Digital applications for effective learning

Possible uses, applications, practices

Marketplace of Knowledge for Digital Education Methodology

2020-1-HU01-KA226-SCH-094158









Introducti on

The education environment has changed a lot in the last decade, but the COVID-19 closures have brought a leap forward in the use of technology and digital tools. The move to online teaching and continuous teacher-student interaction in schools has been replaced by a shift towards independent learning and a much more autonomous approach to learning than before.

This has caused many difficulties, but has also allowed new ways of learning and teaching to flourish that are better adapted to the digitalised environment of the 21st century. This is why it is important to apply the new methodologies learned and used during the pandemic, which take advantage of the possibilities offered by digital technology, to the context of present-day education, now that the epidemic has passed.

In this guide, we provide examples and exercises of applications that enable visualisation of information and online collaboration, helping you to learn effectively at your own pace, adapt to your individual learning needs and provide a positive experience.





1. Word cloud creation

What is a word cloud?

A word cloud is a visual tool that represents the words in a text in a large cloud of letters. The size of the words is proportional to their frequency of occurrence in the text.

When using the word cloud, we build on the fact that people perceive visually. When we see a word cloud, we immediately notice the largest letters, which are the most frequently occurring words. This helps us to identify the most important topics in the text, to collect keywords. It also helps you to memorise important information by visualising it.



What can we use the word cloud for?

- We can collect the key words and key phrases in the text. Using such a word cloud helps you to learn the material. When a student sees a word cloud, he or she immediately notices the largest letters, which are the most frequently occurring words.
- We can display the text visually. You can insert the word cloud into a presentation or document on the topic.
- We can gather opinions, feelings and questions about the text in class.

The resulting word clouds can be shared online or downloaded as image files and printed.







Customizable word cloud builder app



https://wordart.com/create

The Wordart application allows for individual work. Students can set the format of the word cloud (shape, font used, word layout, etc.) through different menus. They can also enter a ranking when entering words, indicating the order of importance of each word.

Wordart creates a graphic from the words you type, using the words as graphic elements. Each word occurs more than once - the number of occurrences and the font size of the words correspond to the ranking given. Colours can be assigned to each word.

The Wordart word cloud helps you process and memorise new knowledge. The word ranking shows the importance of keywords and the colours help to categorise information.

Thanks to these visual elements, it can be used to help process and memorise new knowledge, to gather prior knowledge or to help review and summarise.

Exercise

Read the text about Shakespeare's theatre (https://bit.ly/Shakespeare_szoveg)



Create a word cloud in Wordart on the following topics:

- Characteristics of medieval theatre
- The creative periods of Shakespeare
- The Globe theatre

https://youtu.be/kmcWeD3GZ0o







Collaborative word cloud builder application



https://www.mentimeter.com

In the Mentimeter app, either the teacher or the students can prepare a glossary or a set of tasks that can be answered by the students via a mobile or online app. You can specify how many words each respondent can enter, and the words they enter are displayed in a word cloud that is generated as a result. This dynamic evolution of the glossary inspires learners by providing a visual representation of key terms in the topic.

The word cloud displays the exact words you have entered, with words that are repeated more than once being given a larger font size.

Good for joint project work, brainstorming, collecting prior knowledge or for a review and summary.

Practice

Read the text on Shakespeare's theatre (https://bit.ly/Shakespeare_szoveg)



https://youtu.be/FvwMqpWtRrA

Create a word cloud in Mentimeter on the following topics:

- Characteristics of medieval theatre
- The creative periods of Shakespeare
- The Globe Theatre







2. Making a mind map

What is a mind map?

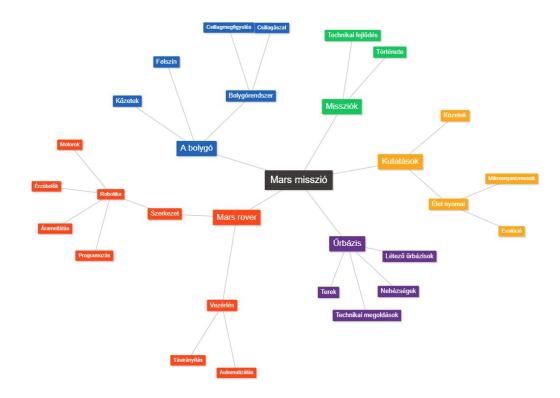
A mind map is a visual tool that illustrates the relationships, cause and effect relationships or hierarchies between concepts.

The centre of the mind map is the theme or a central idea, from which lines or arrows branch out. Along these lines, related concepts and information can be plotted. A mind map can branch out at several levels, so it can be used to represent more complex relationships.

What and how can we use the mind map?

The mind map can be used in education for a variety of purposes, including representing information and logical relationships, problem solving, brainstorming, drafting essays.

- Let's start with the central theme
- Write around closely related subtopics, linking them to the central theme with lines
- Around the sub-topics as nodes, write down the corresponding concepts, information, ideas, connect them with lines
- Use colours and images to highlight and link information.

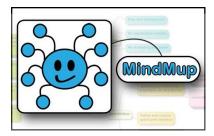








Mindmapping with Mindmup 2.0



Google drive - New - more

In Mindmup 2.0, students can create mind maps individually or collaboratively. It is very easy to use, so learners can integrate it into their learning process without any special preparation.

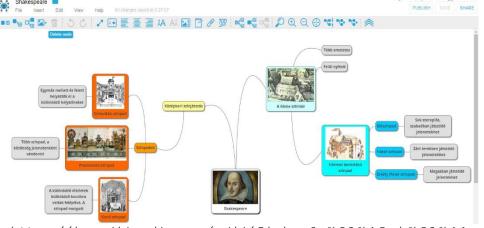
They can place the topics and information in the structure according to the hierarchy of ideas, and they can change their position and connections later on.

they can also edit the mind map together using the sharing feature of google drive, so it can be used for online learning.

Practice

Read the text on Shakespeare's theatre

(https://bit.ly/Shakespeare_szoveg)



Create a mind map using Mindmup 2.0 on the following topics:

- Characteristic s of medieval theatre
 - The Globe Theatre

https://bit.ly/procstage, https://bit.ly/szimult https://bit.lv/kocsi.

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3. Using the whiteboard application

What is a whiteboard app?

A whiteboard app is an application running on a computer or mobile device that provides the capabilities of a real whiteboard in the online space.

Whiteboard applications allow freehand drawing, placing images, diagrams, text, idea tags. As with the real whiteboard, these apps allow learners to collaborate and share content created through joint work.

What and how can we use the whiteboard app?

The whiteboard application can be used in education for a variety of purposes. It can be used for brainstorming, summarising knowledge, visualising new knowledge and interpreting diagrams. The whiteboard facilitates collaboration between students. The whiteboard pictures can be shared to facilitate later learning.

- Placing virtual notes collecting and grouping ideas, questions, points of view
- Writing and editing
- Add an image add images you have taken or searched for on the internet
- Drawing shapes using basic geometric diagrams, arrows to draw sequences, logical relationships, timelines
- Add other objects other objects can be added to the whiteboard, such as icons, symbols, charts
- Collaboration students can work together on a whiteboard, even remotely.



https://www.facebook.com/2028276564081468/photos/a.2028287820747009/2718812075027910/?type=3







Using the whiteboard app in Google Jamboard



Google drive - New - more

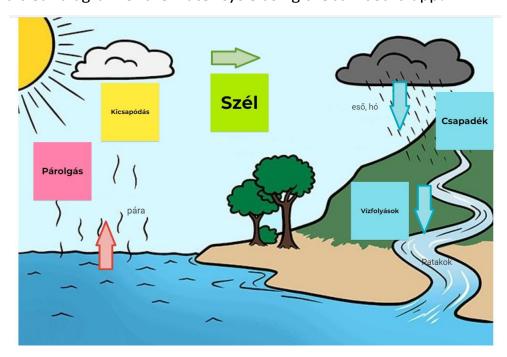
The Jamboard app can be used to work through new parts of the curriculum, for revision, or even to design a classroom programme.

It is very easy to use, so learners can integrate it into their learning process without any special preparation. Multiple tables can be created within a single file, so that all the knowledge for an entire topic can be found and shared in one file.

They can also edit together and share the finished work, in line with the sharing feature of google drive, so it's great for online learning.

Practice

Create a clear diagram of the water cycle using the Jamboard app!



https://youtu.be/A05QZqKmRbg









