ICT4RED

Outcomes

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

1. Describe the value of a Field Trip as a teaching strategy.
2. Earn the FIELD TRIP BADGE.
3. Explain different uses of QR codes in educational settings.
4. Plan, facilitate and assess a scavenger hunt.
5. Explore the use of a mobile device:
   a. Decode (read, scan) QR codes.
   b. Take photos, make photo collages.
   c. Take videos and watch videos.
   d. Read geographical (GPS) information.
6. Use the following suggested apps:
   Camera, QR Code Scanner / QuickMark, Layout (for photo collages)

Introduction 5 min

During this module you will have a fun experience with a Scavenger Hunt Field Trip. This is meant to effectively demonstrate to you the educational value of field trips in general and scavenger hunts in particular. You will have to work collaboratively in your groups in order to achieve all the team goals. You will also be competing against the other groups.

Activity 1 QR Codes 5 min

In this activity you are going to use an app to find out what a QR code is and how to scan and read it.

The QR code system was invented in 1994 by Denso Wave. Its purpose was to track vehicles during manufacture; it was designed to allow high-speed component scanning. Although it was used initially for tracking parts in vehicle manufacturing, QR codes are now used in a much broader context, including both commercial tracking applications and convenience-oriented applications aimed at mobile phone users (termed mobile tagging). QR codes may be used to display text to the user, to add a vCard contact to the user's device, to open a Uniform Resource Identifier (URI), or to compose an e-mail or text message. Users can generate and print their own QR codes for others to scan and use by visiting one of several paid or free QR code generating sites or apps. It has since become one of the most-used types of two-dimensional barcode.
http://en.wikipedia.org/wiki/QR_codes

1. Use the *QR Code Reader / QuickMark* app on your device to scan the QR code on the previous page and write down what it says.

How-to tutorials

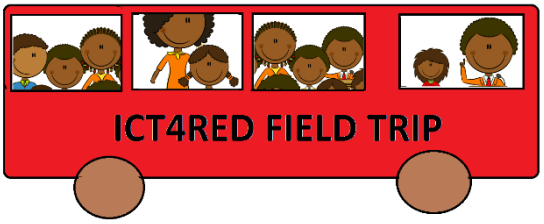
- How to use the *QR Code Reader / QuickMark* app to scan and generate

2. Answer the following QR code questions:

QR Code	Answer

Activity 2 Field Trips 5 min

A field trip is an out-of-class learning experience. These trips often take the form of a costly visit to a certain place, but they can also be fun and challenging activities in your local community. Field trips have many benefits, including:



- The strategy creates experiential learning opportunities for learners.
- Learners remember what they personally experience.
- Concept development is optimised through active explorative experiences.
- Field trips increase learners' knowledge and understanding of the world.
- Learning and teaching take place while learners have fun

A more commonly used field trip is a scavenger hunt which we will use as a learning strategy today.

A scavenger hunt is a game in which the organisers prepare a list of specific items, which the participants (individuals or teams) seek to gather all items on the list (usually without purchasing them) or perform tasks or take photographs of the items, as specified. The goal is usually to be the first to complete the list, although in a variation of the game, players can also be challenged to complete the tasks on the list in the most creative manner.
Source: http://en.wikipedia.org/wiki/Scavenger_hunt

Activity 3 Hunt for your team 10 min

When you arrived you were given a badge with a QR code. You need to find the three other members in your group by scanning the QR codes and finding those that are the same as yours. During the scavenger hunt activity you will work collaboratively as a team. Each of the members needs to take on one of the collaborative roles. See the table below.

Collaborative Role	Description of responsibility	Name of the person who takes on the role.
Facilitator	Make sure that every voice is heard. Focuses work around the learning task.	
Presenter	Compiles group members' ideas. Writes for the class to see during presentation.	
Recorder (photographer)	Presents the group's finished work to the class.	
Timekeeper	Encourages group to stay on task. Keeps track of time.	

Notes

Activity 4 The Scavenger Hunt 70 min

The goal of today's Scavenger Hunt is to learn interesting information about the venue and to experience how important it is to:

- Carefully read the requirements for each item.
- Follow the instructions to the point.

You will be provided with a list of instructions /requirements and an information sheet about the venue. The team that earns the most points will be the winner of the Scavenger Hunt.

Scavenger Hunt Rules

- A Scavenger Hunt takes place within a fixed time. (The time allocated for today's Scavenger Hunt is 60 minutes).
- Points are allocated for the different items that need to be collected. The items are weighted according to difficulty or/and the fun you can experience.
- The team with the most points earned, within the time limit, wins.
- Teams who complete the scavenger hunt after the fixed time will be penalised- make sure that your time keeper keeps the team on time!
- Teams may not split up to take photos faster! All team members must stay together at all times.
- When a team or one of the team's members does not play by the rules the team will be disqualified.
- Remember there is limited time so you most probably won't be able to do everything.
- Be mindful of safety.
- All photos can be posted on the internet so be mindful of decency.
- Only one photo per item will be counted.
- The scavenger hunt activities of a team will be scored by another team.

Activity Score Sheet

Below is an example of an activity score sheet.

You will be provided with a similar Activity score sheet indicating the list of items, and the points that your team can earn if the evidence meet the set criteria and/or the instructions were followed correctly.

REMEMBER: Some activities are just for fun and the points allocated for them vary between 5 to 10 points. Other activities are linked to the history of the school and the allocated points for these items vary between 10 and 30 ooints.			
Points	**Score**	**Description/Requirements/Instructions**	**Tick**
5		An ***all team members*** photo.	
5		A photo of a team member hugging his/her tab.	
5		A photo of ***all team members*** holding a mathematical device.	
5		***All team members calculating*** on a blackboard.	
5		***All team members*** pulling faces.	
5		Write down your group name and take a selfie with **all team members** where your group name is clearly visible.	
5		A photo of a team member holding up an arithmetic problem.	
5		A photo of something which can be used/taught interdisciplinary.	
5		A photo of a something which cannot be counted.	
5		Take a photo of a geometrical shape and estimate the area of the shape.	
5		A photo of two team members playing sudoku.	
5		A photo of a team member exactly two meters off the ground. Prove it with a measurement	
5		A photo of the entire team jumping in the air with each of you holding up his/her lucky number (all the group members need to be in the air).	
10		A photo of a calculation made of sticks.	
10		Write down three words including a number in the name.	
10		Make a photo collage of at least 3 photos representing the length 3cm.	
15		Interview a passer-by with regard to mathematics and its reference to daily life.	
15		Make a photo collage of at least three different geometric shapes which you found on the school campus.	
15		A photo with all the team members which can be titled “Mathematics is for everybody”.	
20		Create a bar chart that displays a characteristic that combines each of you with mathematics.	

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Points	Score	Description/Requirements/Instructions	Tick
25		Produce a short clip, which shows a possible introduction to a lesson with the topic “points in time”.	
25		A series of photos showing at least three different teaching methods.	
15		Scan the QR Code and write down what it says.	
25		Scan the QR Code and do the task.	

Notes

This is an example of a formative assessment done by your peers and the assessment tool is a scoring checklist.

Activity 5 Scavenger Hunt Scoring 35 min

Each team must be scored by another team. Before the scoring can start all the photos and videos of a team need to be on one of the team member's device. Organise the scoring process as follows:

- Allocate two of your team members to join your scoring team in order to make sure your collection is scored correctly.
- Use the activity list to score the items.
- Tally the scores achieved and provide the facilitator with the name of the team and the score.
- The facilitator will anounce the winner once all the scores have been received.

Activity 6 Scavenger Hunt Debrief 20 min

Debrief means to "carefully review upon completion" (Marian-Webster dictionary). Learning experiences, such as scavenger hunts, field trips and watching videos and others, which involve "hidden learning" should always be debriefed so that the learners can reflect on the learning experience in terms of the curriculum outcomes.

Discuss the following questions and write your answers in the space provided.

1. What will you remember about today's Scavenger Hunt?

2. Write down the new concepts you have learned.

3. How does one assess experiential learning?

Homework 25 min

1. Read the following in your Module 8 resource folder.
   - Articles
     - **Understanding the Scavenger Hunt Field trip**
     - **Making the case for Field Trips**
   - Examples of Scavenger Hunts

2. Use the *Memoires app* to reflect on the Field Trip Teaching strategy.
   a. What worked? What did not work? Why?
   b. How are you going to use the Field Trip teaching strategy in your classroom?
   c. Explain how the Field Trip strategy supports 21st skill learning (the four Cs).

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).

3. Do the FIELD TRIP BADGE.
   Use the **Template to design a Scavenger Hunt** (module 8 resource folder) and design a Field Trip Scavenger Hunt.

Scavenger Hunt ……. **GRADE …….**

REMEMBER:			
Points	**Score**	**Description/Requirements/Instructions**	**Tick**

4. Complete the Outcomes Checklist on page 11.

Compulsory Badge

Instructions:

Design a field trip scavenger hunt for your learners. It can be either at the school, at an outside venue or in your community close to your school. It has to include the following elements:

- Fun
- Curriculum objectives
- Environmental issues

Assessment criteria			
	What to do	**What to provide**	
1	Create a Scavenger hunt scoring sheet for your learners, outlining all the activities and scoring requirements that they should do.	The Scavenger hunt scoring sheet with at least 10 different tasks: • 5 of which are fun • 5 of which are aligned to the curriculum.	
2	Take your learners on a field trip where they have to complete the scoring sheet by doing the activities.	Photos and videos of your learners doing their scavenger hunt.	
3	Critical reflection of the educational value of a field trip.	An entry in your journal reflecting on the educational value of the field trip.	

Outcome Checklist

I can do the following:		√
1	Use the Scavenger Hunt field trip as a teaching and learning strategy.	
2	Do the Field Trip badge.	
3	Scan and make QR codes.	
4	Plan, facilitate and assess a scavenger hunt.	
5	Work collaboratively in a group and take responsibility of a collaborative role player.	
6	**Use your mobile device to:**	
I.	Decode QR codes.	
II.	Display information as a QR code.	
III.	Take photos and make photo collages.	
IV.	Take and watch videos.	
7	**Use the following Apps/Websites**	
I.	*Camera*	
II.	*Layout*	
III.	*Android: QR Code Reader (TWMobile)* *iOS: QuickMark (SimpleAct Inc.)*	
IV.	*www.goqr.me*	

Notes

Doing it differently

This course has been designed for classrooms where all learners and teachers have access to their own mobile devices. 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 **Field Trip** teaching strategy without any embedded technology. For instance to give learners real world experiences outside the classroom.

- **Foundation Phase**:
  The learners can explore various environmental issues and draw pictures of what they see or collect evidence that they have been at a specific place (e.g. create an alphabet trail)
- **GET Phase:** Learners are given tasks around the venue and have to collect evidence from each task to be scored
- **FET Phase:** Learners have to interview community members and ask them questions to understand environmental issues.

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 **Field trip** teaching strategy.

- Learners may follow printed clues and perform tasks according to the scoring sheet while you record field trip moments using your tablet camera.
- Leave the tablet at one of the activity points for the learners to record what they are doing or do the task on the tablet.

5 or more devices

If you borrow 4 more devices from your colleagues or have the use of a Mobikit/trolley of devices, the learners can work in groups with each group having the use of a tablet.

- Create QR codes for the groups to scan and to follow the instructions.
- Learners can do mathematical activities using their group's allocated device.
- As field trips are geared towards collaborative group work, having one device per group and collecting all the evidence on one group device, is the best scenario.

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.

- Each student having a device allows for individual activities. (e.g. educational math games)
- Each group member can collect different evidence to submit towards a project group activity (e.g. 1 learner collects environmental evidence, the other collect stories)
- Each of the group members has to provide evidence individually.