the video conference

#### **EXAMPLE OF PRACTICAL EXERCISE**

Imagine, that your task is to plan a conference with a partners from different countries on the topic of migration crisis. Make a strategy, including answers to these questions:

- How many people will join?
- What are the technical possibilities of each partner (what issues should be considered)?
- How to schedule the best time for everyone?
- How long will the conference last?
- What are the main points to be covered?
- What is the best tool to organize such an event and why?



## 5. Media Relations

**HOURS:** 15 (theory 12; practice 3 (exercises))

**Main goals:** To become familiar and to have capacity to name the basic features of media relations. To develop skills of applying the main media features to reach target groups.

### THEORY

**Differences between media relations and public relations.** Public relations - definitions and functions of public relations (PR) and PR specialists (presenting information; making contacts; management; image making; boosting sales; etc.). The management of communication projects (setting goals; making strategy; choosing tools and resources; implementing; monitoring; evaluation of results). Main goals of PR (making something public; creating trustworthy attitude; motivating target group to make a decision and/or act). Media relations - diversity of definitions. The relations and communication of media and groups of interest (companies, politics, celebrities, etc.). The ways of making information public (informational bulletins; thematic articles; special articles; press conferences; etc.).

**New media vs. Traditional media.** Main differences between new and traditional media (different measures of success; orientation towards community building; the concept of news provider (journalist); cost). The characteristics of new media (interactiveness; availability 24/7; content creation “here and now”; no strict control over the content; performing online). Pros and cons of new media (availability; easy information and resources sharing; effective tool for communication; speed; issue of personal responsibility).

**Aims of media relations.** Main aims of media relations: to inform (locally, regionally, nationally, internationally); to build mutually useful relations with media member; to answer reporters requests; to effectively communicate crisis situations (planning and implementing crisis management communication strategies); monitoring political, economical and social issues. The success criteria for reaching target groups.

### PRACTICE

1. Name and compare the main channels of traditional and new media channels. Name the target group of each channel and discuss the impact each channels has on its target group.
2. Create short interview on the mainstream topic for the radio. Keep in mind the aims of the media relations.

### Example of the practical exercise:

Imagine that you are the head of the NGO working with the immigrants. Your goal is to create effective relations with the local media in order to reach your target group - employers, as you are aiming at creating positive attitude towards your clients. Think of the strategy you would implement to make your information as visible as possible; cost-effective; result-driven.

## 6. New media social networks and online communication

**HOURS: 18** (theory 12; practice 6)

**Main goals:** To get to know the main advantages and disadvantages of new media; to form or deepen the abilities to name and describe the most popular social networks and channels of communication.

### THEORY

**Advantages and functions of new media.** Introduction - what is the new media? The needs for emergence of the new media (Newman R.W.: altering of meaning of geographical distance; allow for a huge in the volume of communication; Provide the possibility of increasing the speed of communication; Provide opportunities for interactive communication; Allow forms of communication that were previously separate to overlap and interconnect). The diversity of concepts of new media. Main characteristics of the new media (digital, networkable, dense, compressible, interactive, having characteristics of manipulation). The examples of the new media: news portals, blogs, wikis, social media.

**Negative effects of social media.** Psychological and physical internet and social media addiction (roots, signs, types, coping). Informational abundance and the risk of misinformation (also - fake news, propaganda wars and its impact on politics). Exposure to unsafe content for youngsters (pornography, inappropriate language and/or behavior of others). Threat to personal data (ethics and rules of sharing personal information through new media; potential risks). Threat to self-esteem and personal well-being by the comparison with others; cyberbullying; unwanted reactions. The role of media literacy in overcoming the downsides of the new media.

**Most popular channels of communication in new media (Email, Blogs, Youtube, Facebook, Twitter, LinkedIn, Snapchat, Pinterest).** Pros and cons of most popular channels of communication in new media (criterias - reliability; speed; prevalence; data protection; etc.). Functions and advantages of each channel.

### PRACTICE

1. Discuss the topics:
  - a. What are the characteristics of the new media and their impact on the mass communication?
  - b. What are the reasons that new media has become indistinguishable part of our personal and work lives?
2. Compare several types of social media (e.g. Facebook and Twitter) according to the characteristics of the new media. Find similarities and differences. Evaluate their popularity, appeal, personal safety, etc.
3. Create profile on one of the given social media networks and evaluate the value of it according to the criterias: the friendliness to user; interface; functionality; security.
4. Share the good/bad practices of using social media with other learners.

## **Example of practical exercise**

Media literacy training. According to the resonant articles found in new media and presented to the students, recognize fake news according to 5 criterias:

- The owner of the media channel (evaluating the financial resources; the main topics covered and position formulated; the reputation of journalists of the source, etc.)
- The author of the article(s) (real name or fake; the type of other articles; the other types of new media he's working in)
- The reliability of information sources (links), names of people given in the article
- The added value of the article, the true or hidden purpose of it (e.g. inform or generate clicks)

## 7. Publicity in education

**HOURS:** 18 (theory 12; practice 4 (exercises 2; seminars 2))

**Main goals:** To get acquainted and be able to identify the principles of making education public. To develop the competencies of choosing relevant educational platforms.

### THEORY

**The importance of visibility of educational processes and results.** The reasons for making education publicly visible (being noticed in the abundance of information; being used; having impact). The advantages of visibility of educational processes and results (improving educational system; identifying results and situational changes; sharing good practices; the better visibility of educational organization(s); finding new perspectives). Reciprocal impact on/of the target group.

**The principles and tools for making education public.** Values and principles of publicity in education (the openness of the educational institutions, individual scholars, educational platforms; availability of information about services and resources; the availability of the content created). The most popular and useful channels and tools to make content visible (Youtube, Facebook pages, WordPress websites, Pinterest, Canva.com, Googlesites, etc.)

**Educational platforms: examples (EPALE).** The concept of effective educational environment (dynamical environment of learning activities, created and impacted by the teacher and affected by the goal of education). The diversity of educational platforms (according to the age, target group, fields of interest; ways of educating; etc.). Popular national platforms. EPALE - a multilingual community of adult learning professionals. The functions of EPALE (sharing content; spreading good practices; discussion boards; partner search; event calendar; etc.)

### PRACTICE

1. Discuss the main advantages of making educational processes and results public. Select the best ways to outreach target groups with the educational content and name the obstacles.
2. Make a research, how the best known educational institution are interested in making the educational processes and results visible and available for public.
3. Examine national platforms for publicity in education. Evaluate them according to the criterias of friendliness to user; functionality; popularity among target groups.

### Example of practical exercise:

Make a profile on EPALE, write an article on the topic of adult education and put it online. Discuss the advantages of the platform; name the downsides.

## 8. Techniques and Tools

**HOURS:** 18 (theory 14; practice 4 (exercise))

**Main goals:** To present and deepen understanding about the main techniques and tools for information search, content and learning management. To form the competencies of choosing the right and most reliable tools for information search and content learning or management.

### THEORY

**Reliable search engines and their functions.** Most popular search engines on the internet (Google, Yahoo, Bing, etc.) and their functions. Personalization of the search (previous searches, devices, location, language). Search engine optimisation (SEO) and its functions. The specialized search engines (BASE, ScienceResearch, SpaceTime3D, Vidipedia, etc.). Smart search on the Internet (choosing unique terms; specifying the search; excluding results).

**Content management systems:** WordPress. The aims of content management systems. The functions of content management systems (content creation; content management; content delivery; content lifecycle enhancement). Advantages of WordPress (user friendly; large community of users; variety of plug-ins; wide range selection of templates; relatively secure). Disadvantages of using Wordpress (open source; too much plug-ins; frequent updates)

**Learning management systems: Moodle.** The concept of e-learning. The classification of e-learning environments (learning management systems; learning content management systems; collaborative learning environment; content management system). The functions of learning management systems (communication - email, discussion forums, conferences; collaboration - emails, project management; registration of users; managing content; educational tasks; learning and monitoring). Moodle: main functions (tasks management; discussions; choices and voting; diary; tests; resources; researches)/ Main features of Moodle (suitable for distant learning and in class; simple graphical user interface; integrated security measures)

**Massive Open Online Courses: Coursera, EdX.** The concept and history of Massive Open Online Courses. The types of Massive Open Online Courses (C-MOOCs and x-MOOCs). Target audiences of MOOCs (internal students; potential students; parents; alumni; lifelong learners; professionals; government). The advantages of MOOC (learning community; choosing personal pace of learning; no distance constraints; peer evaluation; certification). Most popular MOOCs - Coursera and EdX: comparison (advantages and disadvantages).

### PRACTICE

1. Effective search of information on the internet. Given the information by the teacher, find the information as soon as possible using different search engines. Compare the experiences. Use the same search engine, but in different languages (e.g. google.lt and google.pt) and spot the differences.
2. Using different search engines, find the information about the problems minorities face in different countries in Europe.

3. Make a user account on Wordpress, explore the possibilities of the content management system and choose the template for the website you would like to have (or the template you find the most appealing). Explain your choice.
4. Create an account on Moodle. Try some functions of it - search the content; send an email to the teacher.

### **EXAMPLE OF PRACTICAL EXERCISE**

Using any given search engine, search for the MOOC according to your field of interest. Motivate your choice of search engine and your choice of the platform for e-learning. Discuss the details of enrolling the course you found (log in information; the price; start date; deadline; certification).