

CAREERS AND ME TEACHER'S PROJECT NOTES



- 3 ENTREPRENEURSHIP
- EMPLOYABILITY
- EDUCATION

Playful Project-based Learning | Life Orientation | TERM 3



basic education
Department:
Basic Education
REPUBLIC OF SOUTH AFRICA



GRADE 10

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Dear Teacher

We have come a long way since January 2018 when the National Education Lekgotla announced that Entrepreneurship in Schools (EiS) was to become a national priority and that a programme should be set up to investigate how to prepare learners with thinking skills for a changing world.

EiS was rebranded as E³, as we felt that learners who were not able or keen to start an enterprise should not be excluded. Hence E³ was born: **E**ntrepreneurship, **E**mployability and **E**ducation for lifelong learning has become the pathway all learners in our country will follow as they find their place in the economy. Playful Project-based Learning was the approach chosen as a method teachers would use for the first trial period, as PPBL has been proven to unlock competencies learners of our century need to thrive in the world after school. These are very clearly indicated in the model on the following pages.

Thus, since 2018, E³ have been conducting trials in schools using the PPBL method as an approach, especially for Term 3 where the School-based Assessment is a Project. Thus, your work as a teacher has been prepared for you (you may, of course, change what does not work for you).

Provided herewith is a Learner's Workbook and a set of Teacher's Project Notes for the School-Based Assessment (SBA) Task for Term 3, as per the SBA Plan in Sec on 4 of the CAPS. These documents are specially created to support you as per the trimmed Annual Teaching Plan (Section 3) for Term 3. You will also be provided with the resources learners need to complete their projects.

The Learner's Workbook and Teacher's Project Notes were created by DBE-E³, our unit at the National Department of Basic Education, and reviewed by our master trainers, who are leader teachers or district officials. For those schools that have been part of E³ in the past: you will notice that we have added a number of additional thinking skills to the original model – try to engage learners in these “thinking” sessions as this is where their growth lies.

We truly respect your apprehension during this time, and acknowledge your commitment. We appreciate all your hard work.

Enjoy unlocking play in your classrooms and encouraging a solution-seeking mindset in your learners – and remember that our learners look up to us – so let's walk the talk!

Good luck!

The E³ team



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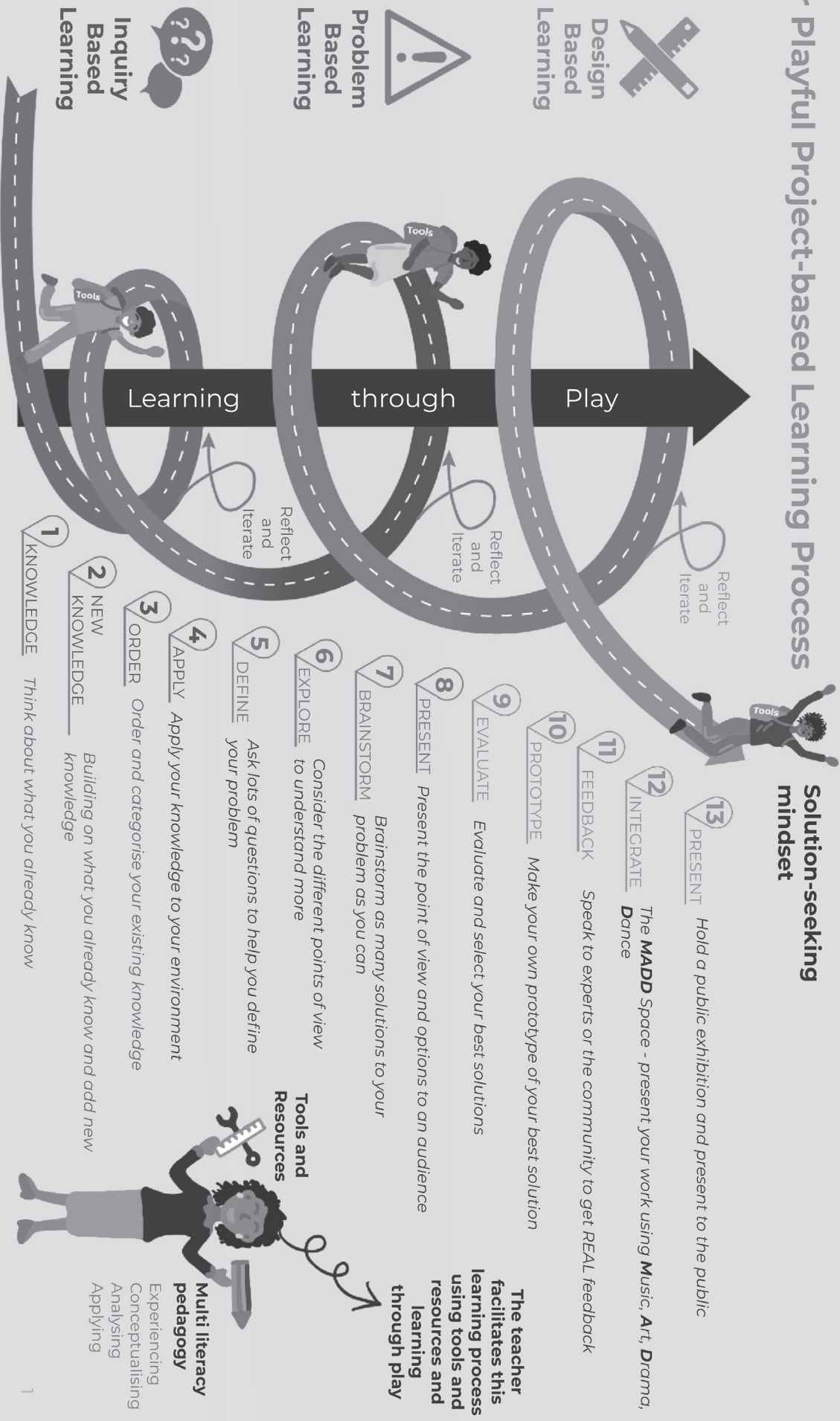


RUBRIC TO RATE THE LEVEL OF COMPETENCIES AND E-MINDSET

Did your entrepreneurial mindset grow whilst managing this project?				Personal rating (1=Poor, 4=Excellent)	
				Pre-project	Post-project
COMPETENCIES	Character	Citizenship	I am very committed and involved in various activities in my community and people regard me as someone to follow in my circle of influence.		
		Curiosity	I am very curious about everything around me and all my senses are alerted to possibilities which I always put into practice.		
		Resilience	When I face challenges I am always excited about the possibilities and I always get up after I have been unsuccessful. I am always enthusiastic about what I have learnt in the process.		
	Thinking	Creativity	I always use my imagination to come up with original ideas and/or I am always creating new things.		
		Critical thinking	I always form judgements based on my ability to analyse and evaluate objectively.		
		Reasoning	I always think about things in a logical and sensible way and I always come up with conclusions easily.		
	Collaboration	Collaboration	I always produce good work/things by working well with people (individuals or a team).		
		Communication	I am always successful in conveying or sharing ideas or feelings.		
		Empathy	I have a highly developed ability to understand and share the feelings of others.		
E-MINDSET	Agency	Growth mind-set	I am always open to new information and am always willing to change my beliefs, assumptions and actions as a result.		
		Motivation	I always do what needs to be done without needing to be influenced by other people or situations. I always find a reason or the strength to complete a task, even when it is challenging, without giving up or needing anyone else to encourage me.		
		Internal locus of control	I am always in control of my life and my work is always my own, and it is because of this that I experience success often. I never blame others or circumstances for my lack of success.		
		Regulation of emotion	I always respond to the demands of a situation with emotions that are socially tolerable and sufficiently flexible, to allow spontaneous or delayed reactions – whichever are appropriate.		
	Self-efficacy	Tasting success	I have always done things successfully enough to give me “the taste of success” that makes me motivated to want more, and to believe that I can get it.		
		Socially relatable role model	I have always been fortunate to have been exposed to excellent role models that I can relate to and who make me motivated to want to be like them.		
		Positive support	I have always been fortunate to have had someone who has been a positive support to me and who has encouraged me and seen me as a person.		
	Solution-seeking	Resourceful	I always find quick and clever ways to overcome difficulties and find solutions.		
		Problem solving	I always find solutions to difficult or complex problems.		



Our Playful Project-based Learning Process



About PPBL



Playful Project-based Learning is a **learner-centred, teacher-guided** teaching method where learners learn by actively engaging in real world and personally meaningful projects. Playful Project-based learning **connects** what learners learn in school to **real-world issues, problems, and applications**. If learning mirrors real-life contexts and equips learners with practical and useful skills, we argue that they are more likely to be **interested** in and **motivated** by what they are learning. This includes 21st century knowledge, work habits and character traits that are critically important to success in today's world.

Playful Project-based Learning is **learner centered and teacher guided**, allowing for in depth investigation of a topic. There are three phases to our Playful Project-based Learning approach.

Inquiry-based Learning

Learners are given an open question or problem, they then create and answer their own more focused questions, generating conceptual procedural knowledge in the process. At the same time, learners are developing their problem solving and critical thinking skills.

Teachers encourage learners to ask questions, scaffolding them through the investigation process and moving them beyond general curiosity into the realms of critical thinking and understanding.

Problem-based Learning

Learners work in teams to formulate complex, open problems rooted in the real world, and propose possible solutions.

Following a student-centred approach, teachers scaffold the development of learners' ability to work collaboratively, be self-directed, and to think critically, promoting critical thinking skills, communication skills, and cooperation.

Design-based Learning

The design phase integrates design thinking and the design process in the classroom. This phase is concerned with how solutions to complex problems might work in practice, in a particular, context. Learners come up with solutions to complex problems by designing, building, and testing prototypes (a "prototype" is a simple model that lets you test out your idea!) that solve some of the problems learners identified in the problem phase.

Welcome



Welcome to the grade 10 term 3 project. We are facing a constantly changing world and learners need to be prepared with skills, competencies, knowledge, and experience to navigate that change. Careers will not be the same in the future as they are now. Through this project, learners will discover more about existing careers and think about careers of the future. Learners will have the opportunity to speak to real professionals find out their experiences and in the process share this information with their peers in a career expo!



These resources have been created by Thinking Schools South Africa at admin@thinkingschools.org.za



THINKING MAPS APPLICATION TIPS

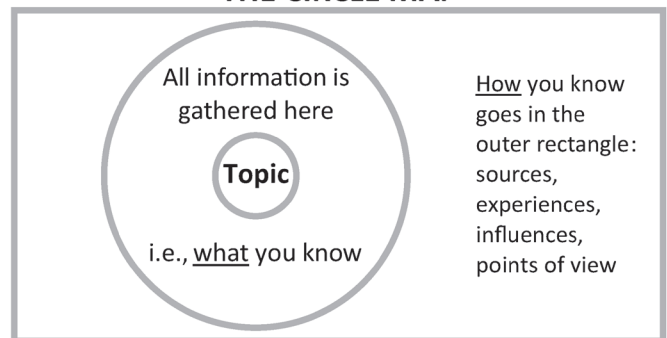
When you are **Defining...**

Key Words used	Questions asked	Applications
Tell me everything you know about this topic, List, Define, Note the key points, name all the types (of fractions, forces, habitats, plants, animals, qualities, points of interest) in this topic. Brainstorm, discuss.	What do you think this word means? What did we learn about this topic? What are the main issues raised in this video/book? What are all the points you want to make (or learn) about this topic? What are all the ways of getting to this answer/number?	Formative Assessment of what students already know about a topic. This includes misconceptions, which you can be aware of. A starting point to gather all ideas – firstly your own, and then perhaps more from peers, video or written material; or pre and post revision.

...then the Thinking Map to use is

Note: You can use the Circle Map to measure growth in your thinking, such as checking and self-correcting information that is incorrect and adding new information in a different colour.

THE CIRCLE MAP



When you are **Describing...**

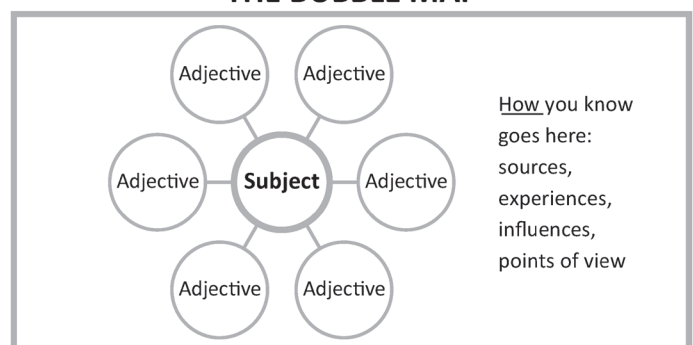
Key Words used	Questions asked	Applications
Describe feelings, attributes, characteristics, properties, adjectives, qualities. Use each of the 5 senses to explain how it feels, smells, sounds, tastes, looks.	How would you describe this in your own words? What is this really like? Which words would you use to paint a vivid picture of it in your mind?	Generate rich and original adjectives before writing – to describe a setting, a character, or situation. Consider the properties of materials or visuals in Natural Science, Design and Technology or Art.

...then the Thinking Map to use is

Note: The Bubble Map is for adjectives only.

It is not a Spider Diagram! (If you are looking for a Spider Diagram, either collect main ideas in a defining Circle Map or main headings in a classifying Tree Map, in which case you can also add sub-points under those headings).

THE BUBBLE MAP

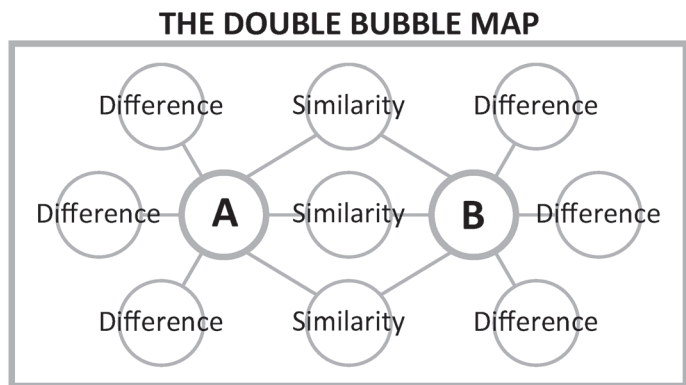


When you are **Comparing and Contrasting...**

Key Words used	Questions asked	Applications
Compare/contrast, discuss similarities/differences, distinguish between, differentiate, what things/concepts have in common or not.	What are the similarities and differences between A and B? What do they have in common? What is unique to only one of them? What distinguishing features help you identify them from each other?	Compare and contrast characters in a book/film, two shapes, methodologies, countries, time periods, formulae, technologies, types of plant or animal. Clarifying identifying properties that enhance understanding of forms, functions, applications and meanings.

...then the Thinking Map to use is

Note: Be careful to connect the lines to the rights places, based on the properties that link or differentiate A and B. Use the most striking or meaningful similarities and differences without mechanically mirroring them (e.g. tall and short may be less distinguishing than that A is gangly and B is well-dressed). A and B can have different numbers of differences.



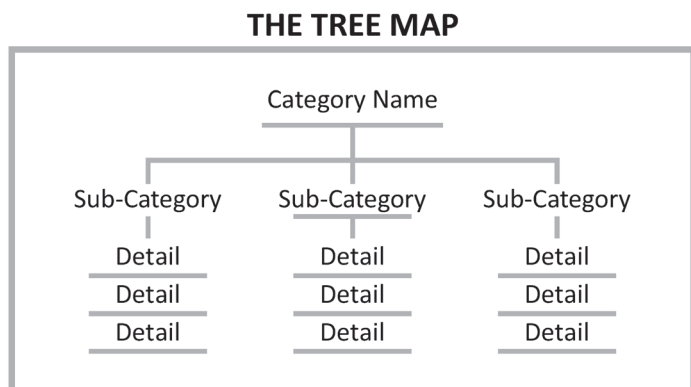
When you are **Classifying...**

Key Words used	Questions asked	Applications
Classify, sort, group, categorise, give related detail, types of, kinds of, list and elaborate, taxonomy	How might you group the main ideas, supporting ideas and details in this topic? What are the key headings in this unit of work/project/talk/essay? Can you sort all the information you have gathered into key concepts? What important details do you want to add under each heading?	Making notes or summaries in any content area – students think about the category headings and the details of what they learn. Categorising information from a Circle Map in preparation for writing about a topic or giving an oral presentation. Collecting information under predetermined headings whilst reading a text.

...then the Thinking Map to use is

Note: Be careful to draw the Tree Map exactly as structured here.

You can use the Tree Map to give students an overview of a subject, to see what is coming up and how units of work fit in. It is also extremely useful for revision.



When you are **Sequencing...**

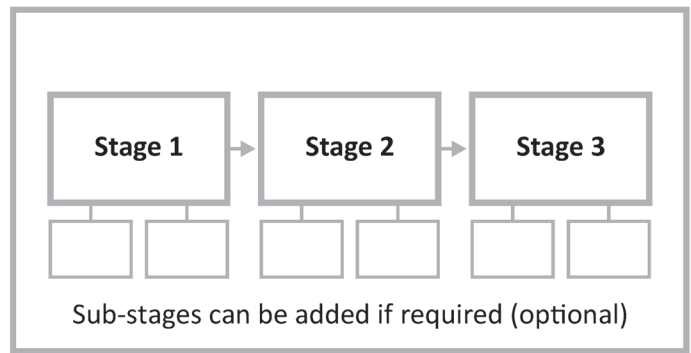
Key Words used	Questions asked	Applications
Sequence, map the steps in this project, put in order, order, recount/re-tell, what happens next, cycles, patterns, processes, change, solve multi-step problems	What is the process/project you are sequencing? What is the step-by-step sequence of events in the process/project? What are the sub-stages? Is each step in the right order?	Mapping a sequenced step-by-step project in PPBL. Life Cycles and processes in Natural Science/Social Science. Time lines in history. Planning the sequence of a story for writing/recording the sequence of a story. Recording a thought process, such as in problem solving.

...then the Thinking Map to use is

Note: Make sure that the Flow Map has arrows showing the order of events/stages. For life cycles it becomes a circle.

General Note: Whilst it is vital to apply the Thinking Maps with the elements of each map exactly as they were designed, please don't squeeze student thinking to the size or number of circles or blocks. Freehand maps that are corrected as they develop, capture more expansive thinking!

THE FLOW MAP



HOW TO PLAN YOUR PROJECT



Grade 10, Term 3, LO,

How would you design a career expo at school to share information about different careers with grade 9 learners?

Inquiry Phase: How might jobs and careers be different 10-20 years from now?

1 KNOWLEDGE Think about what you already know

2 NEW KNOWLEDGE Building on what you already know and add new knowledge

3 ORDER Order and categorise your existing knowledge

4 APPLY Apply your knowledge to your environment

1. Start by thinking about your own interests, skills, values by creating a bubble map.

2. Next create three circle maps, writing in types of jobs that you already know about in the Primary, Secondary and Tertiary sectors.

If possible, teachers bring in 3 guests to the school one from the primary, secondary or tertiary sectors to explain more about their roles and how they see their roles changing in the next 10-20 years. Using the circle maps they created in step one, using a different colour, learners add in the new knowledge they gained on jobs in the primary, secondary and tertiary sectors. Learners can ask questions.

Use a double bubble map to compare and contrast what you have found out about jobs now and what jobs might be like in the future.

Reflect: what surprised you? What would you like to find out more?

Combining your experience from the 3 prior stages learners then start thinking more specifically about what sorts of jobs you would like to find out more about. Ideally in pairs learners choose one job/career to research.

S
Social Interaction

P
Purpose

E
Enjoyment

C
Curiosity

I
Iteration

Reflect and Iterate

Reflect and Iterate

Problem Phase: We cant tell the future, how might you find out more about these new jobs that do not yet exist?

5 DEFINE Ask lots of questions to help you define your problem

6 EXPLORE Consider the different points of view to understand more

7 BRAINSTORM Brainstorm as many solutions to your problem as you can

8 PRESENT Present the point of view and options to an audience

Now that you have done some research on a career, identify someone in your community to speak to find out more about that role. Create a list of questions to ask them, eg. salary, skills, work environment now AND what that role might be.

Interview at least one person to find out more about their experience of that career

Reflect on what you heard. What did you like, not like, is this something you would do as a career?

Now in your pair, using a Bubble Map brainstorm different ways to share this information with grade 8 & 9 learners through a career Expo at the end of term. What sort of information do they need to know and how can you present it. Consider how you might use, Music, Art, Dance and Drama to present

In your group of two, join another group of two to form a group of four. Present you're a summary of the information you have learnt about your career/job and your ideas from your brainstorming for feedback. Add any new ideas to your bubble map.

A
Active Engagement

L
Learner centred

Reflect and Iterate

Reflect and Iterate

Design Phase How might you present this information to your fellow learners?

9 EVALUATE Evaluate and select your best solutions

10 PROTOTYPE Make your own prototype of your best solution

11 FEEDBACK Speak to experts or the community to get REAL feedback

12 INTEGRATE The MADD Space - present your work using Music, Art, Drama, Dance

13 PRESENT Hold a public exhibition and present to the public

Select one idea that you would like from your brainstorming that you think is your best idea on how to share information about careers with grade 8 & 9.

Create a very quick and easy model or plan of your chosen idea.

In your groups of four (from step 8) seek feedback on your 'prototype'. Update your prototype as many times as you need to

Use this time to develop your prototype into something you would be proud to share with your grade 8 & 9 learners in a Careers expo

Invite the grade 8 and 9 learners to an event where you share what you learnt

A
Active Engagement

L
Learner centred

Reflect and Iterate

Reflect and Iterate



Careers and Career choices

The following CAPS outcomes are assessed through this project:

CAPS ATP 2021

Week 7: Diversity in Jobs

- Economic sectors: primary (raw materials), secondary (finished products or goods) and tertiary (infrastructure and providing services)

Week 8: Work place settings

- Workplace environment and conditions; indoors and outdoors
- Activities involved in each job: designing, assembling and growing
- Skills and competencies

Week 9-10: Opportunities within different career fields

- Opportunities within different career fields including work in recreation, fitness and sport industries:
- Research skills, salary package, promotion and further study prospects
- Profitable use of time, how to use talents in working and career opportunities, enjoyment and transfer of skills to other related industries

Project planning table



Grade 10 Life Orientation Term Three (weeks 7-10)					
					* ACTIVITY
Activity	Description	CAPS alignment	Resources	Enrichment activities	Assessment & integration with other subjects
1	PRIOR KNOWLEDGE - in this step learners think about what they already know about themselves, their interests and strengths and what sort of careers they might like to have in the future. Learners then address the CAPS content by defining the primary, secondary, and tertiary sector.	Diversity in jobs - economic structures.	Learner workbooks	Complete skills assessment or something like Mayers briggs.	Business Studies
2	NEW KNOWLEDGE - Now that you have established what learners know about careers, and they have thought about careers that might interest them, it is time to introduce some new knowledge. This new knowledge will be about existing careers and possibly future careers. This will help learners to answer the driving question.	Diversity in jobs - economic structures.	Learner workbooks		Business Studies
3	ORDER - To order and make sense of information and knowledge that emerged in Knowledge and New knowledge steps. In this part learners will have the opportunity to order and compare what jobs are now and what jobs might exist in the future, what is similar and what is different. This information will help them to explain to grade 9 learners in the career's expo the changing nature of careers.	Diversity in jobs - economic structures.	Learner workbooks	Learners carry out additional online re-search into careers of the future.	Business Studies
4	APPLY - in this step learners work in PAIRS and look back at all the information they learned during the last 3 steps to apply what they learnt to their own situation. Learners think about what career they would like to find out more about and present at the career expo.	Diversity in jobs - economic structures.	Learner workbooks		Business Studies
5	DEFINE - in this step learners start by defining questions that they want to ask when they interview career people	Workplace settings/ opportunities in different career fields.	Learner workbooks		Business Studies
6	EXPLORE - learners explore the driving question by interviewing careers people.	Workplace settings/ opportunities in different career fields.	Learner workbooks	Learners could interview more than one person from different career fields.	Business Studies

Project planning table



Activity	Description	CAPS alignment	Resources	Enrichment activities	Assessment & integration with other subjects
7	BRAINSTORM - In this step learners share and discuss possible solutions to their driving question, How would you design a career expo at school to share information about different careers with grade 9 learners? Learners need to come up with different ways of presenting the information.		Learner workbooks		Business Studies
8	PRESENT - In this step learners present their ideas as well as the information they have found out to others to seek feedback and develop their ideas.		Learner workbooks	A dragons den style event	Business Studies
9	EVALUATE - in this step learners review everything they learnt from the problem phase to now refine and begin the preparations for the Career Expo by starting to think about how and what they will present at the Expo.		Learner workbooks		Business Studies
10	PROTOTYPE - In this step learners create their own model/prototype of what it is they will be presenting at the career expo. The purpose of this is to learn from the models and can develop them quickly and make something really great.		Learner workbooks		Business Studies
11	FEEDBACK - To get expert feedback about possible improvements or design changes. This is where the magic happens and the models/prototypes can develop quickly, learners can 'see' the feedback take life.		Learner workbooks		Business Studies
12	INTEGRATE - learners engage with the topic by creating a presentation of their work using Music, Art, Dance or Drama.	Workplace settings/ opportunities in different career fields.	Learner workbooks		Business Studies
13	PRESENT - learners hold a career expo, their public exhibition presenting their MADD space presentation along with other information they created during their project	Workplace settings/ opportunities in different career fields.	Learner workbooks	Learners could carry out their expo in different schools.	Business Studies

RUBRIC

CRITERIA	LIMITED (4)	ADEQUATE (8)	PROFICIENT (12-16)	EXCELLENT (20)
<p>Diversity in Jobs</p> <p>Economic sectors: primary (raw materials), secondary (finished products or goods) and tertiary (infrastructure and providing services)</p>	<p>Learners are not able to explain what the primary/ secondary/ tertiary sectors are.</p> <p>Learners cannot give examples of jobs in these sectors</p>	<p>Learners give a basic explanation of what the primary/ secondary/ tertiary sectors are, they may confuse them.</p> <p>Learners give examples of jobs within each of these sectors</p>	<p>Learners give a solid explanation of what the primary/ secondary/ tertiary sectors are.</p> <p>Learners give correct examples of jobs within each of these sectors</p>	<p>Learners give a solid explanation of what the primary/ secondary/ tertiary sectors are.</p> <p>Learners give correct examples of jobs within each of these sectors.</p>
<p>Workplace settings.</p> <p>Workplace environment and conditions; indoors and outdoors, Activities involved in each job: designing, assembling, and growing, Skills and competencies.</p>	<p>Learners are not able to identify or understand different workplace environments.</p>	<p>Through their research in class learners are able to identify a couple of different workplace environments</p>	<p>Learners have done additional research and are able to confidently identify different workplace settings and understand different roles and responsibilities in different work places and the different skills and competencies needed to succeed</p>	<p>Learners have done significant research and understand the differences in different work place settings.</p> <p>Learners understand different roles and responsibilities in different work places and the different skills and competencies needed to succeed. Learners are able to identify what skills they have and how they might be useful to different roles.</p>
<p>Opportunities within different career fields.</p>	<p>Learners show little understanding that there are different careers</p>	<p>Learners understand there are different career paths but do not know much about them.</p>	<p>Learners have a good understanding of what the different career paths are and are able to explain these clearly to their peers.</p>	<p>Learners have an excellent understanding of the different career paths including how these might change into the future. Learners are able to clearly explain these to their peers.</p>
<p>Research focused career.</p>	<p>Learners only used the class material in their research.</p>	<p>Learners interviewed a minimum of 1 person and used the class material</p>	<p>Learners interviewed more than 1 person and carried out their own research on the topic beyond the classroom materials</p>	<p>Learners research is very detailed and learners use multiple sources of information to draw complex conclusions</p>
<p>Career day expo presentation.</p>	<p>It is unclear what the learners are presenting.</p>	<p>Learners present information on their career - the main points of information have been presented but there are some gaps in their presentation</p>	<p>Learners present their career confidently and well with limited or no gaps in their presentation.</p>	<p>Learners provide an exceptional presentation that is innovative, exciting and covers all the key information. Learners present with confidence and are well organised.</p>
<p>Total</p>	<p>/ 90</p>			



Introduce the project

Grade 10: Development of the Self in Society

Guiding Question: *Explain to the class* - The world is constantly changing. Careers today and in the future will not be the same. Through school you are preparing for the future, for your future career. But things are changing quickly - the jobs that existed when I finished school are not all the same as now. Technology is advancing quickly and so, in 10 years' time, there may be yet more new and interesting jobs that don't exist now. So, the challenge for you to solve in this project is...

How would you design a career expo at school to share information about different careers with grade 9 learners?

As a class you are going to solve this challenge and we will be following 13 steps to do this.

Note to teacher – Show the learners the Playful Project-based Learning spiral and the 13 steps before you begin so that they can see the process involved. You could also explain the three parts of Inquiry, Problem and Design based learning - in each of these parts learners will develop different skills that are essential for their careers.

Getting Started – Let's do a warm-up game

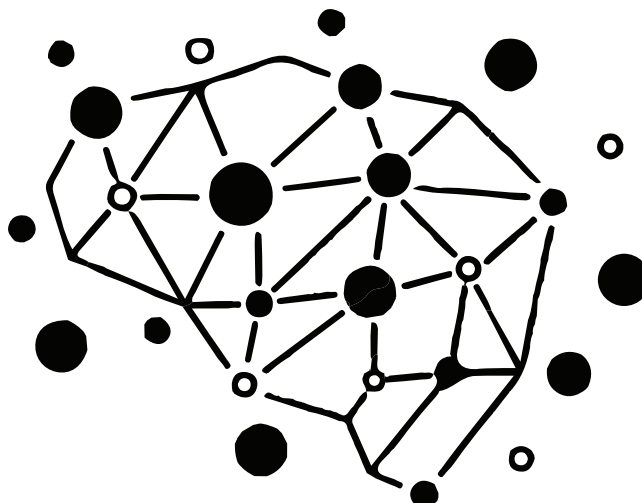
GAME: To get learners creative and inquiring minds warmed up, play a game with learners called What if...

Ask learners to complete **Worksheet 1: What If?** or copy the question down into their notebooks. Ask the learners:

What if our brains were directly connected to the internet and we all had access to the internet all the time?

What would the consequences of this be?

You can create your own questions as well.



STEP 1: Prior Knowledge





Thinking and sharing what you already know.

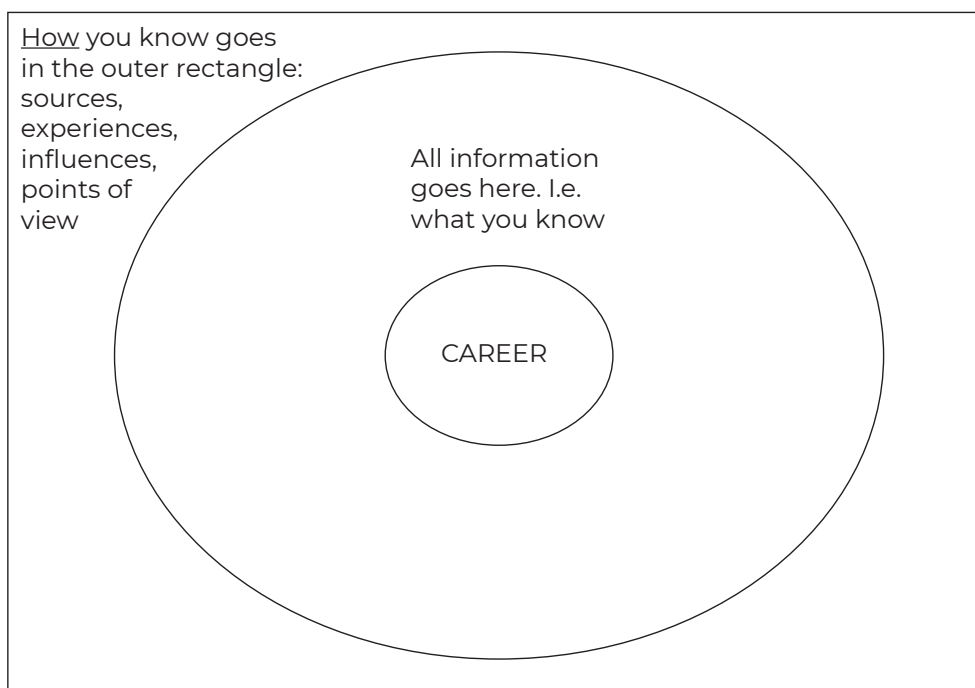
Purpose of this step: in this step learners think about what they already know about themselves, their interests and strengths and what sort of careers they might like to have in the future. Learners then address the CAPS content by defining the primary, secondary, and tertiary sector.

The world is constantly changing. Careers today and in the future will not be the same - learners need to be prepared for the unknown. This is a process of discovery as learners start with the known before moving to the unknown on the topic of careers and career choices. An important place to start is by creating a common understanding of what learners already know about 1. Themselves, and 2. The current workspace. To help learners tackle the driving question *How would you design a career expo at school to share information about different careers with grade 9 learners*, it will help to start with what learners already know about careers.

Now to get started with the project

In the first activities of this project learners will work independently.

- 1.1 In the very first activity of this project ask learners to make a list of the following things in their exercise books or complete **Worksheet 2: All about Me**

 - *What am I interested in?* This could be their hobbies, subjects studied at school, playing sport, science lessons at school, etc.
 - *What are my greatest strengths?* For example, I am good at working in a team and helping other people. If possible, ask learners to give an example of each of their strengths.
 - *What are things that I am not so good at?*
 - *Draw a picture of yourself as a successful career person - what would you look like?*
- 1.2 On a flash card or piece of paper, ask learners to write down **one job** that they think they would like to do in the future. They do not HAVE to do this job in the future, it can just be something that they are thinking about. If learners are struggling, ask them to look at their lists of interests and strengths and see if they can think of something related to these things.
- 1.3 Next, ask learners to work on their own to complete **Worksheet 3: My Career Thinking Map**. You can either hand out a copy of the worksheet or draw an example on the board for learners to copy into their exercise books.




Ask learners to write the name of the career they are thinking of in the inner most circle. In the bigger circle ask learners to write everything they know about the career they think that they would like to go into in the future.

Remind learners this does not need to be something that exists at the moment.

- 1.4. Now, on the board or a large piece of paper, create three Circle Maps - one for each of the sectors, Primary Sector, Secondary Sector and Tertiary Sector. Discuss with learners what they think each of these are.
- 1.5 Ask learners to write what they know about the Primary, Secondary and Tertiary sectors on a piece of white paper and put these papers onto the circle map. Keep these as you will need these in future lessons.
- 1.6 Now, ask learners to place their career card on the circle maps, under Primary, Secondary or Tertiary.

The **Primary sector** relates to the extraction and collection of natural resources. Examples include farming, forestry, mining and fishing.

The **Secondary sector** relates to the processing of raw materials into more valuable materials. Examples include car manufacturers, food production or building companies.

The **Tertiary sector** relates to the delivery of services. Examples include health care, transport, tourism.

STEP 2: New knowledge



Build on what you already know and add new knowledge.

Purpose of this step: Now that you have established what learners know about careers, and they have thought about careers that might interest them, it is time to introduce some new knowledge. This new knowledge will be about existing careers and possibly future careers. This will help learners to answer the driving question:

How would you design a career expo at school to share information about different careers with grade 8 & 9 learners?

- 2.1 Now that learners have thought about what they already know about the topic of careers, and they understand the three business sectors, it is time to bring in some new knowledge.
- 2.2. There are lots of ways of bringing in new knowledge and you can be creative - you don't have to use these if you have other ideas. First start by showing the video – **The World is Changing** - <https://www.youtube.com/watch?v=PZiTyw34lZQ>
- 2.3 Another great way to introduce new knowledge, is to invite three guests to the school - one from each of the sectors mentioned above.
- 2.4. Before inviting the guests, tell your learners that there will be 3 guests coming to the school to talk about their careers, each representing one of the three sectors. Split learners into groups of 4 and assign them a different sector. Ask learners to make a list of the questions they would like to ask the guests. They must all ask:
 - How have their career sectors changed since they first started working?
 - How do the guests see their roles changing in the next 10-20 years?
- 2.5 Ask the groups to share their questions and compile a list. Some groups may come up with the same questions, and that is okay.
- 2.6 Ask the class to decide who will ask what questions to the guests.

- 2.7 On the interview day ask learners to make notes.
- Tell learners that after the guests have left (this might be in a different class) they will be adding any new knowledge to their collective circle thinking map. Use one colour e.g. red for new knowledge about the economic sectors. Learners will then place this on their 3 economic sector circle maps. A new colour will help them to see how much they have learnt.
- 2.8 If you feel that learners did not get enough information about how the sectors and jobs might change in the future, ask them to research this for home. The homework task could be: complete your own research to find out what sort of jobs might exist in the future.
- 2.9 Ask learners to **Reflect** on the interviews and write in their exercise book:
- What did you learn that you did not know before?
 - What surprised you and why?
 - Has the information you have learnt today changed what you would like to do as a career in the future? If so, why?

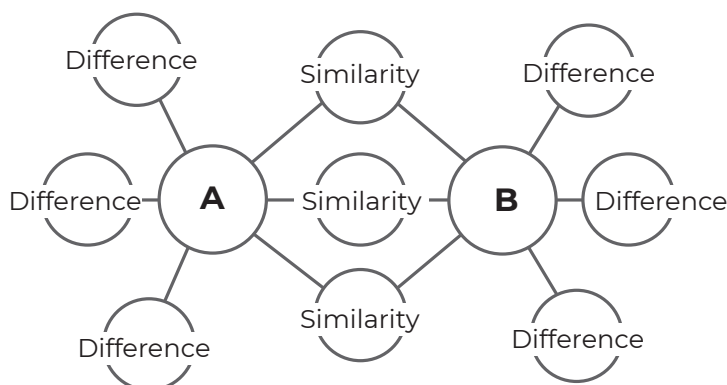
STEP 3: Order



Order and categorise your existing knowledge

Purpose of this step: To order and make sense of information and knowledge that emerged in *Knowledge* and *New knowledge* steps. In this part, learners will have the opportunity to order and compare what jobs are now and what jobs might exist in the future - what is similar and what is different. This information will help them to explain careers to grade 9 learners in the career's expo.

- 3.1 Back in their sector groups, ask learners to look at all the information they collected in step 2 New knowledge. Using their sector, e.g. primary, secondary, tertiary, ask learners to complete **Worksheet 4: The Double Bubble Map A changing World** to compare how their sector in general or a specific job in that sector, is changing.



In A learners can write NOW and B FUTURE

- What are the similarities and differences between A and B?
 - What do they have in common?
 - What is unique to only one of them?
- 3.2 As group, learners can **reflect** by answering the following questions.
- What surprised you?
 - What would you like to find out more about?

STEP 4: Apply



Apply your knowledge to your context (driving question)

Purpose of this step: in this step learners work in PAIRS and look back at all the information they learnt during the last 3 steps and apply what they learnt to their own situation. Learners think about what career they would like to find out more about and present at the career expo.

- 4.1 In pairs, combining all the knowledge and information from the prior three stages ,learners can choose one career/job that they would like to research more deeply.
- 4.2 Ask the pairs to share their chosen career. If possible, try and ensure that there is a good mix of careers represented, including new careers of the future. It is okay for some groups to choose the same career as they might have different perspectives or find out different things. Remind the learners that the career they choose does not need to be something that they want to do in the future.
- 4.3 In their exercise books learners can **reflect** by answering this question.

The career I want to find out more about is _____ because.....

**GAME:**

Learners now move on to the Problem-based Learning part of the process. Along with the theme of thinking about the careers of the future, ask learners to predict **what schools might be like in 100 years time**.

They can write their answers in their exercise books and share their answers with the class.

Making predictions is a useful way of engaging our minds creatively and also helping us to think critically.

**STEP 5: Define**

Ask lots of questions to help you define your problem

Purpose of this step: In the Inquiry phase, learners explored the concept of career by looking at the economic sectors, and what careers exist now and how they might change in the future. In the problem phase, learners will explore how they can find out more about a specific career so that they can answer the driving question - How would you design a career expo at school to share information about different careers with grade 9 learners?

- 5.1 In pairs, learners identify someone in their community/school that they can interview to find out more about their chosen career specifically.
- 5.2 Learners need to create a list of interview questions around things like:
 - What skills do you need?
 - What are the working hours like?
 - What do you do on a day-to-day basis?
 - How has your job changed?
 - How do you think your job will change?

Learners can think of what other questions they might want to include. Learners have already had some experience with interviews when they interviewed the guest speakers in step 2.

STEP 6: Explore



Consider different points of view to help you understand more about the topic.

Purpose of this step: in this step focus on what we need to answer the question/solve the problem. Learners can find out more by interviewing at least one person to find out more about their experience of that career.

6.1 Learners then interview at least one person to find out more about their experience of that career using the questions they created in the previous point. This could be done as a piece of homework.

6.2 Learners make notes and record what is being said. They will need this information later.

Remind learners to:

- Explain who they are.
- What they are doing
- Why they are doing it – the driving question.
- Explain that they will be taking notes, if it is okay with the person.
- Thank the person when they have finished.

6.3. Ask learners to **reflect** on what they have heard.

- What did you like or not like?
- Is this something you would do as a career? If not, why not?

In this section, learners are covering the CAPS content of Workplace Settings (Week 8).

STEP 7: Brainstorm



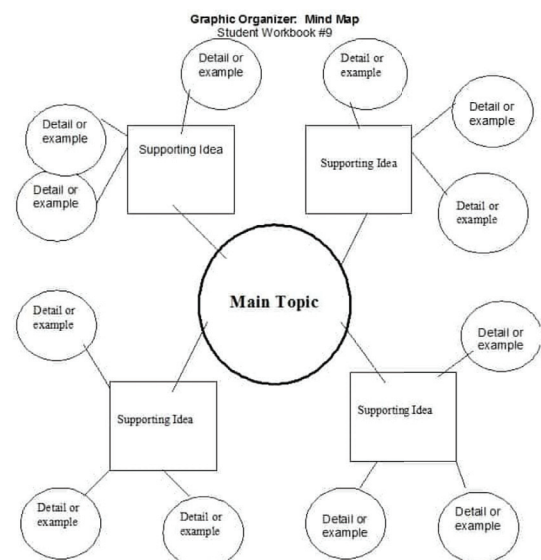
Brainstorm as many solutions to your problem as possible

Purpose of this step: In this step learners share and discuss possible solutions to their driving question, How would you design a career expo at school to share information about different careers with grade 9 learners? Learners need to come up with different ways of presenting the information they have found out about careers to the grade 9 learners.

7.1 Now that learners have collected more information about their career, they need to brainstorm as many different creative ways that they could **present** what they know to grade 9 learners in a Career Expo. Learners can consider how they might use Music, Art, Dance or drama to present information about their career to the grade 9 learners.

Here is an example of a brainstorm template. Encourage learners to be creative about how they brainstorm. They do not have to use this approach on the right.

7.2 As a class, come together and decide WHEN you want to hold your career expo. Who might you need to speak to help you organize this event. **TIP:** It doesn't need to be a big event, it could just be in assembly or during a lunch break over the course of a week.



STEP 8: Present



Present the point of view and options to an audience.

Purpose of this step: In this step learners present their ideas as well as the information they have found out to others to seek feedback and develop their ideas.

8.1 In your group of two, join another group of two to form a group a four. Present the summary of the information you have learnt about your career/job and your ideas from your brainstorming for feedback. Add any new ideas to your brainstorming plans.

Peer evaluation questions to ask each other:

- What I liked about
- Where I thought you could spend more time.....
- Have you thought about.....
- What do you think is your most feasible or realistic idea?



GAME: Learners now move on to the Design-based Learning part. In this part, learners really practice their creativity skills. Start this part with another quick game to warm up their creativity skills. Designing is all about creativity (among other skills).

BAR – Bigger And Replace

This game has been selected from the book *Thinkers Keys* by Tony Ryan. This is a good strategy for developing innovative and unusual products.

Choose an object for the learners or ask them to agree on an object, but don't tell them why - it can be anything. Here is an example:

B A R a skateboard. Ask the learners to draw a normal skateboard and then direct them through the steps one at a time:

Bigger

Add

Replace

Here is what it could be...

BIGGER – extend the end of the skateboard and make it much bigger, but in order to do that you need to put some counter weights on one end to make it balance

ADD – add a small motor

REPLACE – replace the wheels with a special hovercraft so the skateboard moves through the air without wheels.



Step 9: Evaluate



Evaluate and select your best solutions.

Purpose of this step: in this step, learners review everything they learnt from the problem phase to now. Refine and begin the preparations for the Career Expo by starting to think about how and what they will present at the Expo.

9.1 Ask the learners to go back to their brainstorm. Remind learners to look at their feedback to select the idea that they think is the most interesting and feasible idea.

Ask them to think about:

- Do I have the materials needed to do this idea? If not, how can I get them?
- Do I have the time to prepare this idea? If not, what can I do about it?
- Will this be interesting and inspiring to grade 9 learners?
- What other questions do I need to consider?

Step 10: Prototype



Make the prototype of your best solutions.

Purpose of this step: In this step, learners create their own model/prototype of what it is they will be presenting at the career expo. The purpose of this is to learn from the models and develop them quickly and make something really great.

10.1 Share this video with the class to explain what a prototype is <https://www.youtube.com/watch?v=85muhAaySps>

10.2 Ask learners to bring items such as cardboard food packaging, plastic bottles, things that could be recycled, from home.

10.3 In pairs, learners will have a chance to create a model of their chosen idea. The purpose of this is to test their idea and see how they could improve it. Remind learners, models do NOT need to be perfect and can be made very quickly so that they are able to seek feedback on the model and iterate (do it again to make it better).

- If learners have chosen to do a drama performance or a song, ask them to create a model or plan of how they would like to perform their drama or song, e.g. where will it be, how will the space be laid out, etc.

10.4 Learners can then update their prototype as many times as they need to.

TIP: if possible, set a timer and tell learners they have 10 minutes to make their first prototype. 10 minutes for feedback. Repeat this cycle as many times as you can. The more you do it, the better your prototype will be. See step 11 for the feedback on the prototype.

Step 11: Feedback



Speak to experts or the community to get REAL feedback.

Purpose of this step: To get expert feedback about possible improvements or design changes. This is where the magic happens and the models/prototypes can develop quickly - learners can 'see' the feedback take life.

11.1 Ask learners to form their group of four - the same learners that participated in step 8. Together, they share their prototypes (models) for feedback.

11.2 Learners can then update their prototype as many times as they need to.

TIP: If possible, set a timer and tell learners they have 10 minutes to make their first prototype. 10 minutes for feedback. Repeat this cycle as many times as you can. The more you do it, the better your prototype will be – see 10.4 above.

Step 12: Integration



In the MADD Space – present your work using Music, Art, Drama, Dance

Purpose of this step: to engage a different way of thinking about the topic by using music, art, drama or dance.

12.1 Use this time to develop your prototype into something you would be proud to share with your grade 9 learners in a Careers Expo. For example, how might learners make a song, art, dance or drama if they have not already done so.

STEP 13: Present



This is the final and most exciting step – the Public exhibition!

Purpose of this step: present and celebrate the products, share knowledge and answer the driving question!

13.1 During the Career Expo, learners can share their final prototypes, dances, dramas, posters, etc. with the grade 9 learners.

END-OF-PROJECT REFLECTION



To wrap up the project and consolidate learning, learners can think about the following questions and write their answers in their exercise books.

Reflection questions:

- What I loved most about the project
- What I found the most difficult
- What I learnt about myself
- What I learnt about careers
- What advice I would give to other learners doing project

Worksheet 5: Activity 1 – Marking guideline



1. Define the term primary sector: (4)
 - Jobs that involve taking raw material from nature (✓) and making them (✓) into basic foods (✓) and products. (✓)
2. Define the term secondary sector: (3)
 - People in this sector take materials (✓) and make them into goods (✓) that can be sold. (✓)
3. Define the term tertiary sector: (3)
 - People in this sector provide services (✓) to people (✓) and businesses. (✓)
4. Give examples of jobs within each of these sectors:

Primary sector (3)	Secondary sector (4)	Tertiary sector (3)
<ul style="list-style-type: none"> • Coal miner • Fishers • Farmers <p>(Any THREE for one (✓) mark each)</p>	<ul style="list-style-type: none"> • Brewers • Shipbuilders • Engineers • Paint manufacturers • Chemical manufacturers • Builders • Metal workers • Car manufacturers <p>(Any FOUR for one (✓) mark each)</p>	<ul style="list-style-type: none"> • Teachers • Bakers • Bankers • Dry cleaners • Sales assistants • Doctors • Actors • Tour guides • Lawyers • Truck drivers • Bookbinders • Chemists • Scientists <p>(Any THREE for one (✓) mark each)</p>

Total: ____/20