

TEACHER'S PROJECT NOTES



- 3** ENTREPRENEURSHIP
- EMPLOYABILITY
- EDUCATION

PLAYFUL PROJECT-BASED LEARNING | TERM 3 LIFE SKILLS PROJECT



basic education
Department:
Basic Education
REPUBLIC OF SOUTH AFRICA



GRADE **2**

Dear Teacher

Reducing the extremely high levels of youth unemployment is E³'s compelling goal and is at the heart of the E³ Playful Project-based Learning (PPBL) approach. The outcome of this programme is to equip learners with solution-seeking mindsets so they can achieve one, or more, of the three E's - become Entrepreneurs, follow a path into higher Education or become Employed.

Foundation phase learners are many years away from leaving school and finding their way in the big, wide world. They are the lucky ones because if they are exposed to an educational approach that is engaging, interesting and relevant, they are sure to leave school well equipped to participate in the modern economy.

So, what educational approach stimulates learners' engagement and interest and equips them with relevant skills and competencies? The answer is Playful Project-based Learning (PPBL).

The E³ PPBL Foundation Phase projects have at their core a play-based approach as it is through play that children's curiosity, motivation and lifelong love for learning is activated. The PPBL projects are designed to bring maximum fun and learning to the classroom – for teachers and learners. Each project is like an onion and contains layers and layers of learning. When implementing the projects you will:

- Bring the CAPS to life and realise its intended outcomes.
- Promote thinking, connection and empathy – critical competencies for a changing world.
- Encourage problem-seeking and problem-solving skills.
- Stimulate the holistic development of each learner.
- Foster a lifelong love of learning.

At the end of each project we hope learners have had such a great experience that they keep coming back for more.

We hope you enjoy unlocking play in your classroom and encouraging a solution-seeking mindset in your learners.

Good luck and remember to have fun!

The E³ team



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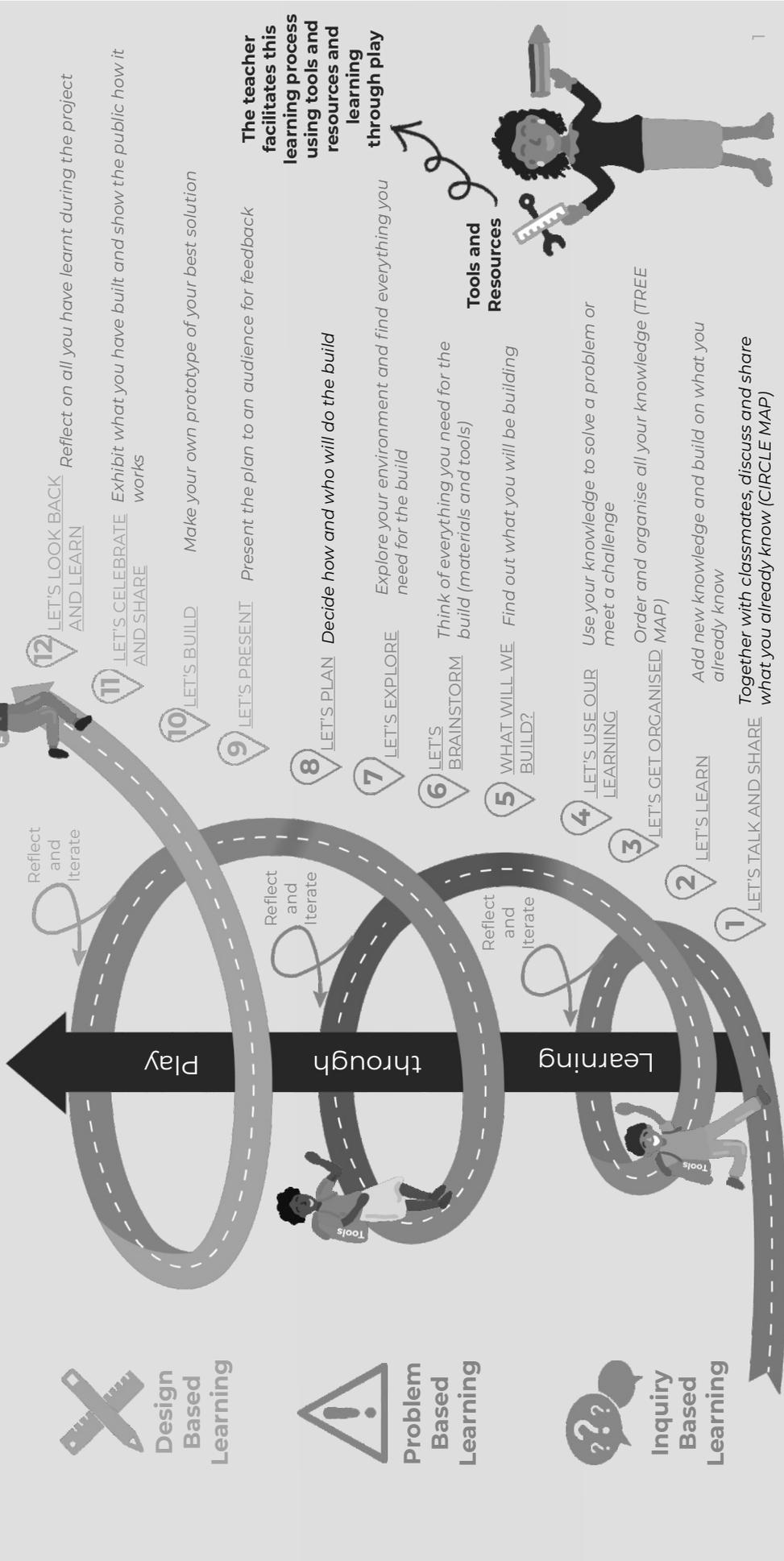


Letter to teachers

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Our Playful Project-based Learning Process

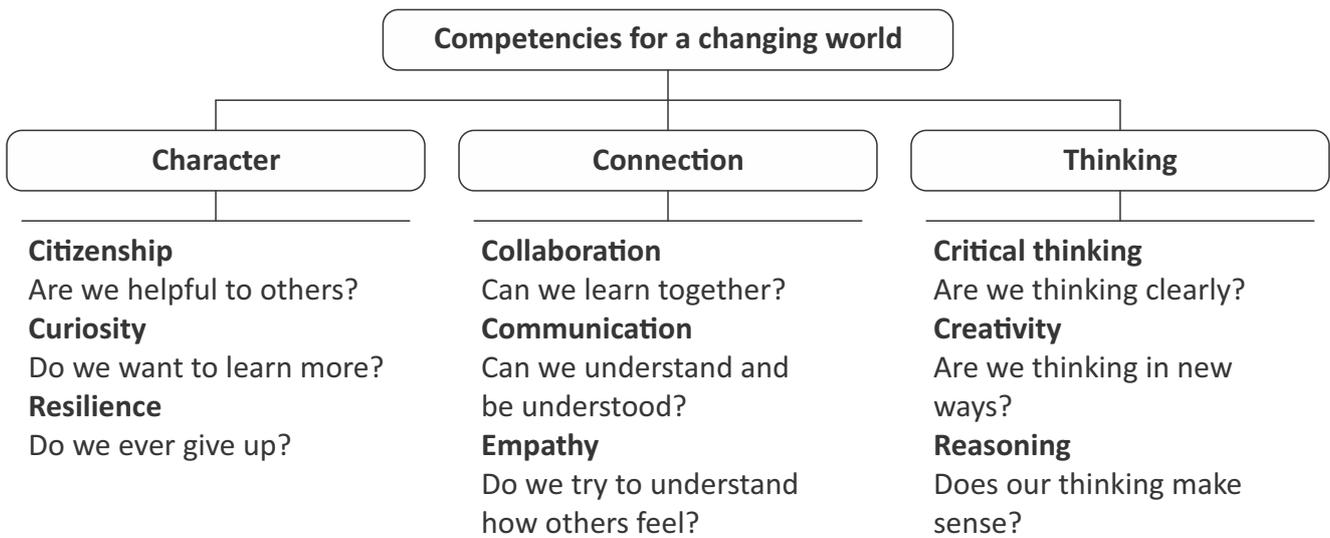
Solution-seeking mindset





“Thriving in today's fast changing world requires breadth of skills rooted in academic competencies such as literacy, numeracy and science, but also including such things as teamwork, critical thinking, communication, persistence, and creativity.” (*Skills for a Changing World: Advancing Quality Learning for Vibrant Societies McGivney E., Winthrop W. 2016*)

E³ has focused on three competencies, Thinking, Connection and Empathy all of which are unlocked and learnt through the Playful Project-based Learning process. This unlocking and learning is designed to be experiential i.e. the learning is in the doing. Activities within each project constantly urge learners to think, connect and empathise. This tree map shows the competencies in more detail.



It's easy to forget about competencies in the busyness of a school day. Making a competency spinner is a fun and easy way to keep engaging with these essential behaviours. You, or better still, your learners can make competency spinners. Keep a big spinner on the wall. Spin it weekly to see what competency to focus on – and acknowledge when you see these behaviours in your learners. They will catch on quickly and start to recognise the various competencies in their peers and most importantly in themselves.



MEASURE WHAT YOU TREASURE: COMPETENCIES FOR A CHANGING WORLD

The Playful Project-based Learning approach is being implemented to better equip learners to cope in a rapidly changing world outside of school. Being equipped means creating opportunities where learners can develop competencies such as Connection, Communication and Thinking that contribute to a solution-seeking mindset. This changing approach to teaching and learning must be supported by a shift in mindset towards what we assess and measure. It is no longer enough to only assess CAPS content, we need to also be looking for and acknowledging behaviour and actions that reflect competency-based behaviour.

To guide you as you start on this journey of learning, a competency checklist called **Measure what you treasure: Competencies for a changing world** has been included in the Teacher's Resource Pack. This will focus your observations and assist your rating of learners' competency development that, collectively, characterise what Playful Project-based Learning (PPBL) looks like in South African classrooms.

Elements of Creativity

Creativity is all about using your imagination to see things differently. Creative people come up with different ideas and find realistic solutions to problems they face.

The CDR outlines several different elements or sub-competencies that make up Creativity, which include:

- Analyzing information
- Transforming knowledge and experience to solve a problem
- Taking risks
- Listening
- Solution seeking and idea-generating
- Reflecting

Here we will focus on generating ideas and solution seeking and reflecting.

Solution seeking and idea-generating Creative people develop new ideas. They are also good at turning these ideas into realistic solutions, especially within situations where there are limitations. Creative people see limitations as opportunities to be innovative by reflecting and improving on their ideas.

Reflecting Part of the process of creativity is reflecting on the process itself and making small changes when appropriate to improve the process.

DURING THE PROJECT OR ACTIVITY:

How often did the learner show this behaviour?

Tick your answer in the boxes

Never (N) Sometimes (S) Often (O) Always (A)

1. **Generating ideas:** Did the learner generate ideas?
2. **Solution seeking:** Did the learner actively look to find relevant and realistic solutions to problems identified?
3. **Reflecting:** Did the learner reflect on the activities and the outcome?
4. **In relation to the explanation:** demonstrate an understanding of your answer below

Did not understand creativity 1 2

Elements of Communication

Communication is the process of transferring information from one person or group of people to another. You can communicate in different ways, through speaking, writing, without words and use different tools. Good communication tries to understand other people (have empathy).

The CDR outlines several different elements or sub-competencies that make up Communication, which include:

- Questioning
- Multiple means communicating
- Inter-personal communicating
- Empathising
- Articulating
- Non-verbal communication

Here we will focus on empathising, articulating and non-verbal communication.

Empathising Good communicators try to understand how other people feel and take their experiences into consideration.

Articulating To excel in communication, it is important to consider the audience and present information using tools and methods that are appropriate for that audience.

Non-verbal communication Communication is not just about words. Non-verbal cues and tones that people use can be extremely important for conveying emotions and messages. It is important to know how the WAY that you say something impacts others as much as, or more than, WHAT you say.

DURING THE ACTIVITY:

How often did the learner show this behaviour?

Tick your answer in the boxes

Never (N) Sometimes (S) Often (O) Always (A)

1. **Empathising:** Did the learner "put themselves in others' shoes" to try to understand how they feel?
2. **Articulating:** Did the learner consider their audience and tailor their responses appropriately, using the most appropriate tools?
3. **Non-verbal communication:** Did the learner demonstrate an understanding of non-verbal means of communication?
4. **In relation to the explanation:** demonstrate an understanding of your answer below

Did not understand communication 1 2

Elements of Collaboration

Collaboration is when people work with each other to complete a task. It involves co-operation and teamwork and the sharing of ideas, knowledge, and skills to reach the same goal.

The CDR outlines several different elements or sub-competencies that make up Collaboration, which include:

- Leveraging other strengths
- Considering
- Conflict resolution
- Compromising
- Feeding back

Here we will focus on compromising, conflict resolution and feeding back.

Compromising People who are good collaborators take responsibility for their own behaviour and tasks. They also know that they cannot get their own way all the time and work with the team to find the best solutions.

Collaborators are good at solving conflict or issues. They actively listen and try to understand other perspectives.

Constructive feedback. They also openly share their own views and help others grow and develop their skills.

DURING THE ACTIVITY:

How often did the learner show this behaviour?

Tick your answer in the boxes

Never (N) Sometimes (S) Often (O) Always (A)

1. **Compromising:** Did the learner make compromises so that the team could get the best results?
2. **Conflict resolution:** Did the learner demonstrate the ability to resolve disagreements or conflict in the team?
3. **Feedback:** Did the learner give useful feedback to the team and was willing to receive, and act on, feedback?
4. **In relation to the explanation of collaboration:** did the learner demonstrate an understanding of what collaboration is?

Did not understand collaboration 1 2 3 4 5 Completely understood collaboration

Elements of Critical Thinking

Critical thinking is all about asking questions to understand the world around you. It is also about trying to make sense of the information you find, evaluating it and connecting it to other pieces of information.

The CDR outlines several different elements or sub-competencies that make up Critical Thinking, which include:

- Reasoning
- Critical Reflecting
- Analysing
- Considering alternatives

Critical thinking is about developing higher levels of understanding, often by considering these critical thinking skills outside the context in which they were learnt (ROE, 2023). The tool will focus on analysing and considering alternatives. Taken from the Centre for Curriculum Re-design 2026.

Analysing Analysing is all about breaking down a complex topic or piece of information into smaller parts that are easier to understand. You can use tools, such as thinking maps to help you to do this. It is also about asking questions to help you understand something.

Considering alternatives To expand initial idea(s) by considering different and/or opposing views.

DURING THE ACTIVITY:

How often did the learner show this behaviour?

Tick your answer in the boxes

Never (N) Sometimes (S) Often (O) Always (A)

1. **Analysing:** Did the learner ask questions which demonstrated their ability to analyse the information about the topic and activity they were learning?
2. **Analysing:** Did the learner use tools to help them to organise the information they gathered about the topic/activity? (e.g. Thinking maps is one tool).
3. **Considering alternatives:** Did the learner consider opinions or views that were different from their own viewpoint?
4. **In relation to the explanation of critical thinking:** did the learner demonstrate an understanding of what critical thinking is?

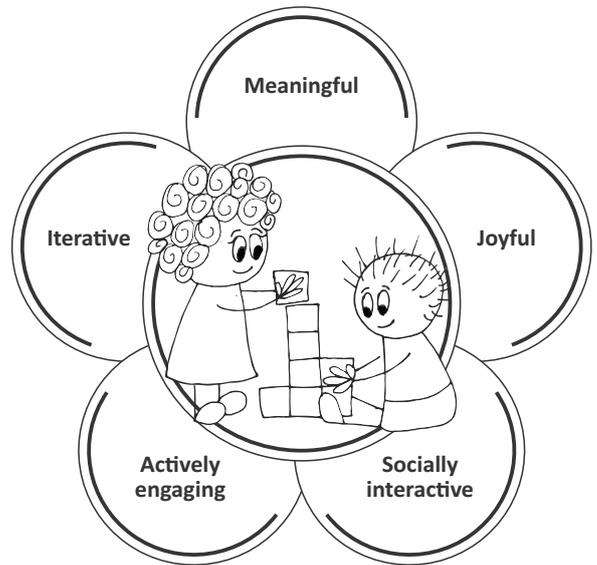
Did not understand critical thinking 1 2 3 4 5 Completely understood critical thinking

WHAT IS SO SPECIAL ABOUT S.P.E.C.I.A.L.?

It's no secret that humans learn best through play. When we are enjoying a task, even if it is extremely challenging, we are likely to become deeply engaged in the process, and ultimately achieve a positive outcome.

What does playful learning look like?

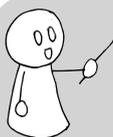
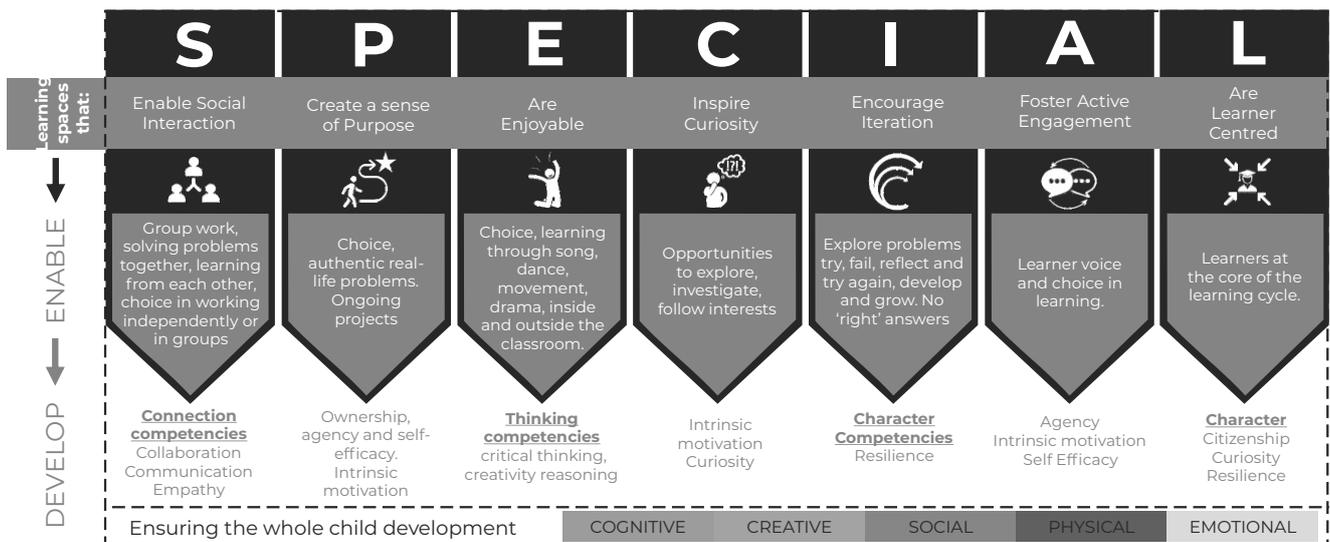
The Lego Foundation, (<http://www.legofoundation.com>) highlights five characteristics of playful learning. If the activities experienced by learners are **meaningful**, **joyful**, **socially interactive**, **actively engaging** and **iterative** they can be considered playful.



Being deeply committed to bringing out the PLAY in the Playful Project-based Learning process, E³ has used these five characteristics and added two unique elements that, collectively, characterise what playful learning looks like in South African classrooms.

What does play look like in South Africa?

The 7 Essential Characteristics of Playful Project-based Learning



Challenge yourself: Create a S.P.E.C.I.A.L. banner for your classroom. Reflect on it through the day. If even one characteristic is evident in your learners then you can be sure you have started to create a positive and playful learning environment.

Grade 2 project summary

Inquiry-based Learning: is an active learning method that involves learners asking questions about a topic, triggering learners curiosity and engagement in a topic



Inquiry - based Learning

1 LET'S TALK AND SHARE Think about what you already know

Learners discuss and share what they already know about the topic of road safety. This is noted on a circle map.

2 LET'S LEARN Building on what you already know and add new knowledge

Learners are introduced to new information about the topic to add to their prior knowledge of road safety.

3 LET'S GET ORGANISED Order and organise all your knowledge (TREE MAP)

Learners collect data about different forms of transport they use and grow a tree map. They also create questions they would like to ask a traffic officer.

4 LET'S USE YOUR LEARNING Use your knowledge to solve a problem or meet a challenge

Learners apply their knowledge to think of creative ways to help the grade 1s in their school understand and follow road safety rules.



S Social Interaction

P Purpose

Reflect and Iterate

Problem-based Learning: Learners work in teams to formulate complex, real-world problems, and propose possible solutions. Real world problems are the tool for learners to investigate and develop their understanding of the CAPS curriculum.



Problem - based Learning

5 WHAT WILL WE BUILD? Find out what you will be building

Learners are introduced to the project which is to build a road vehicle with wheels that turn. They explore pictures of various types of vehicle to inspire their own design.

6 LET'S BRAINSTORM Think of everything you need for the build (materials and tools)

Learners brainstorm what they might need in terms of materials and tools, to build their vehicles.

7 LET'S EXPLORE Explore your environment and find everything you need for the build

Learners explore their classrooms, school grounds, and homes for the materials they need. These must be largely found items and recycled materials.

8 LET'S PLAN Decide how and who will do the build

Learners plan and sketch a design or make a prototype of their vehicles.



E Enjoyment

C Curiosity

Reflect and Iterate

Design-based Learning: Learners produce solutions to complex problems by designing, building, and testing prototypes (a "prototype") that solve some of the problems learners identified in the problem phase.



Design - based Learning

9 LET'S PRESENT Present the plan to an audience for feedback

Learners present their plans and designs to their peers for feedback and iteration. They must be prepared to answer peers' questions.

10 LET'S BUILD Use your knowledge, materials and tools to build the project

Learners build their vehicles according to their iterated plan, using the materials they collected.

11 LET'S CELEBRATE Exhibit what you have built and show the public how it works

Learners show what they have learnt about road safety through a role play or song. At the exhibition they explain their project and answer questions from the public.

12 LET'S LOOK BACK AND LEARN Reflect on all you have learnt during the project

Learners reflect on the process of the project using a set of reflection questions to guide their thinking.



A Active Engagement

L Learner centred

Reflect and Iterate

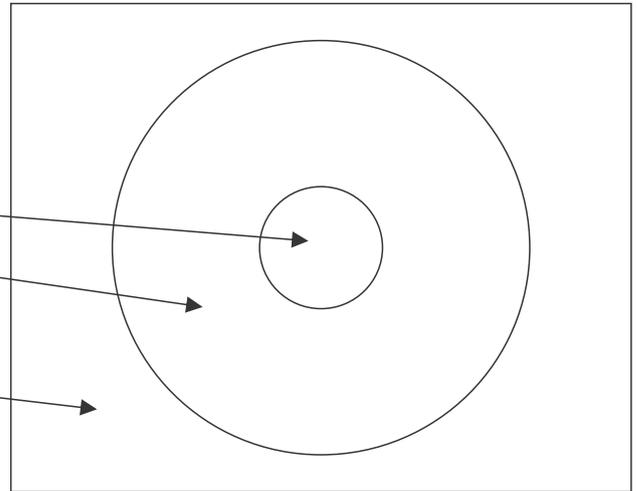
THINKING MAPS: MAKING THINKING VISIBLE

Thinking maps are a simple yet highly effective tool that are wonderfully versatile and can be adapted to suit many ages and contexts. There are eight types of thinking maps, but only two types are used in the Foundation Phase projects, the Circle Map and the Tree Map. (More information on Thinking Maps is available in the Teachers Resource Pack.)

Circle Maps

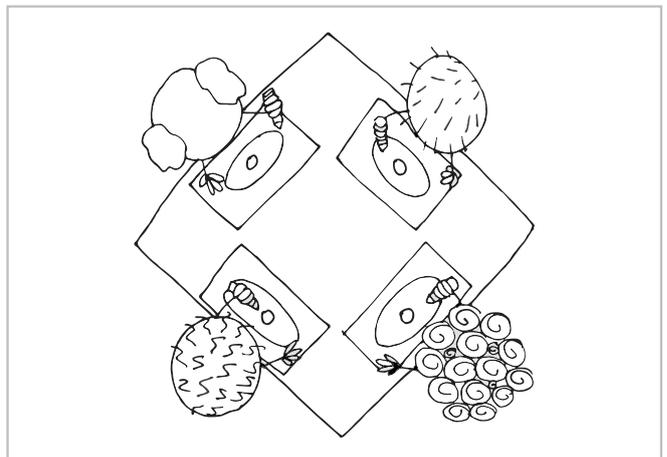
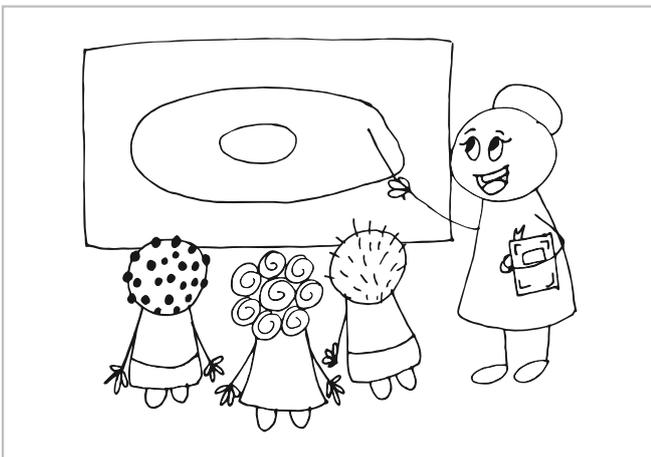
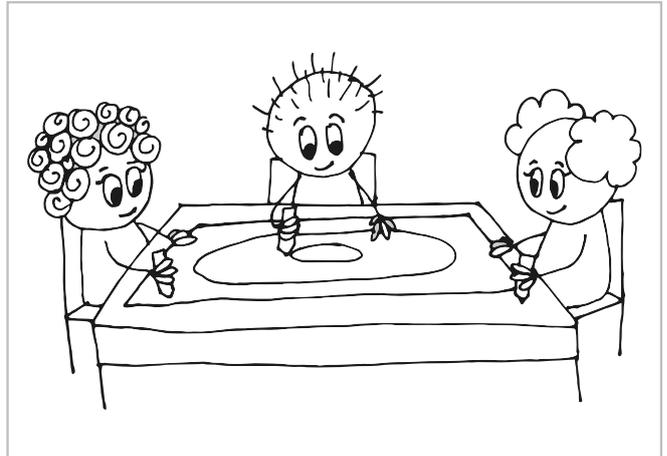
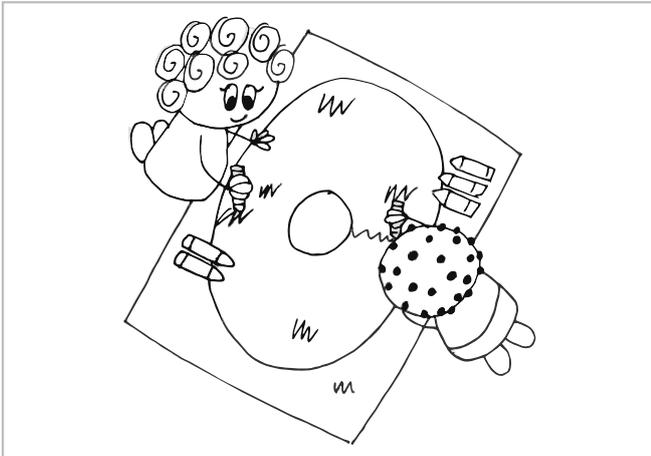
How to use them

- Write the topic in the centre
- Write/draw what you already know about the topic in the big circle
- Write/draw how you know what you know in the rectangle



When to use them

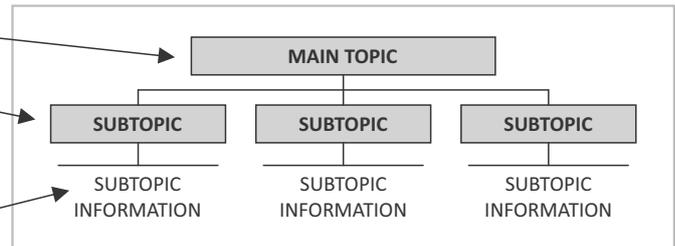
Circle maps are used whenever you want to capture brainstorm-like activities. They are used in the first step of almost all the E³ projects where learners think, discuss and share what they already know about a topic and then write or draw this knowledge onto the map. This is a way of establishing learners' prior knowledge. Here are four ways you could use a circle map in your classroom.



Tree Maps

Tree Maps are used to organise information from a circle map activity into conceptually similar groups.

- The main topic goes here
- The subtopics go under the main topic (There can be as many subcategories as learners can think of)
- Information relevant to the subtopic is listed here



Although the Thinking Map templates are available for printing, it is great when learners draw their own. In this way they don't depend on a worksheet, but learn a portable skill they can use at home.

CAPS ALIGNMENT



Grade 2 Life Skills: Beginning knowledge, personal and social well-being.

Term 3. Topic: Road safety. *Can learner demonstrate knowledge of the road safety including safety rules for pedestrians and cyclists, identify and explain common road signs and how traffic officers help us.*

1	2	3	4	5
Learner has rote learnt words related to road safety but has little to no meaning attached. Struggles to connect road safety to own context i.e., cannot explain what rules he/she uses and why. Learner unaware of own gaps in learning and does not benefit much from additional assistance.	Learner has partial recall of road safety words and can explain the reason for some rules, road signs and people that keep us safe on the road. Needs help bridging road safety from book learning to own context e.g., may struggle to recall road safety signs they see on the way to school or what pedestrian rules they use.	Learner describes / explains most road safety rules, signs and people who keep us safe on the road. Can apply rules to own context i.e., explains what roads signs exist in their area, and what rules they use to keep safe. Learner asks questions to learn more.	Comprehension is good. Learner can explain road safety concepts clearly and in some detail. Clear application of the rules to their context i.e., can answer, "What rules do you use and why?" Learner is curious and asks questions to a variety of people to learn more.	Excellent understanding of road safety. Learner has explored the topic, e.g., has found books on the subject. Learner can explain which rules apply to their context but knows why it is important to understand all rules i.e., why you must learn about robots even if there are none in the area.



These are some guidelines to help you prepare for implementing the project.

PROJECT PLANNING AND PREPARATION CHECKLIST	
Collect and store found and recycled materials.	<input type="checkbox"/>
Not everyone likes change, so if PPBL projects are new to the school be sure to explain to parents, caregivers and learner what the projects are all about and more importantly the benefits of the PPBL approach to learning and teaching.	<input type="checkbox"/>
Different coloured bottle caps/ counters for data collection.	<input type="checkbox"/>
If possible, invite a traffic police officer to participate in an interview with learners. Invite the same officer to the Celebrate and Share event.	<input type="checkbox"/>
Ensure learners have the DBE Term 3 Life Skills workbooks in the Language Of Learning and Teaching (LOLT).	<input type="checkbox"/>
Gather any resources you already have, and that your learners can contribute, to create a theme table or display.	<input type="checkbox"/>
Decide how you want to use the thinking maps and make and copy accordingly.	<input type="checkbox"/>
Have a place, such as a project portfolio, where learners can store their thinking maps.	<input type="checkbox"/>
Diarise a date when the vehicles will be presented and celebrates. Invite lots of people and make it a true celebration.	<input type="checkbox"/>
Plan your groups in advance and place learners together strategically. If group work is unfamiliar, then practise collaboration and group work skills through games and shorter activities.	<input type="checkbox"/>
Think about a classroom management strategy. Decide on rules and that make the classroom an enjoyable learning space for everyone.	<input type="checkbox"/>

THE JOURNEY: STAGE 1

INQUIRY-BASED LEARNING

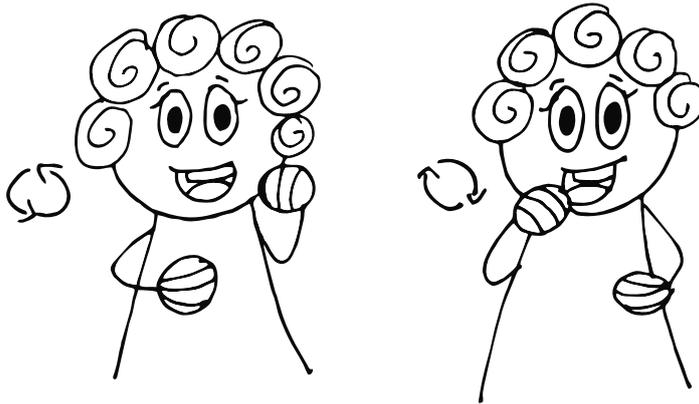


STEP 1

Let's talk and share



1. This project focuses on road safety. To start establishing the vocabulary around this theme start with a movement activity called, "Move like a motor car." Ask learners to pretend to hold a steering wheel and:
 - Drive straight.
 - Turn your steering wheel to make a right turn.
 - Turn your steering wheel to make a left turn.
 - Lean back wards as we drive up a hill and lean forwards as we drive down a hill.
 - While 'driving straight' press down on a pedal with your right foot and then you left foot.
 - Look right, look left and look right again.



2. Learners can write their own instructions on large sentence strips which other learners can read and follow.

Turn right and turn right again



Teaching tip: Healthy bodies, healthy minds

- While learners are 'driving' encourage them to sit up straight, pull their tummies in and drop their shoulders to develop core stability.
- The steering wheel can be 'held' with arms straight out or with elbows slightly bent. Holding this position strengthens the shoulder muscles which ultimately affects pencil control and handwriting.

NOTEPAD



Note your bright ideas here:

Note your reflections here:

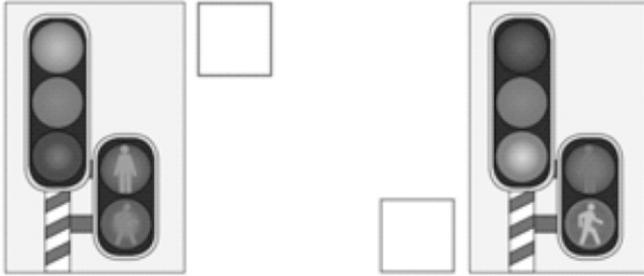
STEP 4



Let's use our learning

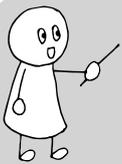
1. Begin this step by sharing this problem (or something similar) with learners.

"In assembly, the principal spoke to the Foundation Phase about the importance of road safety because there have been reports of learners breaking all sorts of rules and putting themselves in danger. The principal is particularly worried about the grade 1 learners who run across the road without looking."



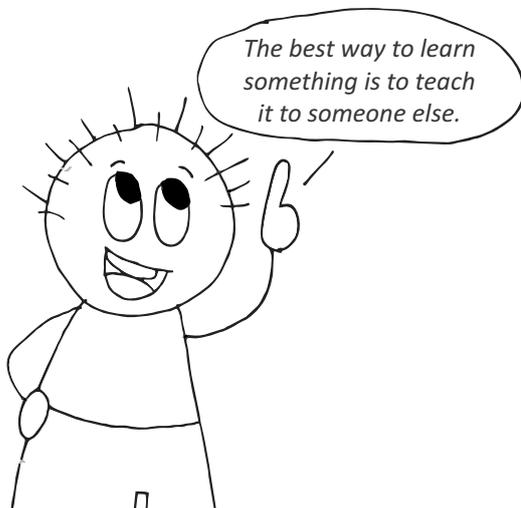
Place a tick (✓) in the box next to the robot that shows that it is safe to walk across the road.

2. Ask learners how they think they could help the grade 1 learners better understand road safety in a fun and interesting way. If they get stuck, inspire them with some ideas such as creating a story, putting on a play, making up a song or playing a game.
3. This can stay in the discussion and planning stage, or you could develop it into a mini project to present to the grade 1 class.



S.P.E.C.I.A.L.

*Building in real-life applications or reasons for learning, such as learners helping each other to learn creates a sense of **purpose**.*



NOTEPAD

Note your bright ideas here:

Note your reflections here:

THE JOURNEY: STAGE 2



PROBLEM-BASED LEARNING

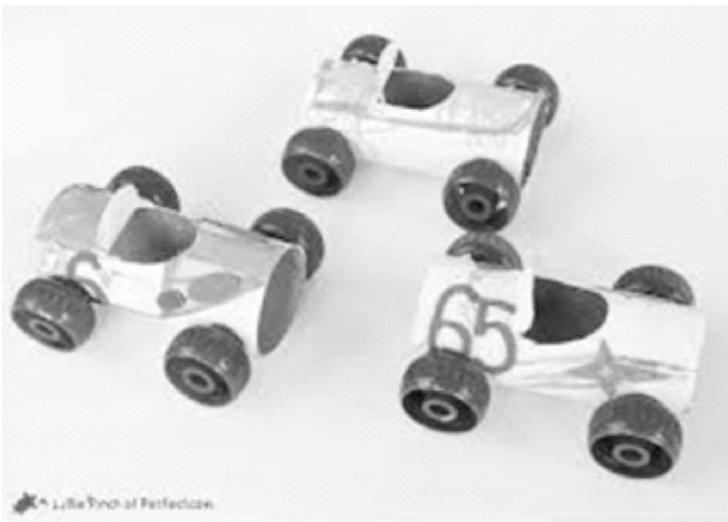
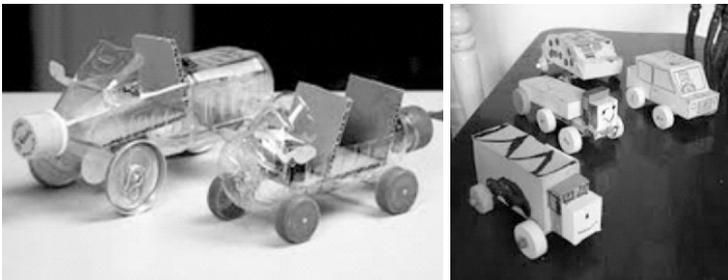
This step takes us into a new phase of the project which is problem-based learning. From here, learners take control of the project and use what they have learnt to solve a problem. This includes a lot of collaborative learning, where learners share ideas, make decisions, design plans and solve problems. Your role from here is to guide, facilitate and advise.

STEP 5



What are we building?

1. It is now time to introduce learners to the project. Explain that they will work in groups and collaborate to design and build a road vehicle of their choice. The problem they need to solve is the wheels must turn so that the vehicle can roll down a slope.
2. All the vehicles must be made from found items and recycled materials. Nothing should need to be bought.
3. Begin the process by showing models, pictures and/ or videos of a variety of vehicles. (More available in the Teacher's Resource Pack but please feel free to add in your own.)



NOTEPAD



Note your bright ideas here:

Note your reflections here:

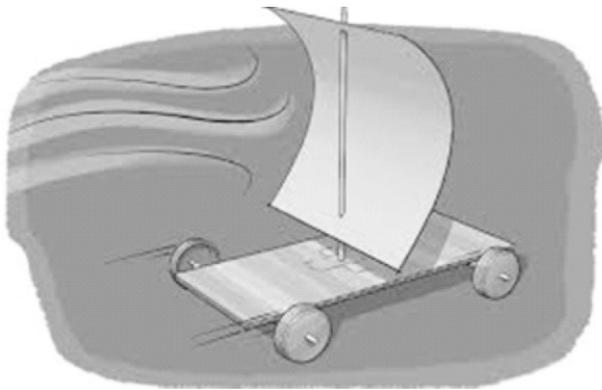
- Give learners time to look carefully at the different vehicles and work out:
 - The different materials used
 - The shapes they could use
 - How many parts there might be
 - How the different parts are joined
 - The textures and possible colours
 - How the wheels have been made and how they turn



Teaching tip: Encourage the creative thinking competency

The pictures used are only for inspiration and not for copying. Learners need to think creatively and design their own vehicles which may be completely different designs. As long as they fit the criteria, there are no right or wrong road vehicles.

Refer to page 3 for more on competencies.



STEP 6

Let's brainstorm



- In their groups, learners brainstorm what they might need to build their vehicle.



Teaching tip: Thinking Maps

A good tool for the brainstorm is a circle map where someone in the group can note all the ideas.

Learners can then use a tree map to get their ideas organised and keep what is useful from the brainstorm.

Refer to page 7 for more on thinking maps

NOTEPAD



Note your bright ideas here:

Note your reflections here:

STEP 12

Let's look back and learn



"We don't learn from experience, we learn from reflecting on experience." (John Dewey)

In this final step, each learner needs to think back on their experience of the project and answer these reflection questions.

- **Road safety**
 - Share five new things you learnt about road safety.
 - What is the most important piece of road safety advice you would share with your friend?
 - What would you like to learn more about road safety?
- **The vehicle building project**
 - What did you love the most about the project?
 - What did you find the most difficult about the project?
 - What was the biggest problem you had to overcome when building the vehicle and how do you solve it?
 - What advice would you give to other learners who might do this project?
- **Working in a group**
 - What was the best part of working in your group?
 - What do you think was the most important thing you did for your group?
 - What was difficult about working in a group?
 - What was the biggest problem you had to overcome when working in a group and could you solve it?
- **Yourself**
 - What did you do in the project that makes you feel proud of yourself?

NOTEPAD



Note your bright ideas here:

Note your reflections here:



Cross-curricular connections

The reflection activity lends itself well to observing and assessing speaking and writing skills.

LANGUAGE

Listening and speaking

Talks about personal experiences

Writing

Shared, group and independent writing

Writes 1-2 paragraphs (at least eight sentences) on personal