

Outcomes

By the end of this session you will be able to:

1. Use mind-mapping as a teaching strategy.
2. Evaluate the use of technology versus traditional teaching methods in your classroom.
3. Create a lesson plan using a mind-map.
4. Organise and manage information.
5. Evaluate apps for educational purposes.
6. Explore the use of a mobile device:
 - a. Use a mind mapping tool with learners;
 - b. Use a drawing app as a discussion tool;
 - c. Install, uninstall and manage apps on your device.
 - d. Create folders of apps.
 - e. Share files using Bluetooth and or Wi-Fi.
 - f. Create a screenshot.
7. Use the following suggested apps:

Adobe Acrobat PDF Reader, Memoires, Kingsoft Office, Random Student Picker, Paint Joy, DrPhillipMillar, ES File Explorer, Simplemind



Introduction

 5 min

During this module you will experience mind mapping as a classroom strategy as you gain a better understanding of the use of various apps in your classroom. Now that you are familiar with digital libraries and have been using various apps along the way, you are ready to have a closer look at the potential of apps in and out of your classroom.



Activity 1

Reflection

 10 min

Reflect in your groups on what you have learned and applied since the previous session. You may need to consult the reflection notes you made in your *Memoires app*.

- What worked and what did not work? Why?
- How did you use your mobile device?
- Explain how you used the Learning Stations Strategy in your classroom.
- How does the Learning Stations Strategy support 21st century skills (the 4 C's)?



Activity 2

Managing apps

 25 min

This is a fun competition activity (if you are in a group workshop) to demonstrate how you can collaborate to find things out quickly, while learning how to manage the apps on your device. It works like this:

- All groups decide on their war cry
- The facilitator will challenge your group to perform a function on their devices.
- Once **every group member** has performed the function they shout their war cry and hold both hands above their heads.
- Note down the challenge and how you solve it in the space provided.



Challenge 1

Challenge 2:

Challenge 3:

Challenge 4:

Challenge 5

General group discussion:

- What skills did you learn?
- Which 21st century skills did this activity require?



Activity 3

How I felt



15 min

In this activity you will express visually how you felt when you first started this course by drawing a picture using either pens and colour pencils or a drawing app.

1. Each member of the group must hand in an electronic copy of their drawing.
2. Half the members of the group must use pens and colour pencils to draw how they felt at the beginning of this course and when they are finished, take a photo of their drawing.
3. The other half of the group will use an app called *Paint Joy* (or any other drawing app) to sketch how they felt. Remember to save your creation.
4. You may use the *Random Student Picker* app to choose who will use the drawing app.
5. Some ideas to guide your drawing:
 - Were you scared, excited, happy, miserable...? How can you draw feelings?
 - Remember to draw “stuff” that will help the viewer to understand your picture.
 - You can draw what you are too scared to say out loud.



6. All photos and drawings must be shared with your facilitator using either Bluetooth, Wi-Fi or a cable.
7. Explain to your group what your picture is saying.
8. Decide which method was a better choice for this activity, using a tablet or using colour pencils and paper?



Activity 4

Mind mapping your apps



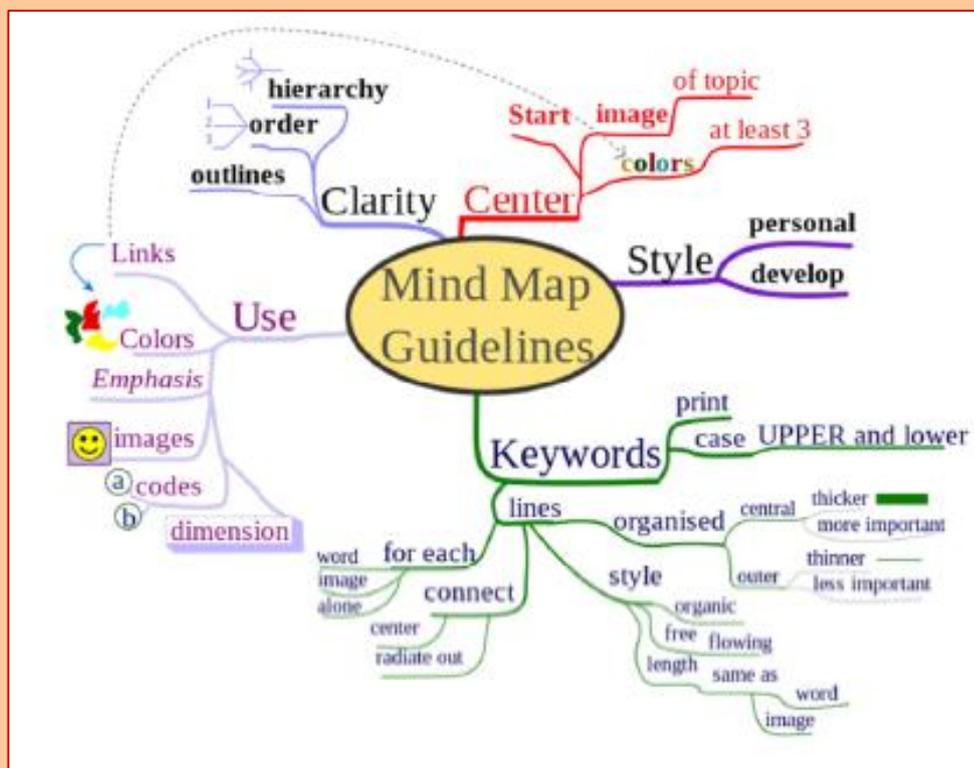
75 min

In this activity you will use mind mapping as a learning and teaching strategy.

Mind mapping (also known as brain storming)

A mind map is a diagram used to visually outline information. A mind map is often created around a single word or text, placed in the centre, to which associated ideas, words and concepts are added. Major categories radiate from a central node, and lesser categories are sub-branches of larger branches. Categories can represent words, ideas, tasks, or other items related to a central key word or idea.

Mind maps can be drawn by hand, either as "rough notes" during a lecture or meeting or as higher quality pictures when more time is available. An example of a rough mind map is illustrated. (Source: http://en.wikipedia.org/wiki/Mind_map)

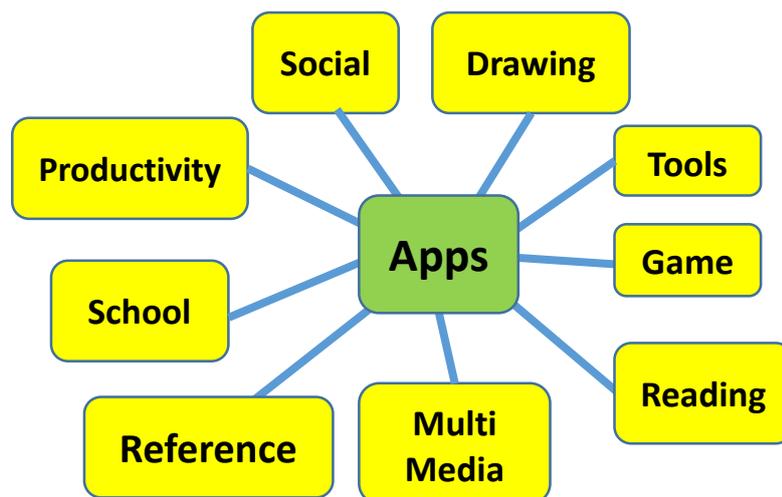


You will find more mind mapping articles, information and examples in your Module 5 resource folder to help you implement this strategy in your classroom.

To see how mind mapping can be used to organise ideas and topics, you now will make sense of all the apps on your device by organising them into various categories.

Instructions:

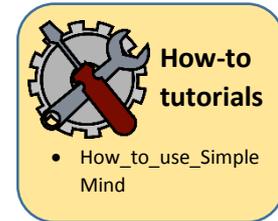
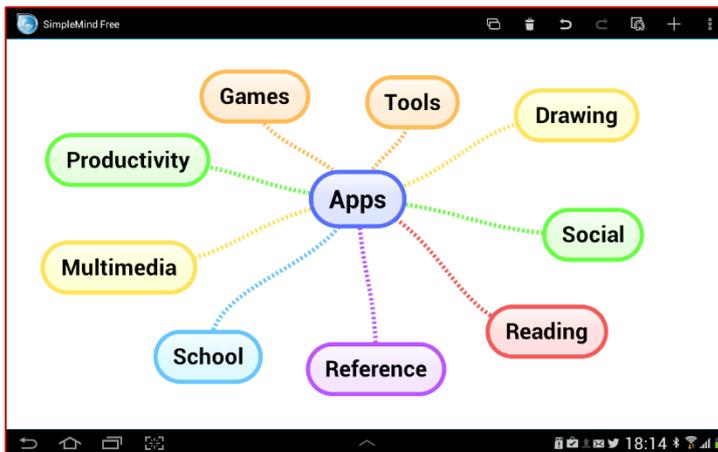
- In your group, create a communal mind map that will organise your apps into the following possible categories: (You may create your own categories as well)
 - Productivity** (Office or work related apps -create work related files e.g. word documents, spreadsheets, presentations, calendars)
 - Tools** (Apps that helps you organise your device/files or folders, timers, scanners, maps, calculators, torch, barcode scanners...)
 - Multimedia** (Photo, Video & audio- capturing, viewing and editing multimedia)
 - Drawing** (sketches and hand written notes)
 - Reading** (library, ebooks and curation)
 - Reference** (encyclopaedias and search)
 - Games** (Fun and educational games)
 - School** (apps that help you manage your classes and learners, create quizzes....)
 - Social** (apps that helps you communicate, email, chat, talk, share, discuss...)



These are some of the apps that you have used and will be using. For a description of what each one of them can do see the **App sheet** in your Module 5 resource folder.



- Open the app called **Simplemind** and create your own app mind map using your group's mind map as an example. You can create different categories if you like. Save it as a picture and share (bluetooth/email) with your facilitator.



- Use the following rubric to make sure that your mind map is of an acceptable standard.

Assessment rubric for the mind map exercise					
	Poor (0)	Fair (1)	Good (2)	Excellent (3)	Score
The extent of the mind map	Just a few items in the map; no clue of the topics	Only the most relevant concepts present	All of the fundamental concepts present with some additional details	All of the fundamental concepts present with a large number of details identified	
Depth of the mind map	Very shallow; just one or two levels	Several levels for some topics; shallow for others	Several levels with a good balance between different topics	Topics are divided into a multitude of finer levels in a clear and continuous fashion	
Logical thinking, subdivision and clarity	No clear logic in the mind map or logical errors; wrong subdivision of concepts or no subdivision	Different concepts clearly sorted; some links and inter-relations marked	Different concepts clearly sorted; several links and inter-relations identified	Clear and easy to understand representation with links and inter-relations on various levels identified; the refinement of concepts to various levels is systematic	
Originality of the mind map	A common presentation copying the structure of the course material	Based on the structure of notes with some own ideas	Own way of expressing concepts and details based on the notes content	Own way of expressing ideas based on the theoretical background; going beyond the lectures and the lecture material	
Final score					



4. Use your mind map to create folders on your tablet homescreen according to the categories that you have identified.



How-to tutorials

- How to open, use and manage apps.



Activity 5

Lesson plan ideas

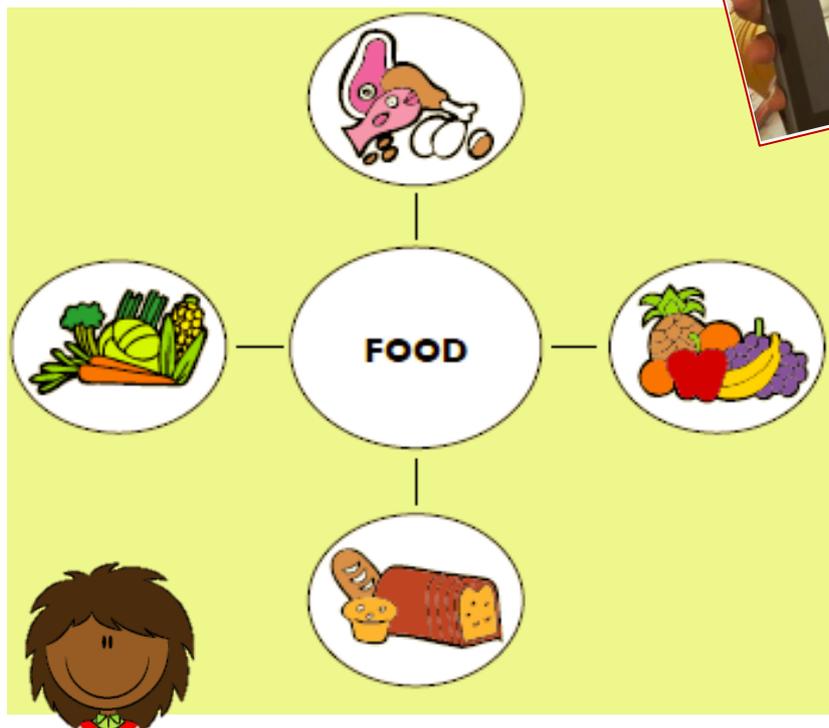


20 min

In the previous activity we used mind mapping to organise our apps visually and in reality on our tablets.

This strategy can be used to great effect with our learners in the classroom to help them to understand complex topics. Mind mapping is just as relevant for the lower grades and pre school by using pictures. They can either use a drawing or mind mapping app to draw their maps or do it on paper using paper like we have practiced.

In the following example the mind map shows the different food groups. For more mind mapping ideas see your resource folder.



1. What is the advantage of using mind maps in your classroom?
2. Brainstorm some mind mapping lesson plan ideas.
3. How does Mind-mapping support 21st learning skills?



Homework



30 min

1. Read the following article in your Module 5 resource folder.
 - **More about Mind Maps**

2. Watch the PowerPoint in your Module 5 Resource folder
 - **Mind Mapping examples**

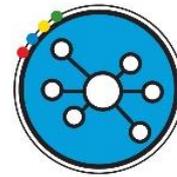
3. Use the *Memoires app* to reflect on:
 - a. What worked and what did not work? Why?
 - b. How can I use mind mapping in my classroom?
 - c. How does the mind mapping strategy support 21st century skills (the 4 C's)?



All reflection activities will count towards a REFLECTIVE PRACTITIONER BADGE Make sure that your *Memoires app* shows the time line of all your reflective entries. (See the tutorial **How to use the *Memoires app* for reflection and timelines** in your How-to resource folder).

4. Do the compulsory MIND MAPPING BADGE (see page 9)

5. Try the optional APP EVALUATION BADGE (See page 9)



6. Complete your **Outcomes checklist** to monitor your progress (see page 10).

7. In the next session we will design flipped classroom lessons. In order to do that you will need to:
 - a. Listen to the podcast on Flipped classrooms from TeacherCast Educational Broadcasting Network: TeacherCast Podcast #26 “The Flipped Classroom” – (<http://podcast.teachercast.net/>)
 - b. Watch the video from MediaCore: “How the Flipped Classroom works” – (<http://goo.gl/HVZgG6>)
 - c. Watch the video from MADDDrawProductions: The Flipped Classroom Model” – (<http://goo.gl/9hcFQ>)
 - d. Read the eBook: The Flipped Classroom Model – By Jackie Gerstein

You need to be able to answer the following questions before you come to the next session:

- **What is a flipped classroom?**
- **How is it different from what I am doing now?**
- **How can I use it in my teaching?**

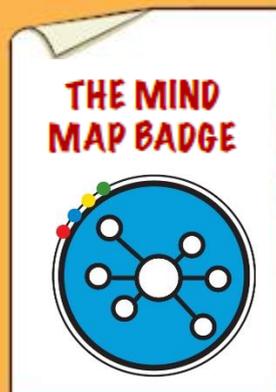
Note: All the resources can be accessed from module 5 resource folder.

Compulsory Badge

This badge is a compulsory badge that must be completed in order to graduate.

Instructions:

Design a whole class activity in which students will use a mind map.
Develop the mind map on the board in the classroom and then re-create it using a mind map app on your device.



Must do

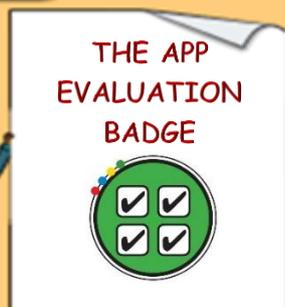


Assessment criteria			
	What to do	What to provide	v
1	Write down what your mind mapping lesson is all about	An outline of your lesson in electronic form. (A photo of written lesson or word file).	
2	Take a photo of the mind map that you/your learners did on the board and in their books.	A photo of class/learners' mind map.	
3	Re-create the mind map (in 2) using an app (e.g. <i>Simplemind</i>) on your device.	Make a screenshot of your electronic mind map or show badge collector the mind map using the app.	

Optional badge: APP EVALUATION BADGE

Try this.....

C



This Badge is not compulsory and is a challenge badge!

Instructions:

Use the **App Evaluation Questionnaire** to discuss suitability of apps for use in **your class** and subject. Consult your **App sheet** for possible apps to investigate.

Assessment criteria			
	What to do	What to provide	v
1	Evaluate at least 10 apps on your device (or from the app sheet) using the App evaluation questionnaire in your Module 5 resource folder.	10 completed app evaluation questionnaires (digital or printed copies will be accepted).	



Outcome Checklist

I can do the following:		√
1	Use Mind Mapping as a teaching and learning strategy.	
2	Evaluate the use of technology vs traditional teaching methods in my classroom.	
3	Create a mind-mapping lesson plan idea.	
4	Evaluate apps for educational purposes.	
5	Manage and organise information.	
6	Explore the use of a mobile device:	
I.	Use a mind mapping tool with learners;	
II.	Use a drawing app as a discussion tool;	
III.	Install, uninstall and manage apps on my device;	
IV.	Create folders of apps;	
V.	Share files using Bluetooth and or Wi-Fi.	
VI.	Create a screen shot.	
7	Use the following suggested APPS on my mobile device:	
i.	Kingsoft Office (Slideshow/Word)	
ii.	Memoires	
iii.	<i>ES File Explorer</i>	
iv.	<i>Paintjoy</i>	
v.	<i>Simplemind</i>	
vi.	<i>Adobe Acrobat Reader</i>	
vii.	<i>Random Student Picker</i>	



Notes



This course has been designed for classrooms where all learners and teachers have access to their own mobile device. In contexts where this is not possible, you will need to reflect on how you will use your particular technology provisions within the given teaching strategy.

Examples

You can use the mind mapping strategy without any embedded technology. This strategy is ideal for getting learners to brainstorm ideas or classify topics.

- **Life sciences:** Biodiversity - classification of micro-organisms.
- **Foundation Phase:** Learners can classify food groups.
- **Mathematics:** Classify the different geometrical shapes.
- **Languages:** Explore the various components of an essay/poem.

One device

If you only have one device, for example if only the teacher has a device, you can still use it to bring technology into the Mind mapping strategy.

- Ask the learners to do their mind-map (or a section of a mind map) on a piece of paper
- Pass the device around so that all groups can add their section to the communal mind map.
- Teacher can use the one device to record what the groups are doing



5 or more devices

If you borrow 4 more devices from your colleagues or have the use of a Mobikit/trolley of devices, you can give each group a device to create a mind map with.

- Ask the learners to create a mind map on paper first following a discussion.
- The group members take turns to insert their idea into the mind mapping app.
- Ask them to create a screenshot of their mind map.
- They then share their group's map with the teacher.

1 to 1 device

This is the ideal scenario for embedded technology and ideal where each member must try the skill on his/her device.

- Learners can create their mind map on their individual devices.
- They then take a screenshot of their mind map.
- They Bluetooth /share their mind-map.
- Each group member swap their device with the person next to them and they can then use a rubric to evaluate each other's mind-maps.

