Content Unit 2:

Basic Digital Competences

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1 LEARNING IN THE DIGITAL AGE

Computers, laptops, smartphones, tablets – these are all devices that have become important in education during the last years. But it is often difficult for many of us to use them, especially if we have not come into contact with them before, such as at school, in a course or at work. Many people are often afraid of doing something wrong or even destroying something.

But don't worry too much about that – with a little courage and motivation, you too can easily learn to use these devices for your learning success.

Therefore, this unit will show you how to use your computer or laptop and the Internet. Whether you're a beginner or already know a little more, **this course will help you get EVEN BETTER!**

You will learn how to use a computer or laptop, how to write and read emails, how to work with Word and PowerPoint, and how to organise your files and documents well. We will also show you how to find information on the Internet and how to protect your personal data. In addition, you will learn how to use online learning platforms and video conferencing tools, and how to solve problems with the computer or the Internet.

Learning all these things may seem hard at first.

But don't worry! With practice, you can develop and use all these skills.

1.1 Main components of a computer

In this lesson, we will look at the **basics of a computer**. Computers consist of **software** and **hardware**. We will now take a closer look at both components.

1.1.1 Hardware

Hardware = **anything you can touch**. This includes the computer itself, but also accessories such as the mouse, the monitor, the printer, etc.).

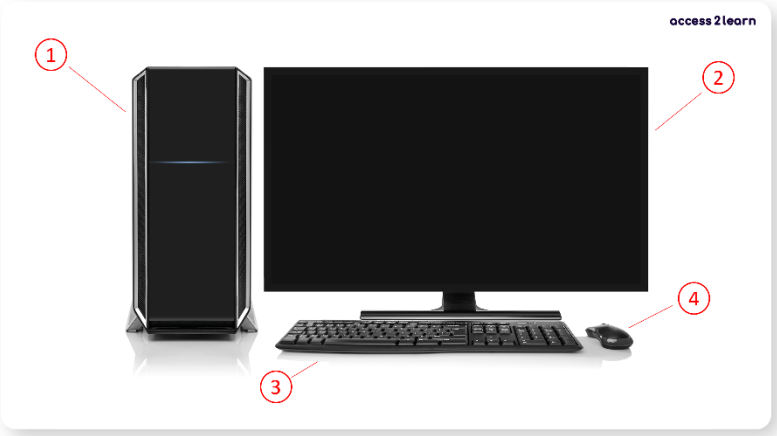
What types of computers are there? We distinguish between the following devices:

- desktop computer (stand-alone computer)
- notebook/laptop (portable computer with battery)
- smartphone/tablet

YES! Smartphones and tablets are also small computers. However, since their screen is smaller than that of a notebook/tablet or desktop computer, they are usually used differently in everyday life. These include, above all, communication (telephone, SMS, WhatsApp, Signal, Telegram, etc.) or social media (Facebook, Instagram, Twitter, TikTok, etc.). In this learning unit, we will take a closer look at the operation of computers and laptops.

Desktop Computers

A desktop computer needs a monitor, a mouse and a keyboard. It does NOT have a battery, which means it must always be connected to a power source (a power outlet). That's why it stands in a fixed place (such as a desk).



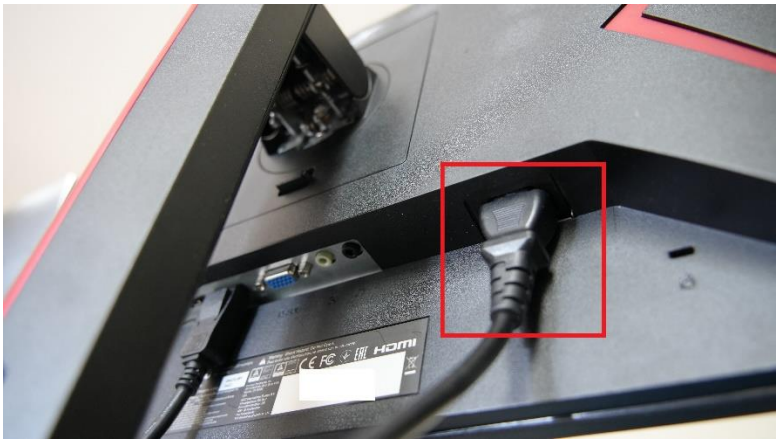
1 = Computer | 2 = Screen/Monitor | 3 = Keyboard | 4 = Mouse

How do I turn on a desktop computer?

Press the power button on the computer. This is usually located on the front or top of the case. If the device does not respond, check:

- Does the computer have power?
  On the back of the case there is a black cable that must go into the socket. Next to it, you will see a small black switch that must be set to "I".

- Does the screen have power?
  On the back of the screen there is a similar black cable, which must also be put into a power outlet:



  You will also find a power button on the screen that needs to be pressed. This can sometimes be a bit hidden - scan the screen on the bottom and side to find it.

- Is the screen connected to the computer?
  Also on the back of the screen there is a second cable that must be connected with the back of the computer and be plugged in. The most common connector for screens is the HDMI port:

  Press the power button for 10 seconds, wait a moment and press the power button again.

Notebook/Laptop

A notebook/laptop is like a desktop computer, but it can also be easily transported and used on the go. Since it has a battery, it can also be operated without a power source for a certain

period of time. In addition, the screen, keyboard and mouse (sometimes even a webcam) are already installed in the case.

1 = Keyboard | 2 = Mousepad | 3 = Screen

How do I turn on a notebook/laptop?

Press the power button. This is usually located between the keyboard and the screen or on the side of the case. If the device does not respond, check:

Does the laptop have power? If the battery is empty, the device must be connected to the power supply. To do this, the power cable must be connected to the laptop and lead into a power outlet:

Press the power button for 10 seconds, wait a moment and press the power button again.

Computers and laptops usually have small lights on the case that light up when the device is in operation. If the lights remain switched off, it means that the device has no power or a technical defect.

To connect additional hardware to the computer:

1 = USB, 2 = USB-C, 3 = HDMI, 4 = DisplayPort, 5 = AUX, 6 = Network connector]

USB

to plug in the mouse, keyboard, USB sticks, printer, scanner, external hard disk or webcams

USB-C

new form of USB port – mainly used for charging mobile devices

HDMI

for image and sound transmission. HDMI is mainly used for connecting computers to screens/monitors.

DisplayPort

similar to HDMI – can mainly be found in modern devices

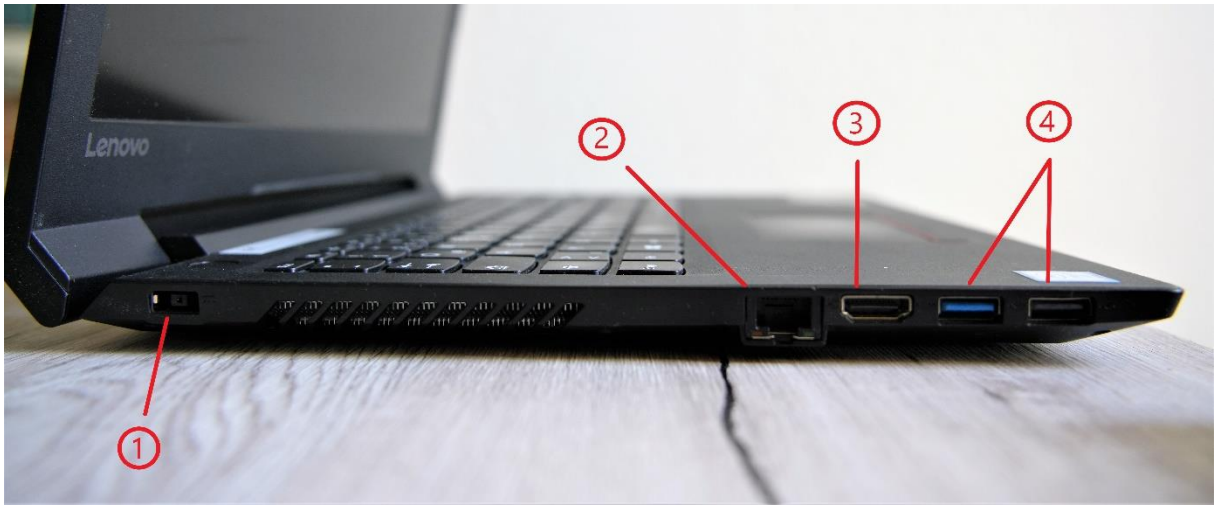
AUX

for sound transmission, e.g. earphones or music systems

Network connector

to access the internet

In the case of laptops, you will find the connectors mainly on the side and front of the case:



1 = Power supply | 2 = LAN network port | 3 = HDMI | 4 = USB

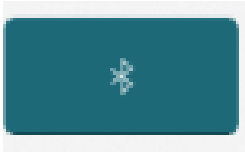
To be able to navigate practically with your computer or laptop, you should connect it with a **mouse**. This allows you to easily move around the screen and operate the device.

When using computers, you also need a **keyboard** to be able to write. You can use it to insert letters, numbers, or special characters, as well as perform some functions. You can use the "Shift" key to capitalise letters or create the special characters in the top line (for the numbers and characters).

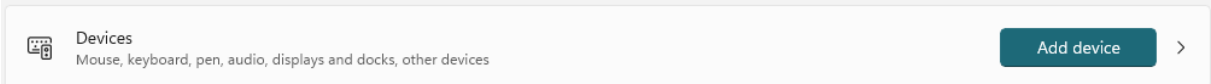
It's best to just try out your keyboard. Open a Word document or another text processing program and start typing.

Attention: The letters and other characters are not arranged in the same way on all keyboards. The arrangement varies from country to country.

Another possibility to connect different types of hardware with each other is **Bluetooth**. Data can be shared with other devices over a short distance without the need of any wires. Bluetooth can be turned on and off by clicking on the button you can see on the right.



When trying to connect two devices with each other via Bluetooth, you have to pair them first. Go to the Bluetooth settings of your computer or phone and choose the device you want to pair your device with.



Logging in to a computer

When you turn on your computer, a login window opens (enter your username and password). What this login window looks like depends on which operating system is installed on your computer. But we can't touch an operating system, that's why it's software:

1.1.2 Software

Software = all types of computer programmes

In order for a computer to be operated, i.e. to function at all, it needs an **operating system**. Normally, an operating system is already pre-installed. The most popular operating systems are:

Windows **Microsoft Windows**	Mac OS **Apple Mac OS**
Android	iOS **iOS (iPhones)**

If the computer has an operating system, it can be operated with so-called **application programmes or apps** . Well-known application programmes are, for example:

Microsoft Office	
Word	**Excel**
PowerPoint	**Outlook**

E-mail programmes	
Outlook	Gmail
GMX	

Web browser	
Microsoft Edge	Mozilla Firefox
Google Chrome	Safari

Application programmes can be installed locally on the computer (e.g. when you download and Install Microsoft Word) and also use some directly in the web browser, i.e. on the Internet.

When you are working with a computer that doesn't belong to you, you should always **log out** after using it (if possible). This way you protect your own data and allow the next user to get started. If you stop using the PC for a longer period of time, it should be **shut down**.

Reflection

Try to start your computer or laptop.

- Is it possible to start it? If not, what could you do?
- Are all hardware components connected with your computer/laptop?
- What are components that could be useful for you and that you don't possess yet?
- Can you find any of the application programmes mentioned above on your computer/laptop?

1.2 E-mails

E-mails ("electronic mail") are number 1 when it comes to digital communication! Messages are sent from one e-mail address to one or more other addresses. In addition to text, images and smaller videos can also be sent as "attachments".

You can recognise an e-mail address by the ending of the e-mail address, e.g. maximilian.mustermann@gmail.com (Gmail) or maximilian.mustermann@outlook.com (Outlook).

Why do you need an email address?

- **Communication:** E-mails are a free and quick way to communicate with others.
- **Registration:** For almost everything on the Internet you need an account that is linked to an e-mail address (e.g. social media, online banking, online shopping, etc.)
- **Work:** Most employers use e-mail as their main means of communication. And job applications are also usually sent via e-mails. WhatsApp & Co. are only for private purposes!
- **Storage:** E-mails are also great for organising documents, invoices, or contracts. If these remain in the mailbox, they can be found and retrieved again and again.

Practical relevance

Some weeks ago, Juan created an e-mail address. He is now very happy about it because this offers a lot of possibilities to him: On the one hand, he can easily communicate with his teacher. On the other hand, he can finally log in to the learning platform provided for his course. This makes it much easier for him to access all the learning materials.

There are many different email providers you can choose from, such as:

E-mail programmes		
Outlook	Gmail	
GMX	Yahoo Mail	Proton Mail

Choosing the right provider depends on your needs and preferences. If, for example, the encryption of your messages is particularly important to you, you should opt for ProtonMail. If you use a lot of Google Apps (e.g. YouTube, Maps, Translate, etc.), then try Gmail. And if you work with Office 365 (Word, Excel, etc.) in your work, then Microsoft Outlook may be the best choice. In general, however, all providers do the same!

1.2.1 Creating an e-mail account

To create a Microsoft Outlook address, go to https://outlook.live.com/. Do you need support? Watch this video to learn how to create an account with Microsoft Outlook: https://www.youtube.com/watch?v=c2T4chmJgPE

To create a Gmail account, go to https://accounts.google.com. Do you need support? Here is a video as a step-by-step guide: https://www.youtube.com/watch?v=kKxDZGNA_so

1.2.2 The most important terms and elements in your e-mail inbox

Inbox	This is where all the messages that have been sent to your e-mail address are located.
Sent	This is where all the e-mails you send are stored. However, only as copies. Sent e-mails can no longer be recalled!

Folder	In most e-mail programmes, you can use different folders to sort and organise your e-mails. For example, e-mails that are considered dangerous are automatically moved to the so-called spam folder. But you can also create your own folders to organise your e-mails by topic, sender, or other criteria.
Drafts	If you're writing an -email but aren't ready to send it yet, you can save it as a draft. Drafts are usually stored in a separate folder so you can edit and send them later.
Archive	An archive is a separate folder where you can store e-mails that you want to keep but don't want to keep in your inbox or other folders.
Wastebasket	This is where deleted e-mails are temporarily stored. Depending on the setting of the e-mail provider, these e-mails are automatically deleted after a certain period of time or can be manually deleted permanently.

Some e-mail providers also offer additional features, such as a search function to find specific e-mails or filters to automatically sort e-mails into specific folders.

1.2.3 Log in to your e-mail account

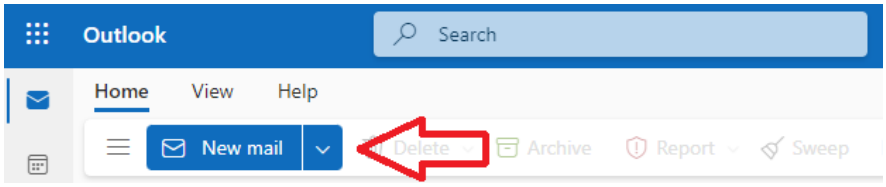
Before you can write or read emails, you need to sign up. In Outlook, for example, you can find this here:

- Visit Outlook's website: https://outlook.live.com/
- Click on "Login" in the upper right corner:

- Enter your e-mail address that you have already created and click "Next".
- Enter your password and click "Login".

1.2.4 Reading and writing e-mails

To write a new e-mail, you will find an option in the overview, such as "New Mail", here as an example Outlook:



What do you need to pay attention to when writing e-mails? These tips can help you:

- **Addressing:** Make sure you're targeting the right person or group of people and providing their e-mail addresses correctly.
- **Subject line:** Give your e-mail a meaningful subject line so that the recipient immediately knows what it's about.
- **Politeness:** Use polite and respectful language and avoid being rude or emotional.
- **Brevity:** Try to keep your e-mails short and concise. Avoid giving unnecessary information and stay on topic.
- **Attachments:** If you're sending attachments, make sure they're not too large and give a brief explanation of what's in the attachment.

What should you pay attention to when reading e-mails?

- **Beware of unknown senders:** Don't open emails from unknown senders or download attachments if you're not sure who sent them.
- **Spam filter:** Regularly check your spam folder to make sure there are no important emails in it.
- **Grammar and spelling:** Watch out for grammar and spelling mistakes to make sure you understand the message correctly.
- **Attachments:** Don't open attachments if you're not sure what's in them. Don't download attachments that you didn't expect or that come from unknown senders.
- **Ask:** If you are unsure what the sender means, do not hesitate to ask and avoid misunderstandings.

Practical relevance

Last week, Juan found an e-mail from an unknown e-mail address in his Spam folder. He thought that it might be a colleague from his course, but he was not 100 % sure about it. Thus, he asked his colleagues during the next lesson if someone was the sender. As one person confirmed that the e-mail address is hers, he decided to open the e-mail and the attachment and read through it. He was not sure if he understood everything correctly. Thus, he asked his colleague today if she could explain it to him. She became aware that she has to take special care when writing e-mails in future so that the receiver understands what she means.

Reflection

Think of the following questions:

- Do you already have an e-mail address?
- If no, why not?
- If yes, log in to your account.
- Have you already created folders to sort your e-mails? If not, think of a way to do that. What folders could you need, so that you get a better overview of your e-mails?
- Who are the senders of your e-mails? Are there some dangerous e-mails?
- Are there some spam e-mails that you haven't seen yet? Are these really spam e-mails or are they from a sender you know?

1.3 Creating digital documents

Digital documents are electronic files that contain text, images, graphics, tables, or other content. They are created, edited, stored and displayed on computers, tablets, smartphones or other electronic devices. Digital documents can be available in various file formats, such as Word documents (.doc, .docx), PDF files (.pdf), Rich Text Format (.rtf) or presentation documents (.ppt).

Why should you create documents digitally and not on paper?

- **Access & Order:** Digital files can be easily stored and found on your devices. With cloud storage, you can open your files anywhere, anytime.
- **Good for the environment:** By working digitally, you need less paper and ink. This saves resources, money and protects the environment.
- **Fast editing:** With digital files, you and others can instantly make changes, format and correct texts without needing multiple paper copies.
- **Collaboration made easy:** With digital files, you can easily collaborate with other people. Google Docs or Microsoft Office enable collaborative work in real time and improve communication.
- **Security & Data Backup:** Digital files can be easily protected. You can make backups and use passwords or encryption to limit access to important information.
- **Manage versions:** Digital files allow you to track changes and restore older versions if necessary.

Practical relevance

Lucie attends a language course to improve her English skills. She has to do a group work with two colleagues of her course. They have to create a presentation together. First, they wanted to make a hand-written poster. After talking to their teacher, they decided to create a presentation with PowerPoint and upload it to an online drive. This enables them to work together on the same document at the same time without the need of meeting at the same place. When they make mistakes in the presentation, they can easily delete the wrong words and write new ones. They also don't have to be afraid that they might forget or lose the presentation before the next lesson because the document is always saved on the online drive.

All in all, there are many benefits to creating documents digitally because it is simpler, more accessible, better for collaboration, and more environmentally friendly. There are many text programmes for different purposes and platforms. Some of the best known are:

1. **Microsoft Word**: A widely used text processor that is part of the Microsoft Office package.
2. **Google Docs**: An online word processing program that integrates with Google Drive and allows for easy collaboration.
3. **LibreOffice Writer**: A free and open-source word processor that is part of the LibreOffice suite and is a good alternative to Microsoft Word.

In this lesson, the program "Microsoft Word" will be explained to you. However, word processing programmes are usually very similar. So you should also be able to use it to operate other programmes, such as Google Docs or LibreOffice Writer.

Microsoft Word is a word processor that is mainly used for creating, editing, and formatting text documents.

Word allows you to create a variety of documents, such as:

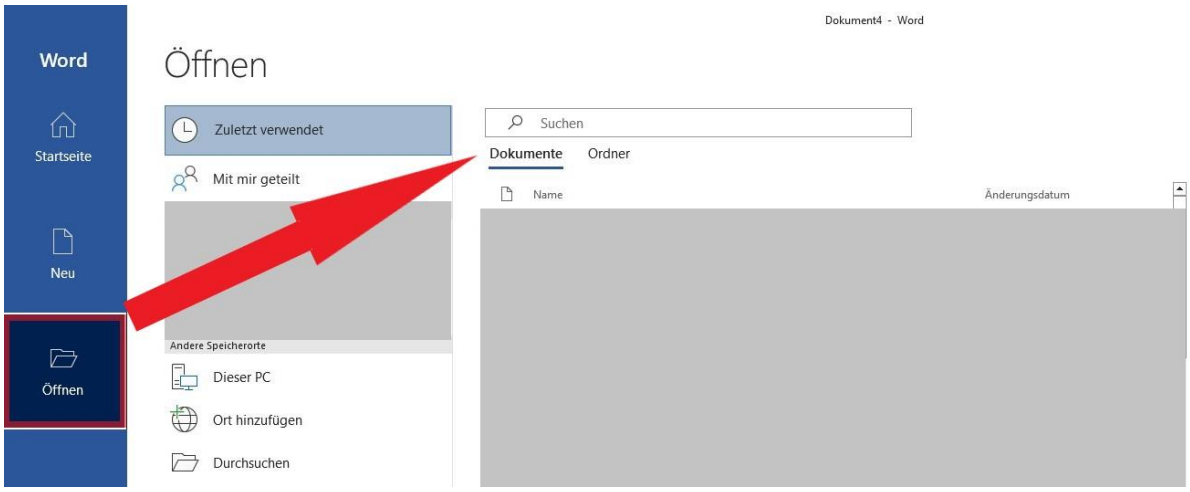
- Letters
- Reports
- Essays
- Articles

- Curriculums
- Flyers
- Booklets
- E-Books

Word offers various features, such as spelling and grammar checking, formatting options, templates, tables, images and graphics, lists, footnotes and endnotes, and tables of contents. But let's take a look at the basic features of Microsoft Word:

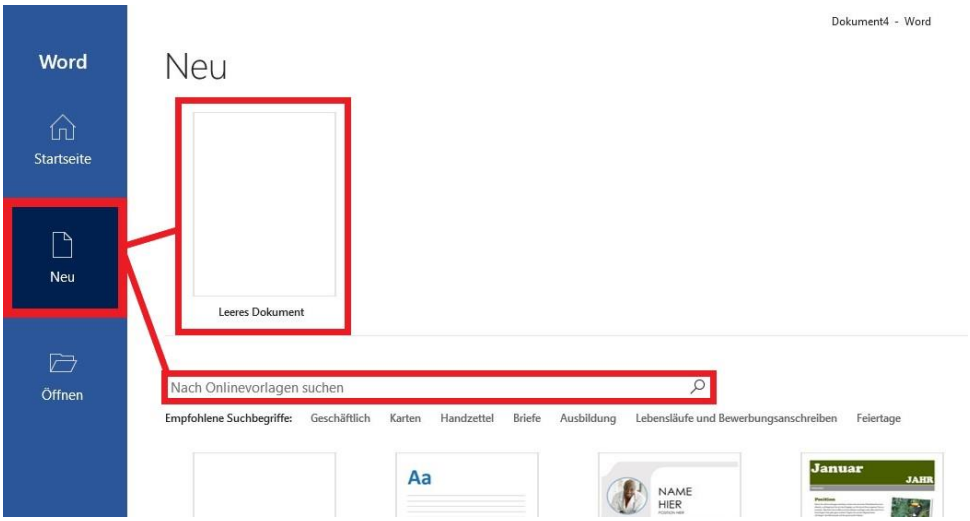
To open a Word document:

- Open the text program on your computer.
- Click “File”, and then click “Open”.
- Find the Word document you want to open and click on it.
- Press "Open" and the document will appear.



To create a new Word document:

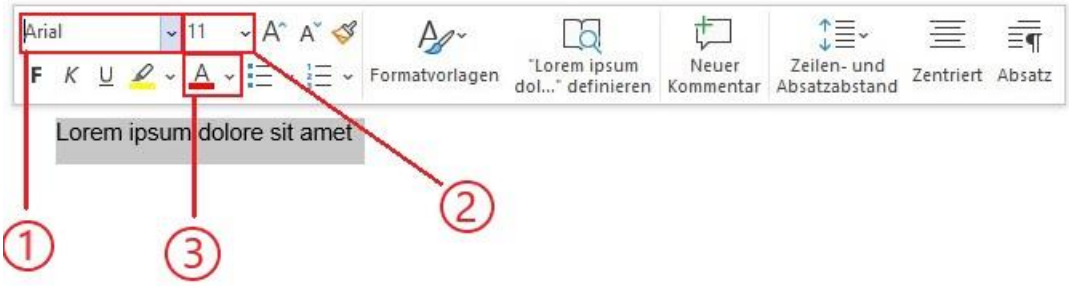
- Open the text program.
- Click on "File" and then on "New".
- Select "Blank Document" or a template you want to use.



Customize the font, size, and colour:

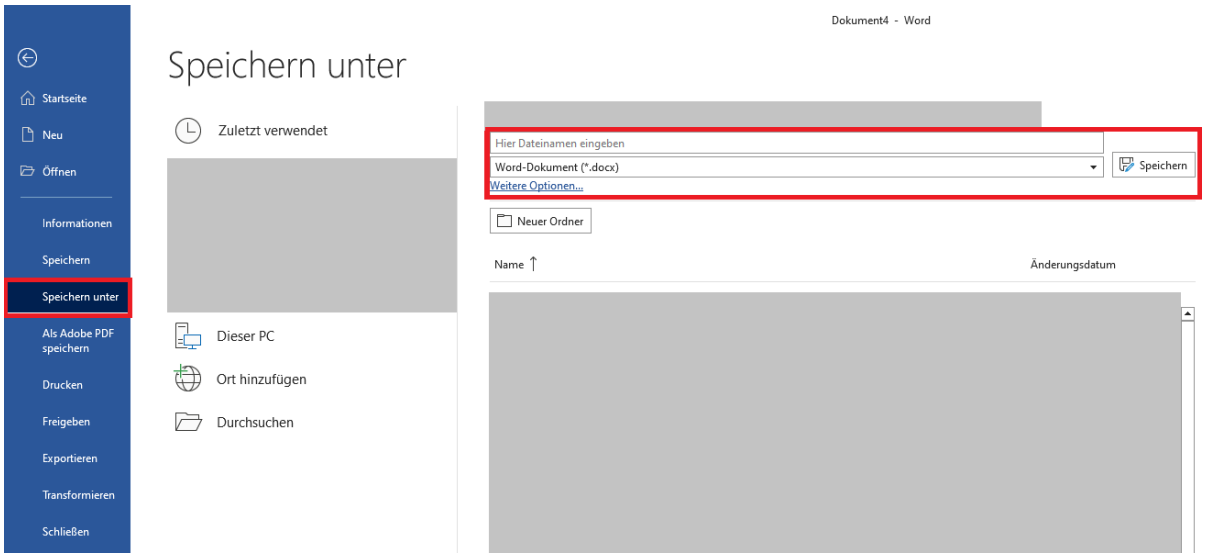
Select the text you want to change.

1. Click on the font menu to choose a different font.
2. Click on the font size menu to change the size.
3. Click the colour menu to select a new colour for the text



Save document:

- Click “File”, and then click “Save” or “Save As”.



- Enter a file name and select the location where you want to save the document.
- Select the desired format (.docx, .pdf, .rtf, etc.) from the "File Type" menu.
- Click "Save" to save the document in the selected format.

If a document is saved as a PDF, this not only serves to improve the presentation of the content, but also prohibits other people from editing their own documents.

It's important not only to store documents on the desktop, but to create a folder structure to keep your files organised and easy to find. For example, if you store all documents in a single folder on your desktop, it will be harder to find specific files when you need them.

A folder structure helps you categorise and organise your files. For example, you can create a folder for important documents such as invoices, tax records, or work projects. Then, within these folders, you can create additional subfolders for specific documents or projects.

You can create a folder structure in your Explorer to make saving and finding documents easier. You can find out what the explorer is and how it works in the following video:

Windows File Explorer

It may also make sense to use online drives such as Google Drive, Dropbox, or OneDrive. These services allow you to store your files online and access them from any device with internet access. This allows you to access your files on the go without having to take them with you on a USB stick.

Online drives are also an easy way to share documents with others and collaborate on projects. For example, you can create a folder for a team project, and all team members can store and access their files in that folder.

1.3.1 Creating presentations with PowerPoint

To create and save a PowerPoint presentation, you can follow these steps:

- Open Microsoft PowerPoint on your computer.
- Click "New Presentation" or "Blank Presentation" to start a new presentation.
- Choose a design you like or start with a blank slide.
- Add text, images, graphics, and other elements to your slides by clicking the appropriate buttons on the ribbon.
- Design your presentation by changing colours, fonts, and other visual elements.
- Click "File" and then "Save As" to save your presentation.
- Give your presentation a descriptive name and select the folder where you want to save the presentation.
- Click "Save" to save your presentation.

That's it! Now you have created and saved a PowerPoint presentation. You can open the presentation later by opening Microsoft PowerPoint and clicking “File”, and then clicking “Open”. Select your saved presentation and click "Open" to edit or present it.

Reflection

- Do you already know what functions Microsoft Word and PowerPoint have? If not, open a new document and click through the menu. Try to create some text and to format it.
- Is it easy for you to format your text?
- Are you able to save your document?
- Where do you need some help? You could ask your teacher or a family-member or friend if they can explain those things to you.

1.4 The Internet

One can use the internet to send emails, learn, browse websites, stream music and videos, use social networks, or do online shopping. The internet also allows real-time communication with other people around the world through various services such as video or voice chat.

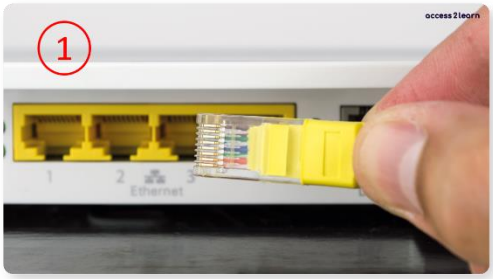
The Internet is a **vast network of computers** that are connected to each other. These connections allow information and data to be sent from one computer to another, regardless of where the computers are located.

1.4.1 How can I connect to the Internet?

To access the Internet, you need a device such as a computer, tablet or smartphone and an internet connection.

There are two ways to connect a laptop, tablet or mobile phone to the Internet: via a **network cable** or via **Wi-Fi**.

1. Network cable: If your device has an Ethernet port, it can be connected directly to the router or modem using a network cable.



The cable plugs into the Ethernet port of the device (1) and the LAN port of the router or modem (2). The cable establishes a wired connection to the Internet.

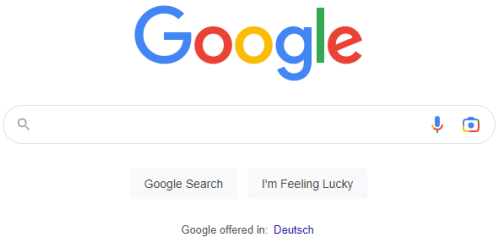
2. Wi-Fi (wireless): Most laptops, tablets, and cell phones have Wi-Fi, which allows you to connect to the internet wirelessly.

To connect to Wi-Fi, you'll need to make sure your device is connected to your router's or modem's Wi-Fi network. You'll need to enter the Wi-Fi network password to connect. Once you're connected, you'll be able to use the internet.

To ensure a stable Wi-Fi connection, it's important that you're close to the router or modem and that no obstructions such as walls or furniture interfere with the connection.

1.4.2 How can I open the Internet?

Once you are connected to the internet, you can open different browsers to access the internet. For example, there is the **Microsoft Edge Explorer, the Google Chrome browser or the Mozilla Firefox browser.** Once you've opened the browser you want, enter the URL of a website you want to visit in the address bar. For example, "www.google.com". If you press the “Enter” button, you will be redirected to this website.



In the search field, enter keywords or questions. Then click on "Google Search" or press the “Enter” button to start the search.

Google will show you a list of results. Click on the link to open a website that contains your desired information. When you're done, you can either close the open website or use the back button in the browser to return to the search results.

Important

In order to find reputable information on the Internet, one should make sure that the sources are clearly stated and come from trustworthy organisations. Expert opinions can also be helpful. Wikipedia is known for sometimes containing inaccurate information, so you should pay attention to this.

1.4.3 Freely accessible learning materials

On the Internet you can find information about all sorts of things. This is precisely why you can also use the Internet well to support your learning process.

Here are some examples of websites with free learning materials:

- https://www.klett-sprachen.de/fuer-erwachsene/c-1164
- https://anton.app/en_gb/
- https://sprachportal.integrationsfonds.at/english/learning-german

You can also use the **YouTube** page as a learning support. You will find a lot of free tutorial videos on a wide variety of topics. Just visit the site and search for topics you are interested in: https://www.youtube.com/

Reflection

Think of a topic you are interested in. Then go to the internet and try to find a course relating this topic. Try to find out when the course starts and what content it covers.

- What were the main challenges when searching for this information?
- Was it easy to enter the internet?
- Was it easy to search for the information you wanted to get?
- Did you find the information you wanted to have?

1.5 Data Privacy and Security

Digitisation and increasing Internet use are also increasing the risk of IT attacks or data misuse.

For example, do you know how to protect yourself from IT threats? What data do you share on the Internet? If not, here's what you'll learn:

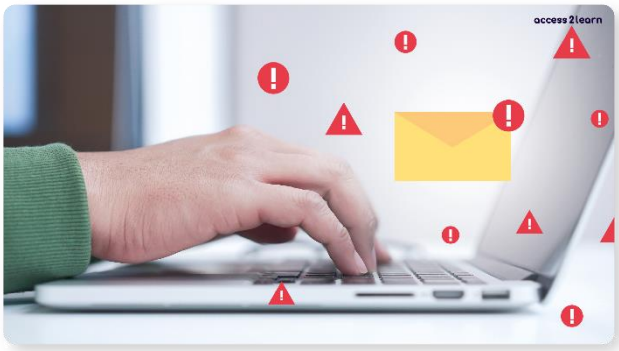
1.5.1 IT security

IT threats are diverse and often criminal in nature. Most of the time, they are intentionally carried out by external persons or organisations. The reasons for this range from theft to sabotage to political motivations. In the same way, human error, technical failure or force majeure (e.g. due to power failure) can also be the cause of IT threats.

The main types of threats to private users are:

- **Viruses or worms** (infiltrated programmes that are dedicated to a programming task, such as tracking down passwords; they are usually distributed via mass e-mails or via "pop-ups", i.e. a suddenly appearing website)
- **Trojans** (also known as "Trojan horses"; they hide behind a seemingly useful program and relay data and information in the background)
- **Spoofing/phishing** (fake websites or emails trick the victim into actively sharing their passwords or account details)

The most common IT threats are therefore caused by installing software or reacting (e.g. by clicking on a link) to dubious e-mails.



To keep the risk of an IT attack as low as possible, you should consider the following points:

- Install only authorised applications/software.
- Watch out for fake email sender addresses.
- Use strong and different passwords (the more special characters, numbers and letters, the better). And as tempting as the thought may be, sticky notes with the most important passwords on your desk are not a good idea!
- Enable your firewall and install an antivirus. Antivirus programmes automatically scan the IT system and identify and remove malicious elements. Firewalls detect unauthorised access from outside and prevent it.
- Perform regular updates and backups. Updates are necessary to keep the software and its ability to fend off new viruses up to date. Backup means manually storing your computer data on an external storage device (such as a hard drive or USB stick). This protects you in the event of data loss.

1.5.2 Privacy

The term data protection has less to do with the protection of technical data (such as backups). Data protection means protecting people from misuse of their **personal data.**

Personal data is information that uniquely identifies or makes identifiable an individual. Under certain conditions, they are stored by Internet providers, online retailers and all providers of products or services.

Example

Examples of personal data are:

- Name
- Date of birth
- Address
- Telephone number
- Bank account details
- Social security number
- Appearance/photos of people/physical characteristics

When is personal data stored?

The principle of data protection stipulates a general **ban on the processing of personal data**! This means that a company or a person may ACTUALLY not collect, record, organise, store, adapt, read, query or even pass on any personal data.

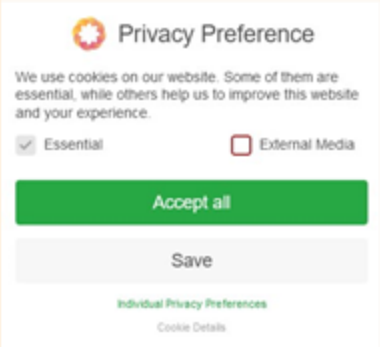
But there are some exceptions:

- Consent (e.g. by signing a petition, clicking on a box on a website or selecting a selection of technical settings of an Internet service)
- Condition for the fulfilment of the contract (e.g. the specification of a delivery address when placing an order)
- Legal obligations (e.g. ministries of finance or hospitals that are required to retain personal data)
- Vital interests (e.g. for the necessary observation of health conditions, natural disasters or epidemics)

However, most of the data is collected via "consents". For example, do you know the term "cookie policy"?

Example

If you visit a website on the Internet and accept its cookie policy, then this is considered consent to the storage of your data.



Screenshot: https://access2learn.eu/open-educational-resources/, 22.03.2023

So, before you accept, check **WHAT** data is stored and **TO WHOM** it is shared. In addition to "Accept all", you usually have the option "Reject all" or "Settings", which you can use to restrict your consent.

Why is my personal data worth protecting?

If you disclose personal data, it will be stored, processed and passed on to authorised interested parties. Your data is linked and merged into an overall picture. This overall picture, also known as **digital identity**, allows conclusions to be drawn about your behaviour, needs or political views.

So, the more data you reveal, the better companies can offer you their products. Of course, hackers also know the importance of data. It happens again and again that data thefts take place and companies or private individuals are blackmailed with information.

Therefore, pay general attention to what information you disclose. As a rule, particularly sensitive data has no place on the Internet.

Sensitive data is particularly sensitive personal data, such as political opinions, trade union memberships, religious beliefs, health data or sexual orientation.

Practical relevance

Juan heard about data privacy in the blended learning course about digital competences. He already knew that this is an important topic, but he never knew how to protect his data and his device. Now he learned how to do that.

First, he changed his password to a stronger one and he remembered not to write it down on his desk. He only has it in his mind. He also installed an anti-virus-software so that his computer is safe. Before downloading new applications, he always asks his friend who knows everything about this topic to check if they are reputable. When they are not, he doesn't download the app.

He also wants to save his personal data, so he carefully checks where he enters his personal data and how he could change some settings on websites so that his data can't be shared with third parties.

What rights do I have as a data subject?

If it happens that your data is stored and you want to revoke this afterwards, you have the following options:

- Right to transparent information and communication
- Right to rectification
- Right to information
- Right to erasure and to be forgotten
- Right of revocation
- Right to data portability

Example

Right to information: You contact an online retailer from whom you bought something some time ago. They would like to know what data has been stored about you. The information must then be provided within one month.

Right to deletion: You contact a job platform that you no longer wish to use. Deleting your account does not guarantee that your personal information will be deleted. In an e-mail, you once again clearly state that your data should be deleted immediately. The platform also has one month for the deletion process.

Right of withdrawal: You have discovered an old photo of you at a party on a website. At that time you gave your explicit consent, but now you want to revoke it. In this case, the site can either censor (anonymise) you in the photo or remove the photo altogether.

Companies or individuals who store your data must act quickly and in compliance with the law on the data protection requests described above. In the event of data protection violations, there is not only a risk of financial penalties, but also an enormous competitive disadvantage and damage to the company's image.

As you can see, data protection can be interpreted as the **right of every person to make their own decisions who has when and to what extent access to their own personal** data.

Nevertheless, you should already handle your data wisely, carefully and sensibly!

Reflection

Think of the passwords you use.

- Are you using the same password for more websites?
- Are your passwords difficult to guess?
- How do you remember your passwords? Do you write them down somewhere?
- Are you changing your password on a regular basis?

1.6 Learning Platforms

Learning platforms enable learning on the Internet. You can see a learning platform as an educational institution. By participating in a course, you get access to the learning platform (login). There you will find information, learning materials, communication options and/or other activities, such as work assignments, tests, surveys, interactive quizzes, etc. before.

© Canva

There is a huge selection of learning platforms on the Internet. In this learning unit, the focus is on self-learning platforms that cover different topics and learning styles. Here are some of the most well-known:

Khan Academy	An online learning platform that offers educational materials in the form of videos and interactive exercises for students of all ages. It is financed by donations and is therefore completely free of charge.
Coursera	A platform that offers online courses, specialisations, and degrees in collaboration with leading universities and institutions worldwide. While some courses are free, other courses, specialisations, and certificates may incur fees.
Udemy	A platform that offers online courses on a variety of topics, from programming and web development to art and music.

edX	A non-profit online learning platform that offers courses from prestigious universities such as Harvard, MIT, and Berkeley. edX has a wide range of free courses, but some courses and certificates may incur fees.
LinkedIn Learning	A platform that offers a wide range of video courses on job-related topics such as programming, design, marketing and communication.
Udacity	A platform focused on technical courses, especially in areas such as artificial intelligence, machine learning, data science, and web development.
Codecademy	An interactive online learning platform that offers programming courses for beginners and advanced learners. Offers a free basic version with access to basic course content. For additional features, projects, and personalised support, there's a paid Pro version.
Duolingo	A mobile and web-based application that offers playful language learning. The basic version of the language learning app is free and funded by advertising. There is also a paid version with no ads and with additional features called Duolingo Plus.
Skillshare	An online learning community that offers courses in areas such as design, photography, marketing, and art.
FutureLearn	A platform that offers online courses and programmes from leading universities and organizations from around the world.

Keep in mind that the Udemy, LinkedIn Learning, Udacity, Skillshare, and FutureLearn platforms typically offer paid courses! Occasionally, however, free courses or test access can also be provided. It is therefore worthwhile to regularly check the websites of these platforms to stay up to date with current free offers.

1.6.1 Advantages and disadvantages of self-learning platforms

There are many benefits to learning with online platforms, but there are also some challenges that you should consider.

Advantages:

1. **Flexibility:** You can learn at your own pace, at a time that suits you best, and adapt your learning process to your personal needs.
2. **Accessibility:** You'll have access to a wide range of courses and resources from anywhere in the world, as long as you have an internet connection.
3. **Cost:** Many online learning platforms offer free or low-cost courses, which often cost less than traditional educational offerings.
4. **Variety:** You can choose courses and programmes from different specialties and from different providers, giving you a wide range of learning opportunities.
5. **Up-to-date:** Online learning platforms are often updated regularly, giving you access to up-to-date information and the latest trends in your field.

Challenges:

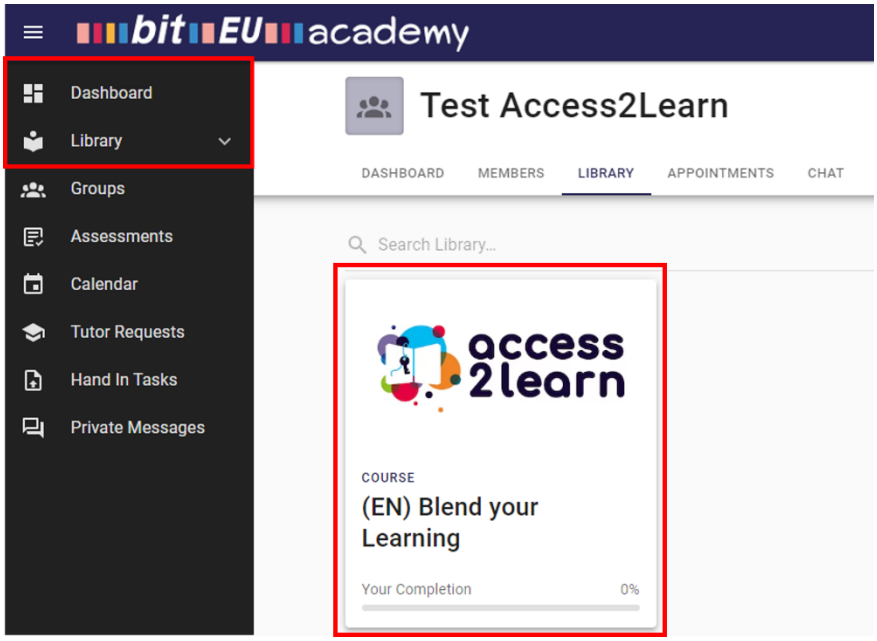
1. **Self-motivation:** You need to be disciplined and motivated to guide yourself through the learning process, as there are no fixed structures like traditional educational offerings.
2. **Social interaction:** Online learning platforms can give you fewer opportunities for direct interactions with teachers and fellow students, which can lead to a lack of social support and collaboration.
3. **Technical issues:** You may encounter technical difficulties, such as internet connectivity issues or platform usability, that can interfere with your learning process.
4. **Quality Assurance:** The quality of the courses offered can vary, and it can be difficult to choose the best courses or providers from the variety of options available.
5. **Recognition:** Certificates or degrees from online courses may not always be recognised by employers or educational institutions, especially if they are lesser-known providers.

It's important to weigh these pros and cons to find out if self-paced learning with online learning platforms is right for your individual needs and goals. You are currently on the online learning platform "bit EU academy". Have you already got to know all the functions?

1.6.2 Learning with the bit EU academy platform

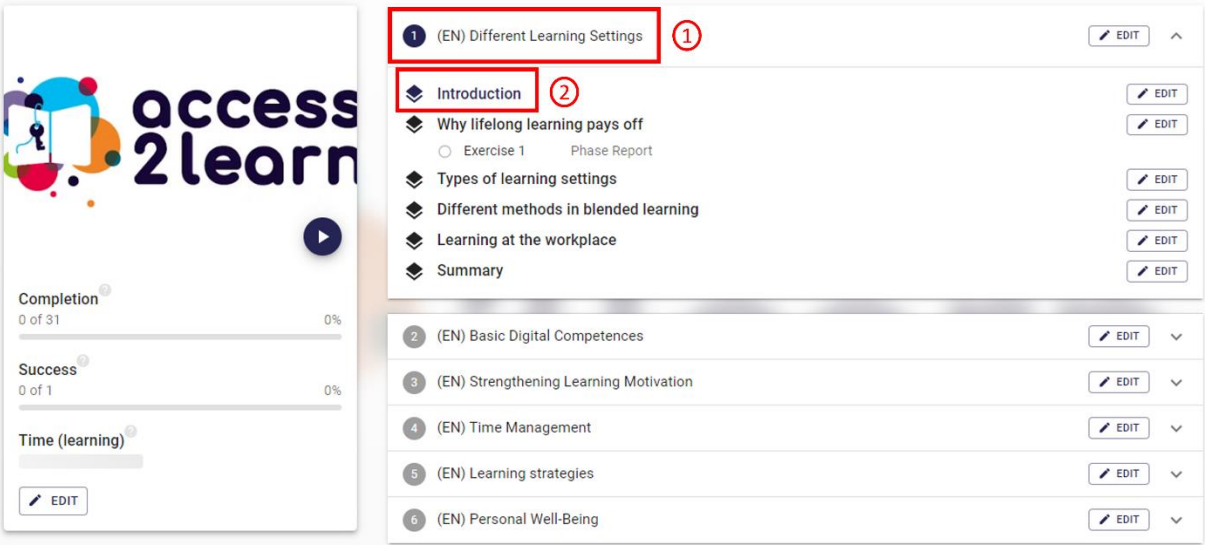
Opening learning content

Learning content (course modules) can be accessed via the library or via the dashboard. Each module can be opened with one click.

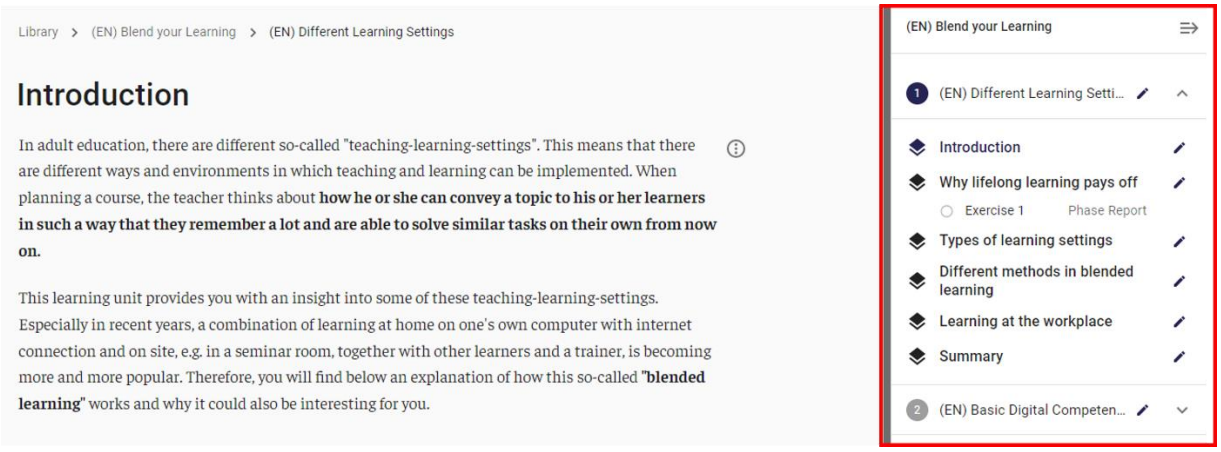


Navigating content

Individual learning contents are opened by selecting a chapter (1) and by clicking on another learning sequence/exercise (2):

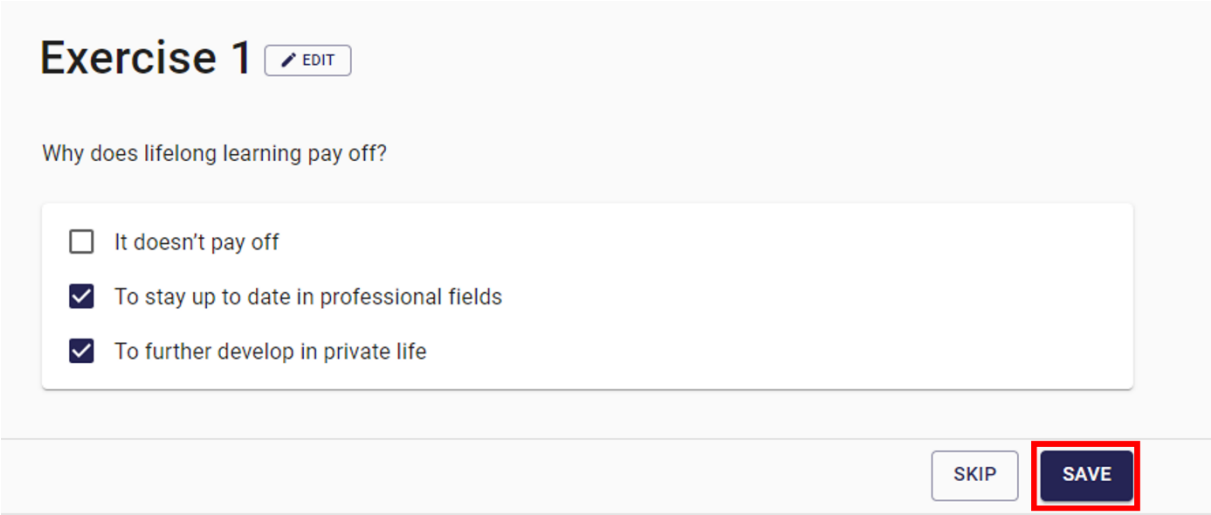


Using the **index** of each course module, you can switch between learning sequences and exercises as you wish:

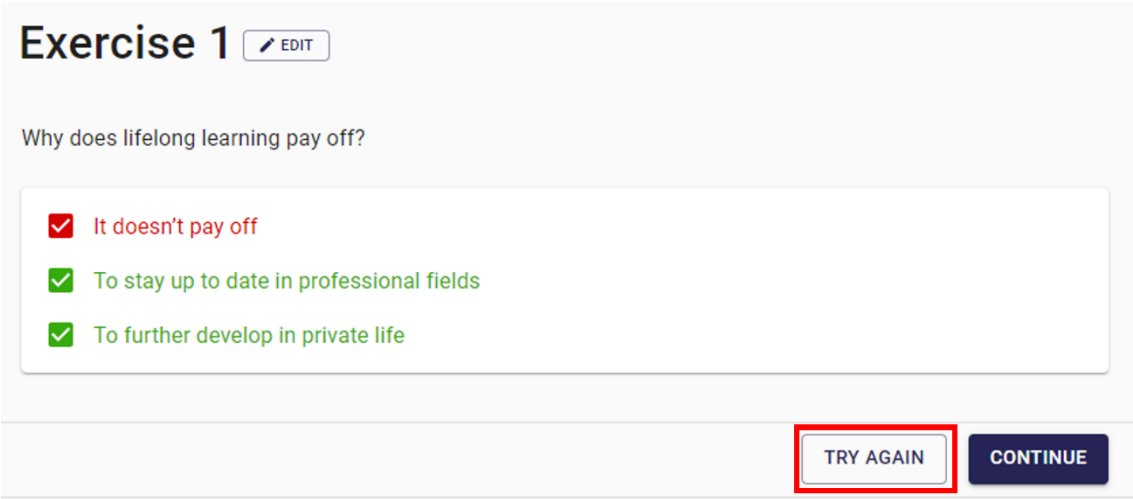


Working with exercises

Each exercise that has been fully completed can be checked automatically:



The answers are then marked as true (green) or false (red). You can then reset the exercise and try again or switch to the next exercise right away.



You can find out exactly how learning works on this platform in the following video:

Learning Platform "bit EU academy"

Reflection

Have you ever tried to learn on an online learning platform?

- If yes, what did you like most about it? What were the main challenges?
- If no, what are the reasons for that? What has to be changed so that you want to learn on an online platform? What could you personally do to get more motivated for learning on such platforms?

1.7 Video conferencing tools

Video conferencing tools are software applications that allow users to **communicate with other people via the Internet in real time, seeing and hearing each other through video and audio connections.** These tools allow you to conduct virtual meetings, training, presentations, and other types of collaboration and communication activities without the need to be in a physical location.

Video conferencing tools can usually be used from various devices such as desktop computers, laptops, tablets, or smartphones. They also allow users to share documents and other digital content to collaborate on. Some tools have additional features like screen sharing, meeting recording, and group chat to improve collaboration.

Some of the most well-known video conferencing tools include Zoom, Microsoft Teams, Google Meet, and Skype.

Practical relevance

Julia, the teacher of Juan, is teaching her learners in blended learning mode. Sometimes, they meet in person at the educational institution and sometimes, the learners have to study on their own. To support her learners when studying at home, she organises one online lesson per week which is done via the video conferencing tool Microsoft Teams. It is very similar to face-to-face teaching in the classroom – she can see her learners and talk to them. She can also share presentations. The learners can ask questions if they have some and they can also work together in groups. Juan likes that a lot because he can attend these lessons from home and can ask his teacher when he has some problems.

1.7.1 Microsoft Teams

Microsoft Teams is a service of the Microsoft 365 suite (Office, Outlook, Sharepoint, etc.). A **valid Microsoft 365 account is required** to hold Teams meetings. If you are only invited to the meeting, a valid account is not necessary and you can attend by clicking on the link.

You can schedule a meeting directly in the Microsoft Teams application or in your mail programme (e.g. if you use Outlook). Enter the e-mail addresses of the people you want to join the meeting directly in the meeting scheduler. Alternatively, you can copy the meeting link and make it available.

For better performance and the full range of functions of Microsoft Teams, it is recommended to download the service as an app or as an application: Download

Features within a Microsoft Teams meeting (from left to right):

- **Overview of the participants**: Do you want to check whether all people are already in the room or invite others? Then click on the icon with the people on the far left.
- **Conversation/Chat**: Questions or links can be shared by writing.
- **Raise your hand**: If people want to speak, they can raise a virtual hand so as not to disturb the person speaking. In addition, this function can be used to carry out votes (e.g. "If you would like to have a 5-minute break now, please raise your hand".)

- **Breakout Rooms**: This feature allows you to set up group exercises, meetings, or discussions. If you are the moderator of the meeting, you can determine the number of rooms and decide which people are assigned to which rooms (automatically or manually).
- **Other settings**: Here you can manage settings, such as those of your device, your meeting or your recording.

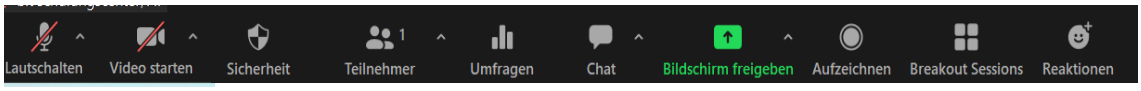
> **Important**
>
> When recording meetings, always pay attention to data protection and ask for the explicit consent of all participants.

- **Camera/microphone:** Click on them to turn on/off your camera or microphone.
- **Share content:** By clicking on the button on the right side (with the arrow up), you can share your screen, e.g. to show a presentation. The designation "Screen 1" means that all the content of your screen, i.e. what you see, is also displayed to the participants. For example, if you only want to present your PowerPoint, you can select this application under "Window". Above the various windows you will find a digital control "Share system sound" - this can be activated especially when you play audio samples or videos with sound!

1.7.2 Zoom

Zoom is another popular video conferencing tool. It is often used for meetings, training and online events. To participate in Zoom meetings, it is only necessary to download the App, but you don't need an own account for it. Only when hosting a Zoom meeting, an account is needed. In the free version, meetings with more than 2 people are limited to 40 minutes.

Zoom meetings can be scheduled in advance and the meeting link can be shared with others via e-mail, for example. The functions of Zoom are very similar to the ones of Microsoft Teams:



- **Microphone/camera:** You can turn on and off your microphone or camera by clicking on the buttons on the left.
- **Overview of participants:** By clicking on the button with those two people, you can see all people participating in the meeting.
- **Polls:** You can create polls on the button next to the participants.
- **Chat:** When opening the chat, you can communicate with others.
- **Share content:** By clicking on the green button, you can share your screen with others.
- **Recording:** You can record the meeting.
- **Breakout rooms:** By clicking on the button with the four boxes, breakout sessions can be started.

1.7.3 More video conferencing tools

Skype is one of the oldest programmes and offers basic features such as video calls, audio calls, and text messages.

Google Meet is part of Google and offers similar features to the other programmes, but also integration with other Google apps such as Calendar and Gmail. It can automatically create subtitles. Since the beginning of the Covid-19 pandemic, Google Meet has been free for all users (except for some special functions).

Reflection

In your opinion, what are the advantages of video conferencing tools? Have you ever used one for learning? Why could they be beneficial for your learning?

1.8 Problem solving

When you run into problems with your computer, it can be easy to get frustrated and stressed. However, in this situation, it is especially important **to remain calm and proceed systematically** in order to effectively solve problems and prevent possible damage.

By taking a structured and methodical approach, you can ensure that you successfully solve the problem. A quick and chaotic solution can lead to additional problems and only aggravate the situation. So, if you encounter any problems with your computer, you should keep a cool head and take a step-by-step approach to effectively solve the problem:

1. **Try different solutions when the computer doesn’t start**
   If your computer doesn’t start, first check that all cables are plugged in properly. Make sure the power supply is working by checking the power outlet and power cord. If you have a laptop, check that the battery is sufficiently charged.

2. **How to deal with a screen that doesn't work**
   If your screen doesn't work, turn it off and on again. Also check the cables that connect the screen to the computer. Make sure they are firmly seated and plugged into the correct ports.

3. **Restart the computer if it freezes**
   Sometimes, your computer may freeze or glitch. In such cases, a restart can help. Before you do that, remember that all open documents and programmes will be closed. Save your work regularly to avoid data loss. To restart the computer, you can press and hold

the power button until it turns off, and then turn it back on. Another option is to press the keyboard shortcut Ctrl + Alt + Del and click "Restart".

4. **The features of Task Manager**
   Task Manager is a useful tool for closing programmes or restarting the computer. You can open it by pressing the keyboard shortcut Ctrl + Shift + Esc or right-clicking on the taskbar and selecting "Task Manager".

> In Task Manager, you can close programmes that are not responding or restart the computer. You can also change the password of your user account by clicking on "User Details" and then selecting "Change Password".

5. **Seek help from the Internet**
   If you have simple problems with your computer, you can often find solutions by searching for guides and videos on the Internet. There are many websites and YouTube channels that offer step-by-step instructions for solving computer problems.

Reflection

When a problem occurs on your computer, laptop or smartphone, what are you doing? How are you trying to solve the problem? Do you think you could try to solve more problems on your own in future? Whom could you ask for help if you cannot solve problems on your own?

1.9 Summary

There are desktop computers (stand-alone computers) and laptops/notebooks. The **hardware** is anything that can be touched (e.g. monitor, mouse, printer, computer itself, etc.). On the body of the device, you will find various interfaces to connect other hardware to the computer. These include USB, USB-C, HDMI, DisplayPort, AUX or the network connection. The **software** is anything that runs as a program on the computer. The most well-known software for computers is the operating system that manages the computer. Well-known operating systems include Microsoft Windows and Apple's MacOS. Other software programmes that can run on the computer include applications such as word processors, spreadsheets, and image editors.

An **e-mail** is a digital message that you can send to one or more people. You can send and receive e-mails on your computer, tablet, or smartphone. There are various e-mail providers such as Gmail, Outlook or Yahoo that allow you to create an e-mail address.

Creating digital documents is an important skill in today's technology-driven work environment. A digital document can have a variety of formats, such as a text document, a presentation, or a spreadsheet. To create a digital document, you need software such as Microsoft Word, PowerPoint or Excel. Digital documents can be easily stored, shared, and edited. You can also make sure that the document is accessible to other people by saving it to a shared folder on a cloud service like Google Drive or Dropbox.

The **Internet** is a network of computers around the world that allows people to communicate with each other and share information. To access the Internet, you need an Internet service provider, a computer or device with an Internet connection and a web browser (Mozilla Firefox, Microsoft Edge, Google Chrome, Safari). You can then visit websites, send emails, and use social media to interact with other people online.

The **security and privacy of data** are important aspects of computer use and the Internet. It is important to ensure that personal data such as passwords and financial information are kept safe. This can be done through the use of antivirus software, firewall protection, and regular updates of operating systems and applications. The **GDPR** (General Data Protection Regulation) is a European regulation that regulates the protection of personal data and the rights of individuals in relation to their data.

Online learning platforms are websites that offer online courses and resources. These platforms can offer both free and paid options. You can take courses on various topics. Some of the most well-known online learning platforms include Udemy, Coursera, and Khan Academy. Online learning platforms offer users the opportunity to expand their skills and knowledge from home and are especially useful for people who are unable to complete traditional education due to time or money constraints.

Video conferencing tools allow people to communicate and watch in real time over the Internet. There are many different video conferencing tools, such as Zoom, Skype, Google Meets, and Microsoft Teams. These platforms offer features such as video calling, chat, screen sharing, and integration with other apps. They're a convenient way to hold virtual meetings or collaborate with people around the world, especially when face-to-face meetings aren't possible.

Problem-solving skills are important when using computers. As a user, it is important that you can deal with basic problems. For example, you can restart the computer or check the connection cables. If the problem is more complex, you can contact online support or professionals. It is important to remain calm and proceed systematically in order to effectively solve problems and prevent possible damage.

2 SOURCES

https://www.microsoft.com/en-us/microsoft-365/microsoft-office

https://about.google/brand-resource-center/logos-list/

https://www.gmx.at/

https://www.mozilla.org/en-US/firefox/new/

https://www.apple.com/

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