Ministry of Education - Guyana

In collaboration with the OAS and ProFuturo FOUNDATION

2020 CARICOM ICT Route - Advance Level

MODULE 1 - GOOGLE DRIVE

Training Manual for Teachers of Riverine and Hinterland Region



MINISTRY OF EDUCATION
ELIMINATING LITERACY, MODERNIZING EDUCATION, STRENGTHENING TOLERANCE

ProFuturo
A PROGRAMME OF: Telefónica FOUNDATION "la Caixa" Foundation

OAS More rights for more people

Message form the Minister of Education



Dear Teachers

Across the world, the COVID 19 pandemic (Corona Virus) continues to cause undesirable disruption to the global education systems. Guyana, as you know, was not spared. As such, we implore you to keep engaging our nation's learners and we applaud those of you who have tried and continue to try. We heard your concerns when you told us you were uncertain about how to teach using different means, that you lacked confidence, and that you felt you were not equipped. This is our first response in partnership with the **OAS** and **ProFuturo Foundation**. This training will give you the much-needed knowledge and expose you to the tools you need to deliver education differently by being innovative and by using easily available technology.

We are aware that the cost of data is of great concern to you and we have remedied that by partnering with GTT and Digicel to zero rate the ProFuturo platform domain. This means that when anyone accesses the training platform, data will not be consumed. If teachers have neither devices nor connectivity, we will arrange a suitable location and if teachers, as those in the hinterland and riverine areas, cannot access either, even with our help, we have arranged for part of the program to be done through these printed modules because we know that it is only a matter of time before you are able to access connectivity and devices. We will never leave you behind.

I encourage you to take this training offer with vigour so that you can be better prepared to do what you love: influence by teaching the next generations.

CONTENTS

Unit 1. Introduction

1.1. Presentation

1.2. Starting point

1.3. Objectives

1.4. Contents outline

Unit 2. Internet

2.1. Presentation

2.2. Operation

2.3. What is it?

2.4. How does it work?

2.5. Functions

2.6. Educational applications

2.7. The Servers

2.8. Information on the cloud

Unit 3. Online applications

3.1. Presentation

3.2. What are they?

3.3. Types

3.4. Are they useful?

3.5. Online office automation tools

3.6. Google Drive

3.7. Access Google Drive

3.8. Using Google Drive

3.9. What can you do with Google Drive?

3.10. Google Drive for education

Unit 4. Other applications

4.1. Presentation

4.2. Office automation

4.3. Virtual storage

4.4. Diary and calendar

4.5. Presentations

4.6. Educational platforms

4.7. Specific tools

Unit 5. Conclusion

5.1. Presentation

5.2. Practical activity

5.3. Summary

5.4. Final word

KEY TERMS

Please familiarize with the following terms and meaning.

1. **Apps**
   This term refers to software applications that can be downloaded to various devices.
2. **Cache**
   This is an area of a computer's main memory that stores a copy of the data that is accessed from the computer. When you access that information again, the computer uses the data stored in the cache because the process is faster.
3. **Chrome OS**
   Operating system created by Google, specially designed to work on the cloud.
4. **Email or distribution lists**
   These are groups of users who debate about a topic of interest via email.
5. **Google+**
   A Google social network that includes, among other applications, chat and group messaging.
6. **HTML documents**
   These are file documents with a special format so they can be viewed on web pages in users' browsers.
7. **Intranet**
   This is a network of private computers, within an organisation, that use the Internet to share their information.
8. **Newsgroups**
   These are discussion forums in which users can talk about topics of interest. Messages can be read by anyone who can see the group, which is where they are exposed.
9. **PDA**
   Pocket device with a writing recognition system that was originally designed as an electronic diary (contacts, notes, calendar, etc.).
10. **Rich Internet Applications**
    Web applications that have many of the same characteristics as desktop applications, thanks to the possibility to add additional characteristics to the base application.
11. **Social bookmarkers**
    Tools that allow you to save web addresses you are interested in, and which enable access from any computer.

Unit 1

Google Drive



Starting point

There is an **endless number of online applications** that teachers can use in the classroom, while remembering that the use of these tools is not an end in itself, but rather such tools are a **medium to facilitate a change in the educational paradigm**, by means of applying more effective learning methodologies.

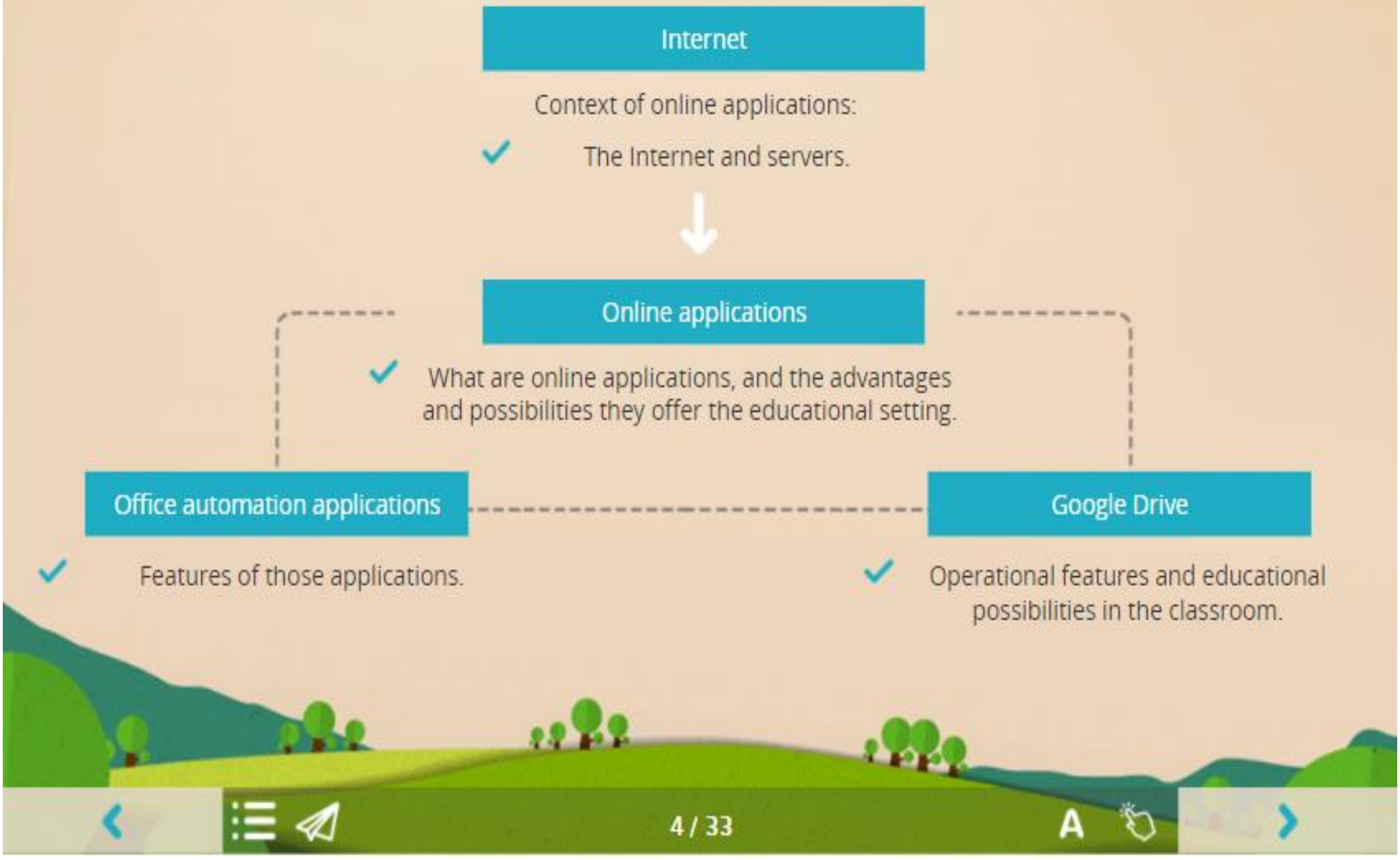


Objectives

- To find out what **Google Drive** is and the possibilities it offers in the creation and storage of different types of information.
- To identify the **didactic uses** offered by online office automation applications for carrying out educational experiences in the classroom.



Contents outline



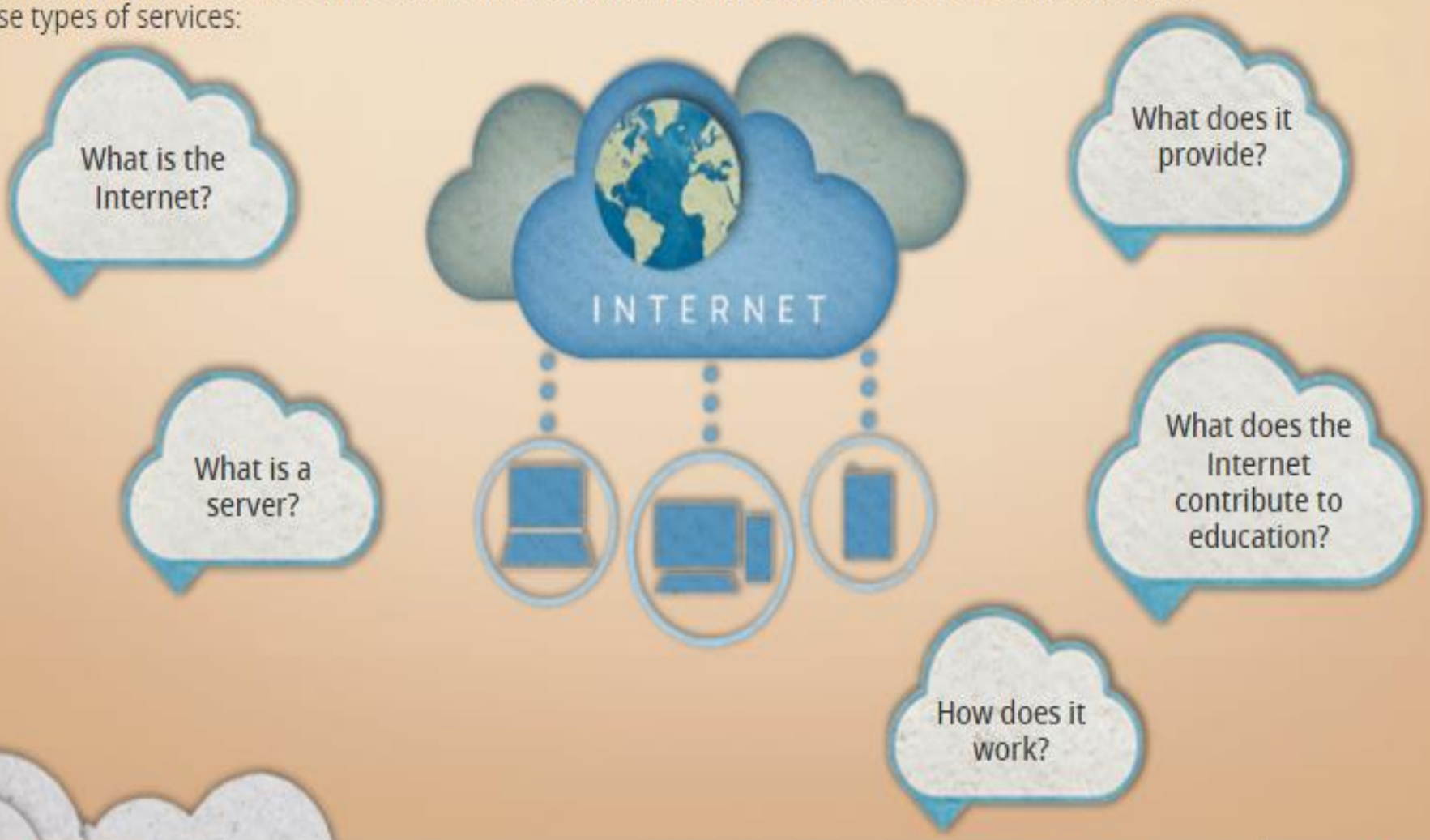
Unit 2

Internet



Operation

Before starting to work with online tools, one must know **how the Internet works** in order to provide these types of services:



What is it?

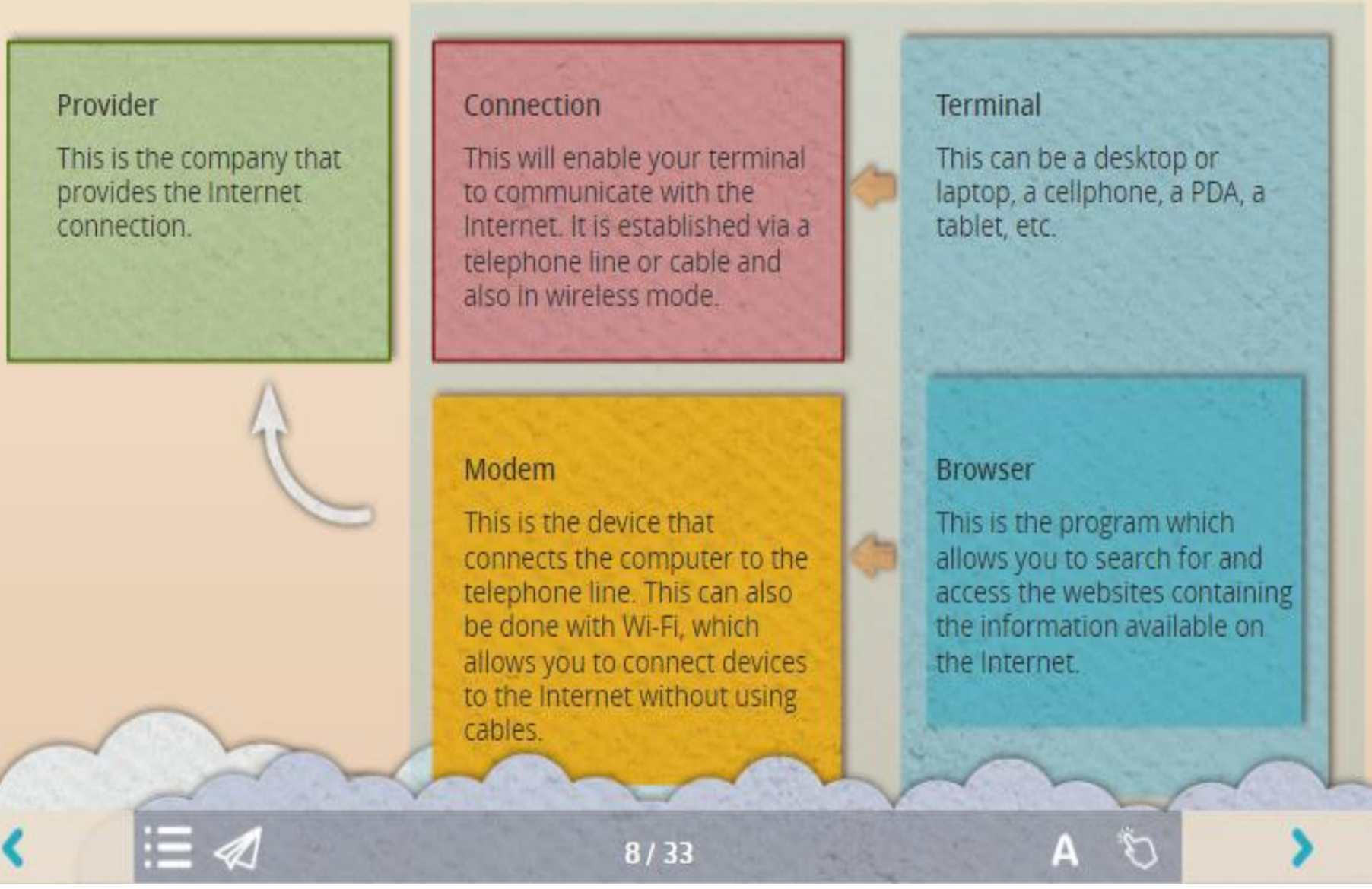
The Internet is a **network of networks** that connects computers from all around the world, enabling an exchange of information between them.

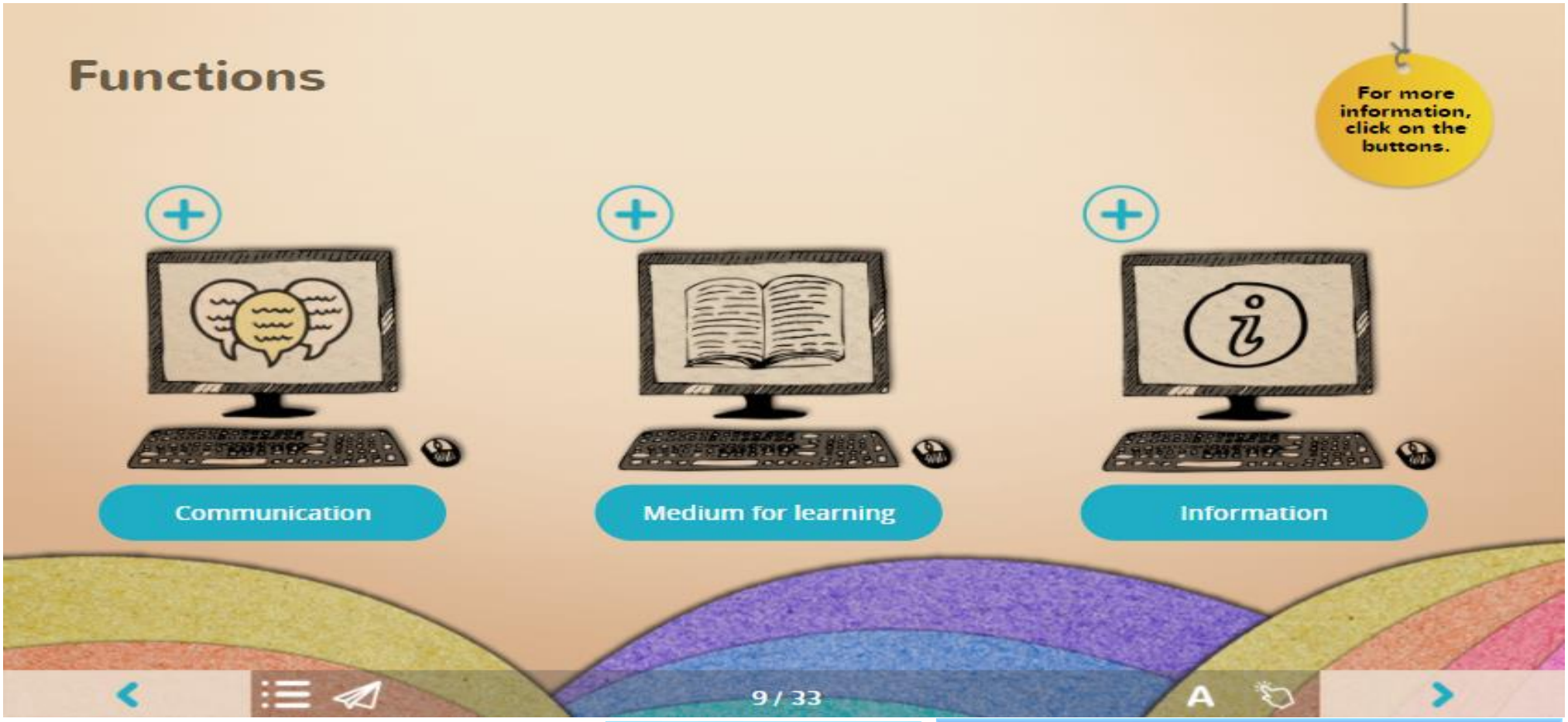
It is a huge space for **storing data** that allows multiple tasks related to a single topic to be carried out.

Knowing how it works is **fundamental** to **understanding how to work** with the **online applications that are available.**



How does it work?





COMMUNICATION

Has an unmeasurable value. It facilitates communication and relations with other people in real or delayed time, and enables the sharing and exchange of ideas and documents, thus enabling collaborative and cooperative work:

- Email.
- Distribution lists.
- Newsgroups.
- Chats.
- Video communication.

MEDIUM FOR LEARNING

Through the communication and information function, the Internet offers many possibilities for classroom learning and continuous education.

INFORMATION

The Internet database is immense, allowing access to any type of information, in addition to making it possible to do other things such as watch television, listen to music or the radio, etc.:

- Websites with multimedia educational content.
- Programs, files, etc. for sharing.
- Newsgroups.

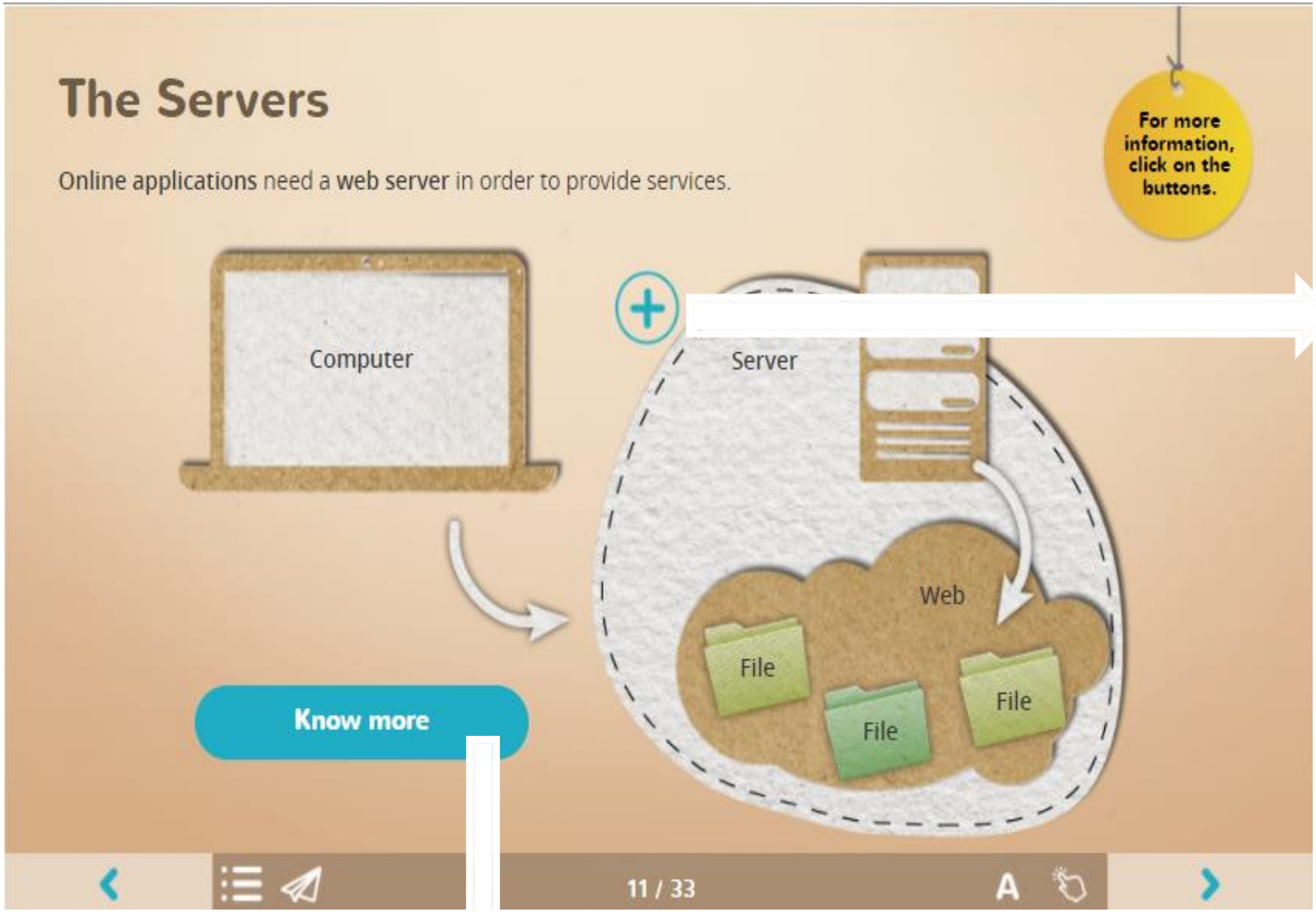
Educational applications

Taking advantage of its three main functions, the Internet offers an infinite number of **educational possibilities** for both teacher and student.

How do you think you could use it in your classroom?

- Communication via **email** with the teacher and colleagues to send files, etc.
- Creating and participating in **collaborative and cooperative projects.**
- **Holding debates with students from your school and other educational centres.**
- Teachers participating in **discussion lists and newsgroups.**
- Creating and using a classroom **blog** or **website.**
- Designing and online use of **educational activities and sharing** classroom experiences.
- Exchanging information and documents through **online applications...**





SERVERS

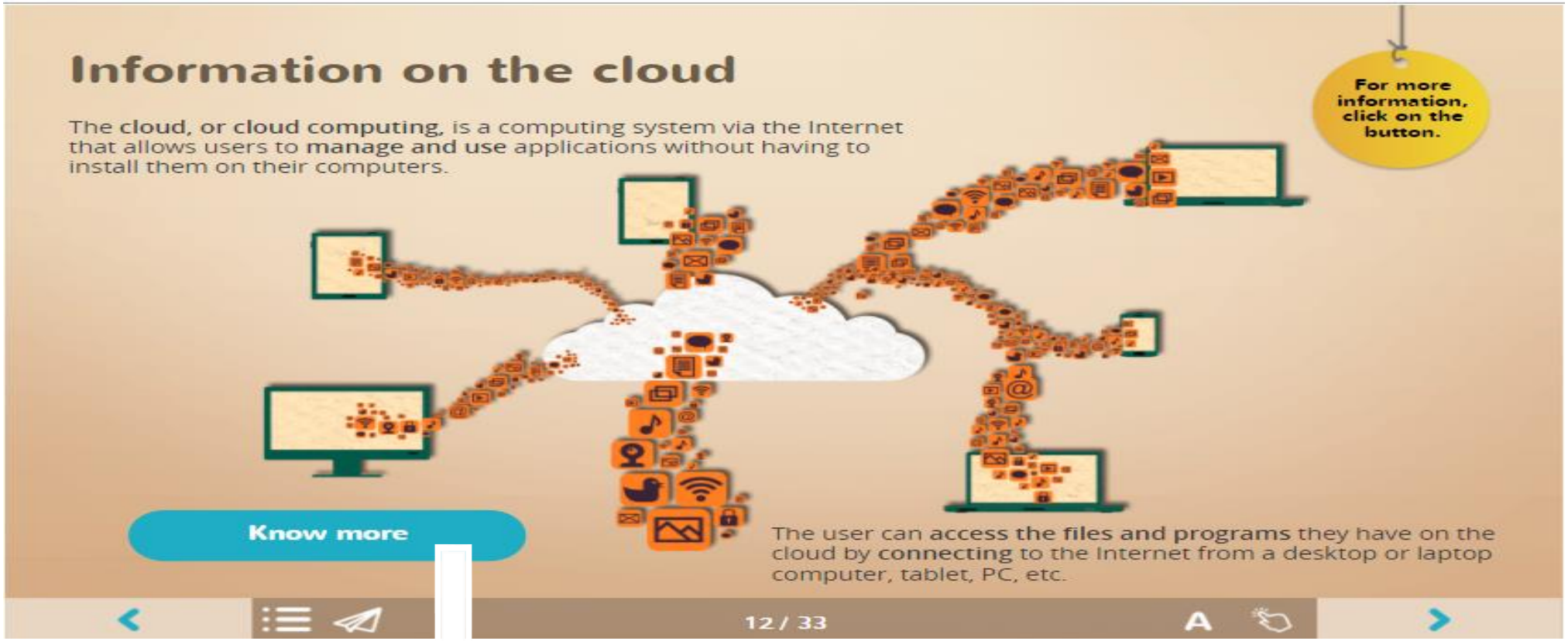
It's like a "warehouse" for the websites we visit on the Internet. Servers are installed on computers and, when we visit websites, the computer allows us to access them.

When a user visits a website on the Internet, the browser communicates with the web page's server by sending and receiving data which then determines what you see on your screen.

TYPES OF SERVERS

There exist different **types of servers** depending on the type of data being stored:

- **Email servers:** these perform various email-related operations for the network customers (they store, send, receive, etc.).
- **Web servers:** these store all kinds of information, mostly HTML documents, images, videos, text, and presentations, and distribute this content to users that request in on the network.
- **Database servers:** these provide storage and database management servers to their customers.
- **Security servers:** these provide software to impede malicious intrusions (antivirus, antispyware, etc.).



WHAT DOES IT PROVIDE?

Advantages

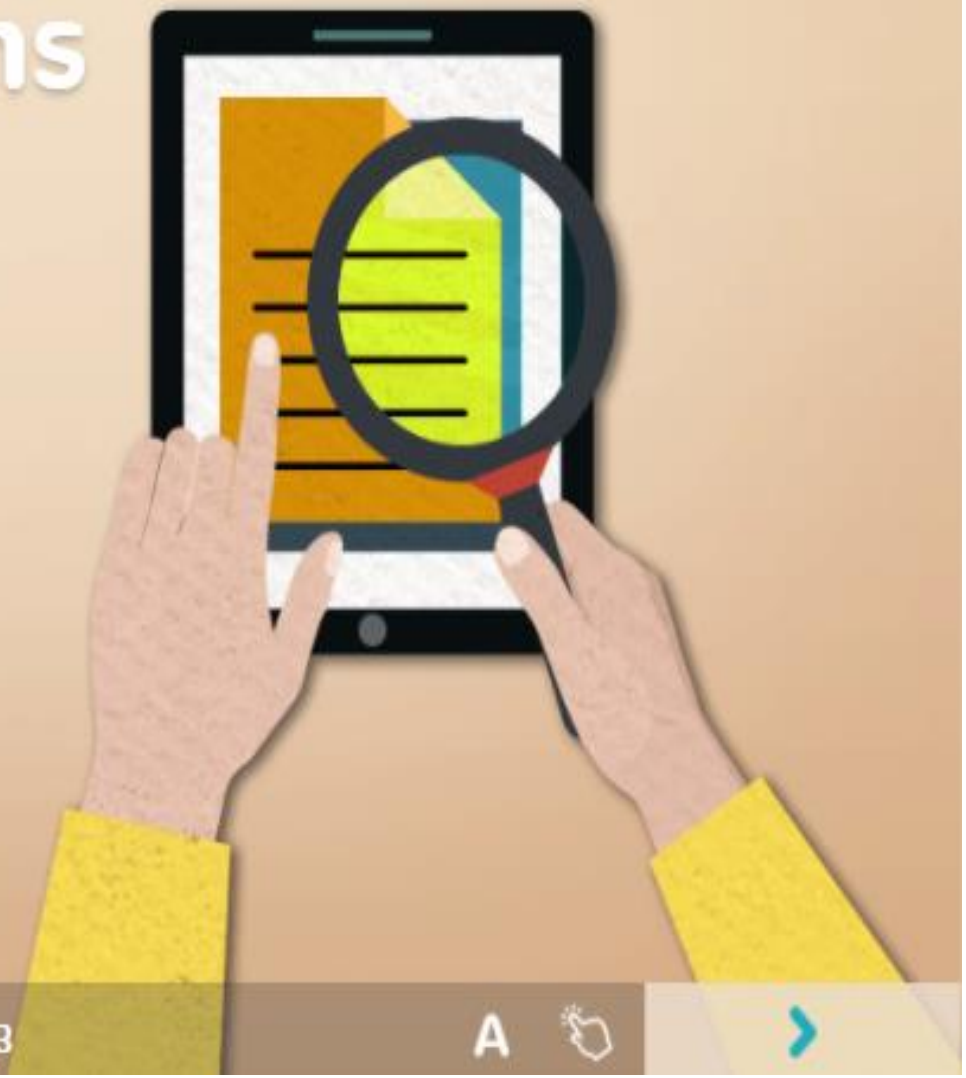
1. It allows you to access information from anywhere and from different devices.
2. You can access the software you need without needing it to be installed on the computer, which represents a savings in software and hardware.
3. You save on technical maintenance. Not having programs installed on the computer means fewer configuration and maintenance tasks and a reduced number of computer and software problems.
4. It answers users' occasional, one-off needs. If you need more processing power or storage, the service provider supplies it immediately.

Disadvantages

1. The access to the applications will depend on the possibility for Internet access.
2. There may be issues with security and privacy. In theory, data stored on the cloud should be more secure than data on a computer. However, this is not always so.
3. As the number of cloud users increases, the providers' servers will become overloaded. If they are not prepared to respond to this increased demand, the service may deteriorate.

Unit 3

Online applications



What are they?

They are tools that users can use by **accessing a web server** through the **Internet**, or through an **intranet** by means of a browser.



They don't need to be installed since the data and programs that manage them are located on the servers.

SOCIAL BOOKMARKING APPLICATIONS

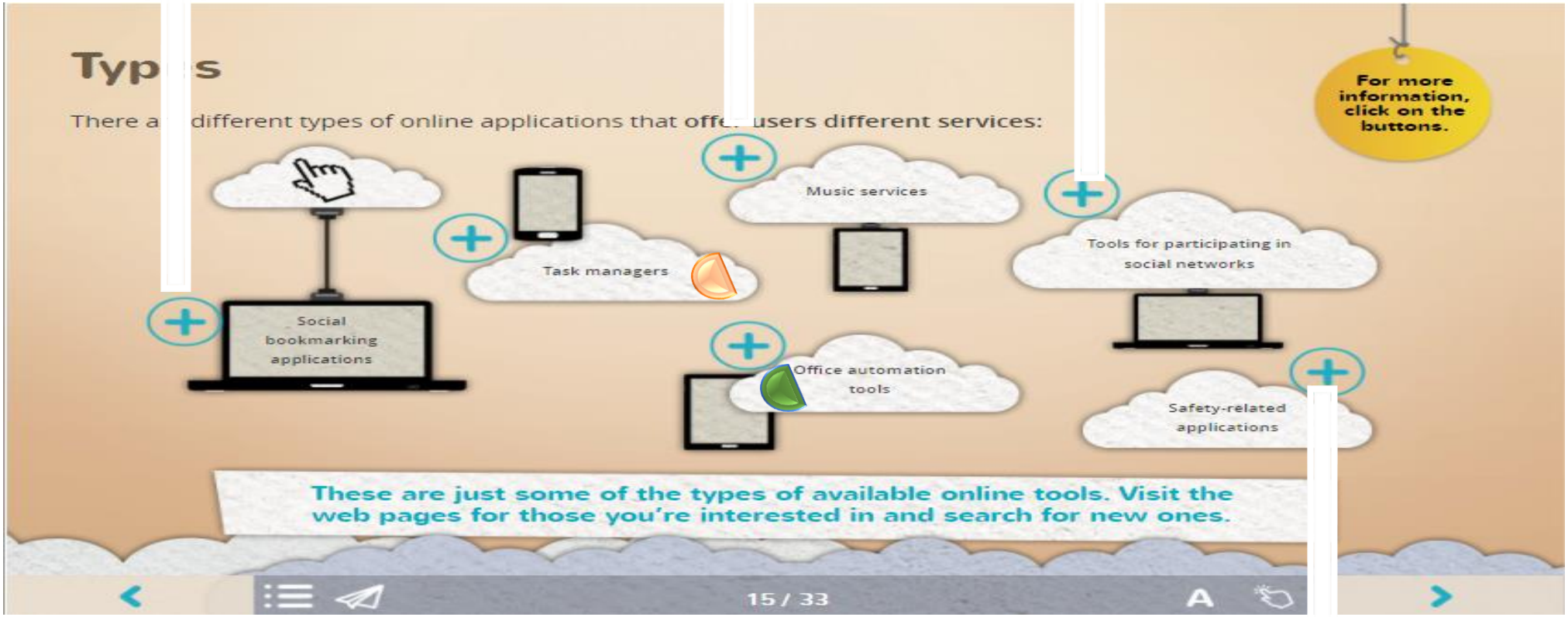
These are tools that allow you to store, classify, and share Internet links with others. Some examples are Delicious, Diigo, etc.

MUSIC SERVERS

These allow you to listen to music over the Internet, from a computer or a mobile device. Some examples include the Last.fm network, the music shop Anywhere.fm or Spotify.

Tools for participating in social networks

These are websites that allow users to communicate, share information, etc. with other people who are a part of that network. Examples include Facebook, Twitter, LinkedIn, Instagram, etc.



OFFICE AUTOMATION TOOLS

These tools allow you to create and share on the internet text documents, presentations, spreadsheets, etc. Some examples include Google Drive, Zoho, Suite, OneDrive, etc.

TASK MANAGERS

Applications that allow you to collect, organise and share activities or tasks that you, as a user, perform throughout the day. Some examples include Remember the milk, Labelia, BaseCamp, OpenProject, Trello, etc.

SAFETY-RELATED APPLICATIONS

They allow you to perform an online analysis of the computer to detect the presence of computer viruses or other threats. They scan the computer in search of viruses and threats. Some examples are VirSCAN, VirusTotal, etc.



Disadvantages

- **In general, they offer fewer functions than desktop applications. Nevertheless, it is possible to add functions with rich Internet applications.**
- **The availability to access information depends on the service provider, meaning your access is subject to a third party.**

Online office automation tools

For more information, click on the vertical arrows

They are highly useful, both for teachers and for students **working** in the **classroom.**



They provide a unique opportunity to work on **digital skills** and to introduce ICTs in order to help implement new **learning methodologies.**

Online office automation tools

For more information, click on the vertical arrows

Reflection

Have you considered having your **students create** a **joint document**, but not known how to do it?



Have you ever lacked **space** on your computer for **storing documents?**

Have you ever wanted to **send** an attached **file** via **email** but it was too **big** and you couldn't?

Find out how to do all this and more. **Off you go!**

Google Drive

It is a **document storage service** that also allows you to create:

Presentations

Charts

Drawings

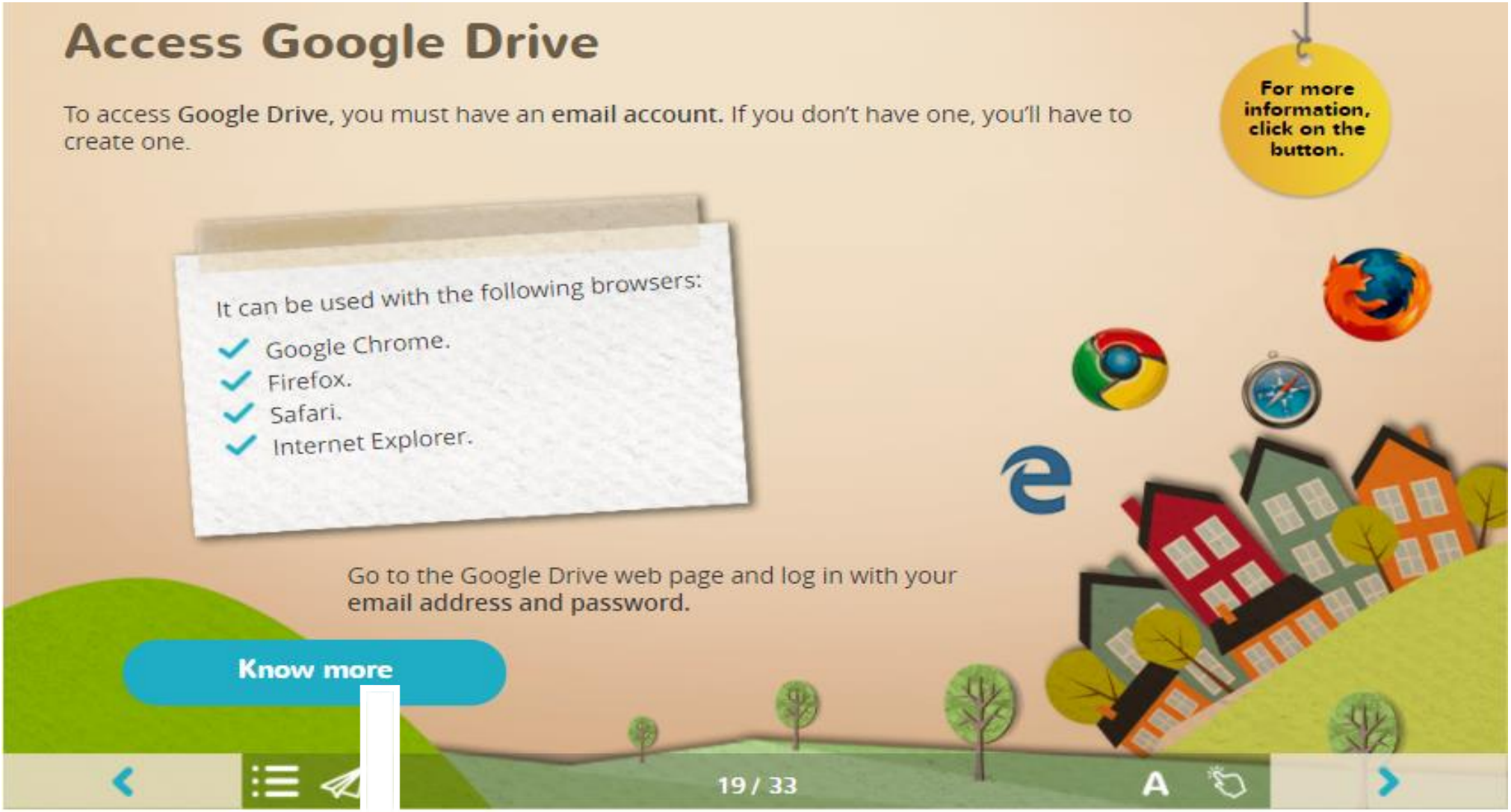


Text documents

Folders

Forms





GOOGLE DRIVE

Google Drive also offers the option to download the application onto your computer. This will create a folder where you can save any type of file and access those files from any location.

You can sync this folder with the Google Drive website, so any changes made in one location will be reflected in the other.

Check in the "Material" section how to download it, create the account and how to log in.

Using Google Drive

Without connectivity, there are contents that will not be displayed.

For more information, click on the buttons.

Every user has **15 GB of free space** to store their files, and more space can be bought.

PC and Mac

Chrome OS



Android devices

iPhone and iPad

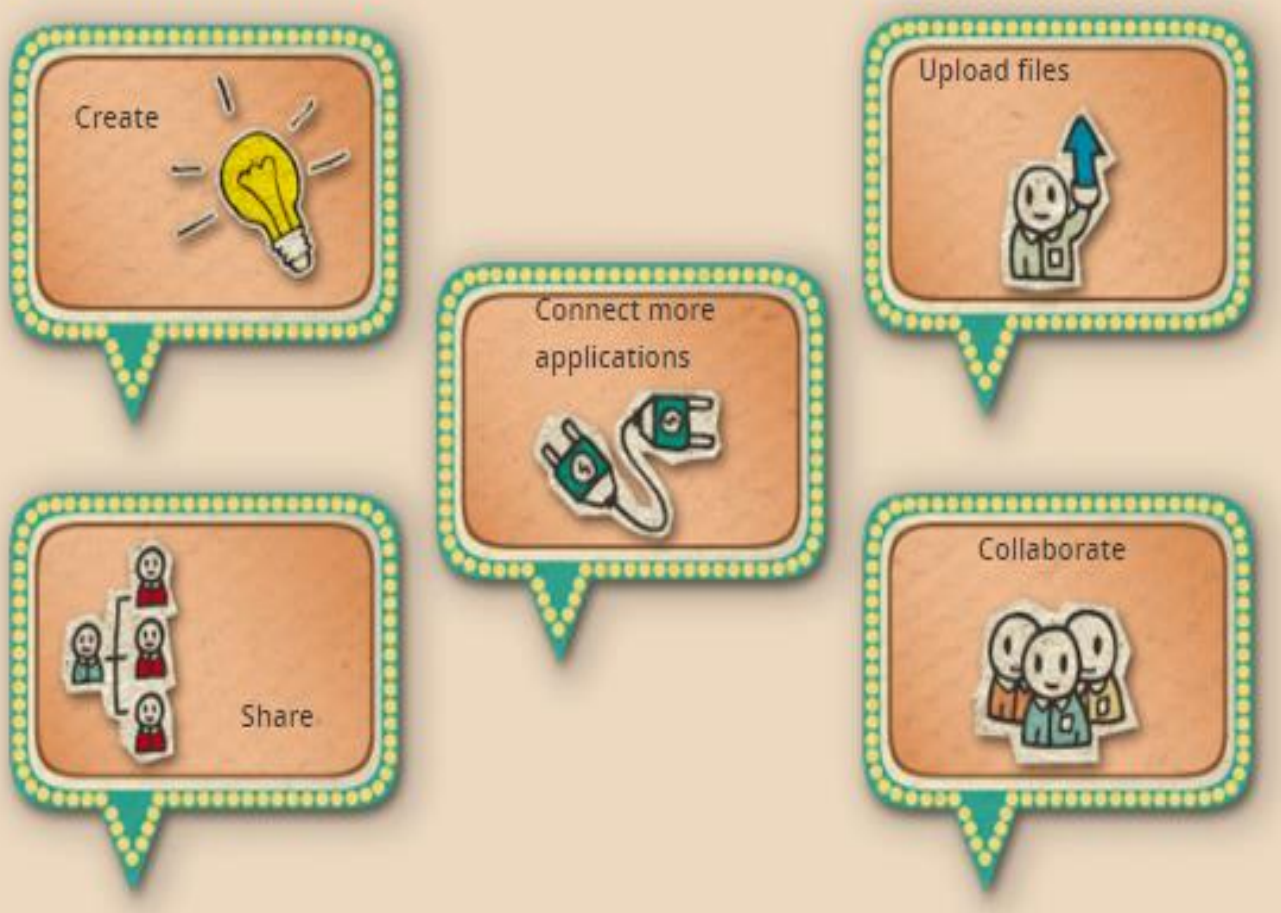
Google Drive

(If you have a Gmail account, Google Drive will open).

This is the application that replaced **Google Docs** and which integrates other services such as **Gmail and Google+**.

What can you do with Google Drive?

For more information, click on the vertical arrows



What can you do with Google Drive?

For more information, click on the vertical arrows

Create

- You can create a **folder**, a **text document**, a **presentation**, a **form** or a **drawing**.
- To create something, **select the type of document** you want in the "Create" drop-down menu and a new document will open.
- Any changes you make to the document are **saved automatically.** You can access and make changes to your document from any device by logging in to your Google Drive account.
- You can also **upload files** you've **created on your computer.**



What can you do with Google Drive?

For more information, click on the vertical arrows

Share

You can **collaborate with other users** when creating your documents or allow access to share it. To do this, select the file and click on the share icon.



You can choose from **three options** for document sharing and then enter the **email addresses** of the people you want to share it with.

- Public on the web
- Any user
- Private

Another method is to open the file and click on **the Share icon.**

What can you do with Google Drive?

For more information, click on the vertical arrows

Connect more applications

The option to **access and use third party apps** from the "Create" menu. When accessing this option, a window appears where **you can choose from various applications**, selecting them according to topic or name, or you can view all the available applications.
Once you have selected the application, there are two ways to access it:

- Clicking on the "**Connect**" button that appears in the application image.
- Clicking on the **application image** and then on the "Connect" button.



What can you do with Google Drive?

For more information, click on the vertical arrows

Upload files

There are two ways to upload files to Google Drive:

- **From your computer.** Just "drag the file from your computer" to your Google Drive space and it will save automatically.
- **From the application.** Left-click with your mouse on the arrow icon and a drop-down menu will open. Select "Files" and choose the document you wish to upload.



What can you do with Google Drive?

For more information, click on the vertical arrows

Collaborate

- Google Drive allows you to **create collaborative documents** in real time. After sharing the document, collaborators can modify it from their computer, mobile phone, etc.
- When a collaborator modifies the document, the owner can will see a note indicating **who is working on the file** and will be able to see the changes that are being made.
- Another option is to **make comments** within the documents and hold debates among the collaborators.
- The document **automatically updates** as the changes are made.





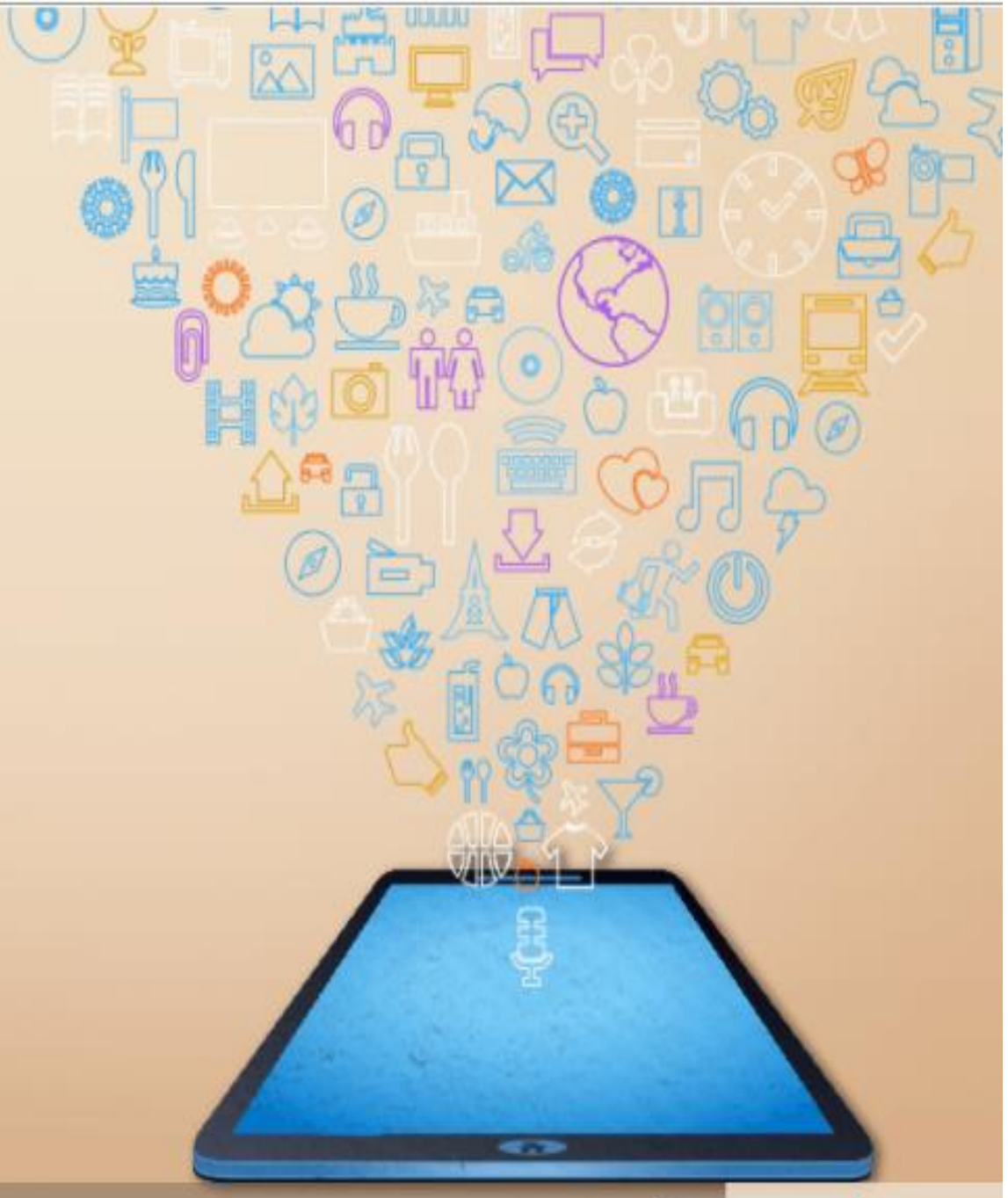
What does it offer?

Google Drive can help in a school setting at three different levels:

Organisation	School activities: with the collaboration of all team members. Real time actions: students' scores, records, and it allows access to all updates that take place. Documentation: it enables access to documentation without delays.
Management of learning	Students can prepare their classroom work while they are at the educational centre and while they are away. Teachers can control the development and people that have participated at all times. Creation of presentations that can be used in the classroom and shared with other teachers. Repository of educational resources stored in folders.
Assessment	Creation of assessment documents, for various subjects. Creation of forms regarding various topics.

Unit 4

Other applications



Office automation

In addition to Google Drive, there are other online applications that allow you to use office automation tools:

- Text processors.
- Spreadsheets.
- Slide editor.
- Wiki editor, etc.

For more information, click on the buttons.



OFFICE AUTOMATION

Any activity that the student must perform using one of these tools can be carried out with this application: presentation of assignments, classroom presentations, creation of work groups with wikis...
etc.

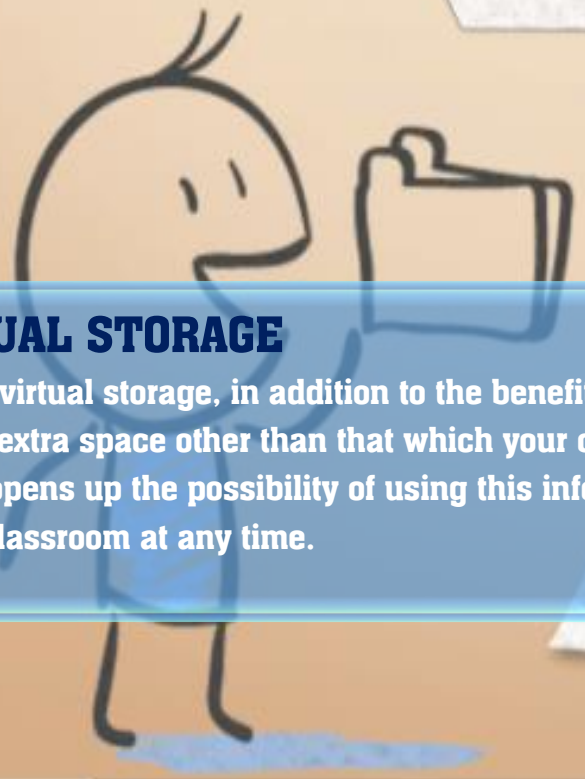
Zoho is a widely used application that offers these services, among others.

Virtual storage

Another use for online applications is the option they offer for file storage.

For more information, click on the buttons.

SkyDrive is one of these file-hosting sites that Microsoft offers. The user has 7 GB of free storage.



VIRTUAL STORAGE

Having virtual storage, in addition to the benefit of having extra space other than that which your computer offers, opens up the possibility of using this information in the classroom at any time.

SkyDrive

SkyDrive

Diary and calendar

A good way of **organising classroom work**, for both the teacher and the students, is the use of classroom diaries that can be **shared in public spaces**, such as on the **school blog**. One of these free applications is Google Calendar.

For more information, click on the buttons.

CALENDARS AND DIARIES

Teachers can easily plan activities they are going to do and students can have updated information on exam dates, assignment deadlines, extracurricular outings, etc...



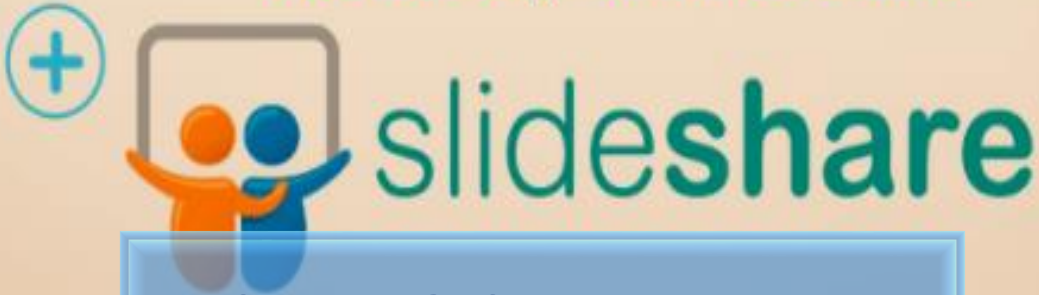
Google Calendar (If you have a Gmail account, G. Calendar will open)

Presentations

Some applications allow you to **upload and share**, either publicly or privately, your presentations, documents, PDFs, etc. This way, students can **access educational information** created by the teacher or other educators, and can also **create their own assignments and upload them.**

For more information, click on the buttons.

One of these applications is Slideshare.



PRESENTATIONS

The teacher can plan classes for specific content and can access educational information created by other teachers.

Educational platforms

For more information, click on the buttons.

These enable the creation of online courses. Within these applications, you will find features that allow you to present information in different ways and to create different types of activities.

One of the most used platforms is Moodle, which offers the option to create and modify your own courses and access other pre-created ones for free.



Moodle

PLATFORMS

Teachers can use these platforms as a support for their classroom work, uploading class content, proposing activities, assessment tests, asking students to upload their assignments, etc.



CHEMISTRY

Interactive access to the chemical periodic table of elements.

READING

Allows you to read online books, magazines, newspapers, reading and writing activities, etc.

TOOLS

Consults the "Material" sections for interesting links that we recommend.

MATHEMATICS

Offers problem-solving math problems.

Unit 5

Conclusion



Practical activity

Activity

Open a **Gmail account** or use the one you already have to access Google Drive. Plan an activity for classroom use by using the work options that Google Drive offers, including images and resources you consider appropriate.

Objective

Using Google Drive, plan and implement in the classroom an educational activity.

Results

Implement the activity in your classroom and create a document to describe how you developed the activity and the results you obtained. The activity **will be presented, reviewed and discussed** by your colleagues at the centre and even the educational community.







Summary

The Internet offers a huge amount of **educational possibilities** through its information, communication and support for learning functions.

Among these **online applications**, there is an endless number of tools related to the provision of various services.

Google Drive is one of these tools, allowing you to create documents with **office automation tools**, and to store and share them.



Final word

We encourage you to put into practice the new applications that we've learnt about in the exercise of your profession.

Are you ready to integrate ICTs into your classroom?

We remind you that to finish you can take the evaluation test and check what you have learnt.

