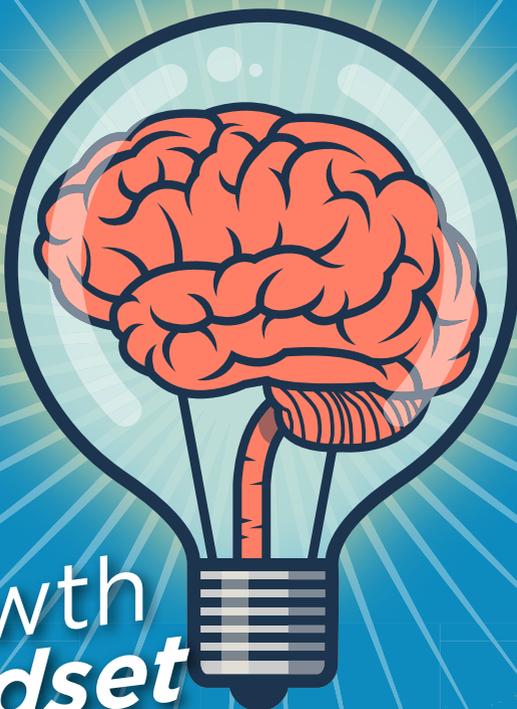


WCED

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Growth *Mindset* Pillar

Implementation Manual



Western Cape
Government
Education

BETTER TOGETHER.



THE WORLD BANK



UC DAVIS
UNIVERSITY OF CALIFORNIA

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1. Background and Introduction

For learners to succeed within and beyond their schooling career, they require a certain set of social and emotional skills to support their journey. Social and emotional skills can be described as the ability to regulate one's thoughts, emotions and behaviour, and may include characteristics such as grit, perseverance, self-affirmation, self-efficacy, aspiration, and growth mindset. Studies have confirmed that there is potential for such skills and characteristics to be developed via learning programmes¹. While the schooling system tries to support learners to develop such skills, the syllabus does not directly incorporate socio-emotional learning into the curriculum.

The current programme attempts to equip learners with the skills needed to develop a growth mindset. Growth mindset can be described as a belief that one's intelligence grows with considerable effort. Across the world, in countries such as Indonesia, Macedonia and Peru, a variety of interventions have been successfully implemented to teach growth mindset. Collectively, the results of said interventions have found that growth mindset can indeed be taught, and that an improved growth mindset is linked to improved academic outcomes, specifically mathematics and language.

In 2017 and 2018, the Department of the Premier, the World Bank, and UC Davis piloted a Growth Mindset intervention to test whether similar positive results could be found for Western Cape learners. The pilot involved eight high schools (i.e. grades eight and nine) and twelve primary schools (i.e. grade three and four), totalling around 1,100 learners. The pilot was implemented in the after-school space, using a series of videos, which was followed by reflective activities. Results from the pilot were positive. It showed that if learners attended all Growth Mindset sessions, there were positive improvement in their grades.

The current programme has been modelled based on the pilot's design to ensure that similar outcomes can be attained for learners in the rest of province. This information pack includes a description of the instructions you'll need to follow to implement this programme successfully. Contents of this package include:

-  Objective of the Growth Mindset intervention;²
-  Understanding Growth Mindset;
-  Outline of the intervention;

¹ Claro, S., Paunesku, D., & Dweck, C. S. (2016). Growth mindset tempers the effects of poverty on academic achievement. *Proceedings of the National Academy of Sciences*, 113(31).

² All icons are sourced from www.flaticon.com

-  Protocol for Intermediate Phase Learners including appendices, and;
-  Protocol for Senior Phase Learners including appendices.

2. Objective of the Growth Mindset intervention

Everyone has their own perception about how much they think their intelligence can change.

Some think that they are born with a certain amount of intelligence and that they have that same amount of intelligence throughout their lives. Others, however, believe that their intelligence can be developed through practice: the more we train the brain, the more powerful our brain becomes. Scientific evidence shows that the latter perception is correct: intelligence can be developed, but we have to work on it.

The objective of this intervention is to assist learners in understanding this truth: that their intelligence can be developed through effort. The intervention combines watching videos, group discussions and activities to teach learners that intelligence can grow – this is known as having a **Growth Mindset**.



3. Understanding Growth Mindset

Why do some learners rebound when they fail whereas others give up? The main difference lies in their underlying beliefs of their own learning and intelligence. Those with a **Growth Mindset** understand that they become smarter through increased effort, therefore they will put in extra time and effort, leading to higher achievement. Whereas those with a **Fixed Mindset** believe that their intelligence cannot be changed, and thus believe that it is a waste of time to invest effort in trying to develop themselves.

In other words, learners with a **Growth Mindset** are more likely to persist in their schooling, because they believe that they are capable of improving their abilities, even in the face of failure!

Previous research has found that **Growth Mindset** can be taught. This has the potential to improve a learners' attitudes toward their learning, thus impacting their effort and perseverance.

Figure 1. demonstrates the **potential outcomes** for teaching Growth Mindset



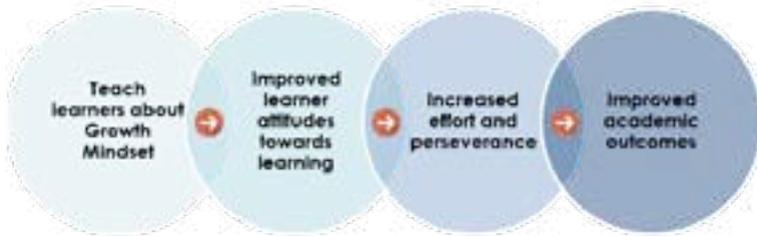


Figure 1. Growth Mindset Theory of Change



Growth Mindset can be useful for learner motivation and achievement. In addition to teaching Growth Mindset using this programme, there are effective strategies that can be used to nurture a Growth Mindset in the classroom – These are presented in the following section.

Strategies to nurture Growth Mindset amongst learners

Praise process, not ability. Your praise of students should be focused on the process, effort, progress, and strategies learners use when they face challenges, and not on the innate ability of the learners. (e.g., don't tell learners – "You did well because you are so smart!" – Because, what will they think when they do not do well?)

- "The more you practice, the more you grow your brain!"
- "I see you're getting better on this problem. It means your brain is growing!"

Create a classroom environment that is tolerant for errors. If errors are considered normal, learners will not be afraid to ask.

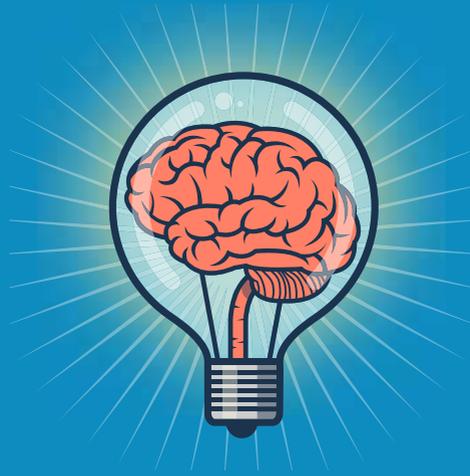
- "At the end of this lesson, I will ask a learner to talk about the mistakes that he/she did during study, because mistakes will help us learn!"
- "Mistakes are natural. What is important is that you can learn from that mistake."
- "If it still does not work, perhaps you can ask your friends or ask me."

Give challenges. Make sure that your learners are sufficiently challenged in the classroom, and that all learners have access to challenging materials. Make them understand that difficult tasks are opportunity to train the brain and learn new things.

- "Mistakes are normal. Difficult is normal. But do not give up, keep trying because it will make you smarter."
- "Challenge is beautiful, because challenge will train your brain to grow and develop further."

Set a high expectation and assure them that they can meet expectations. Say clearly that you expect a lot towards your learners & that you believe they can reach these expectations if they work hard --- it's important that you have high expectations for ALL of the learners, not just the high achieving ones.

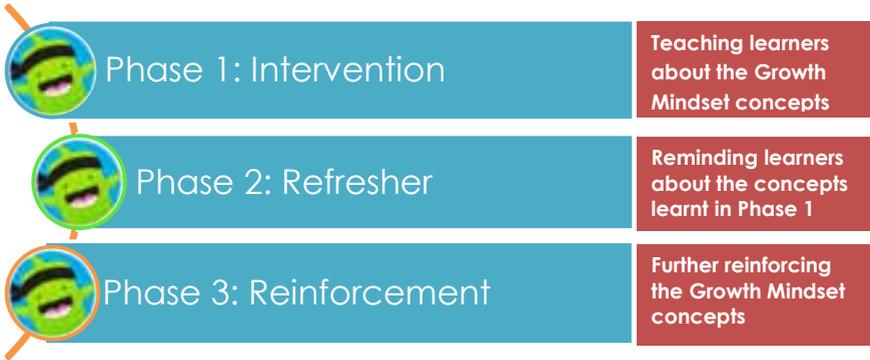
"I will give challenge and criticism because of my high expectations, and I know you can succeed



Section 1: Programme Overview and Structure

4. Outline of the Growth Mindset Programme

The programme is divided into the following three phases.



a. Cohort distinctions

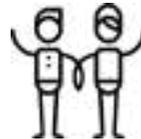
The Growth Mindset programme is run with intermediate phase (grades 4-6) and senior phase (grades 7-9) learners. Each of these phases receive a different set of activities. Below is an outline depicting the nature of activities per phase:



Intermediate Phase

Activities associated with intermediate phase learners are largely comprised of:

- Peer and class discussions
- Story telling
- Drawing



Senior Phase

Activities associated with senior phase learners are largely comprised of:

- Reflective writing
- Peer discussions

b. Overall framework of activities

Each phase will comprise the following elements:



1 class of no more than 40 learners

Learners watching a series of **animated videos**



Learners completing **reflective activities**

Intermediate Phase: 1 facilitator per 10 learners
Senior Phase: 1 facilitator per 40 learners



Tablets and computers were proven to be most effective method for delivery of the intervention, as this promoted independent learning. However, not all schools may be efficiently resourced – **if no tablets or PCs are available, learners may watch the videos on a projector.** This will, however, require more intensive monitoring.

Scenario 1



All learners from a class have individual access to a PC with HEAD PHONES/LAP TOPS or TABLETS at the same time

Scenario 2



Learners are split up into groups and receive individual access to a PC with HEAD PHONES/LAP TOPS or TABLETS, although not at the same time

Scenario 3



Facilitator to guide class via PC/LAP TOP, PROJECTOR SCREEN AND SPEAKERS

c. Learner Management



For learners to meet the desired programme outcomes, there are **learner management recommendations** based on best practice. This section details the different measures to follow regarding learner management.

Recommendation	Description	Expected Outcome(s)
Following the recommended viewing sequence	You must ensure that each learner follows the recommended sequence when watching videos during the intervention phase. This is because each video builds on the messages portrayed in the previous video.	A cumulative learning effect should occur, where learners use the concepts learnt from preceding videos to understand each video.
Tracking activity completion	Linked to above, you should keep a log of each learner's activity completion..	Being able to efficiently monitor the status of activity completion.
Developing a rotation schedule for videos	Depending on availability of resources (i.e. PCs or Tablets) you should develop a rotation schedule to ensure efficiency. For example, while one group completes activities on PCs, the other can work on tablets.	If the schedule is followed, all learners should be simultaneously preoccupied with an activity.
Group Discussions	Learners will be encouraged to work together in pairs or groups for many of the exercises. Facilitators must manage this process effectively.	Learners engage each other and develop a shared understanding of content.

d. Preparation

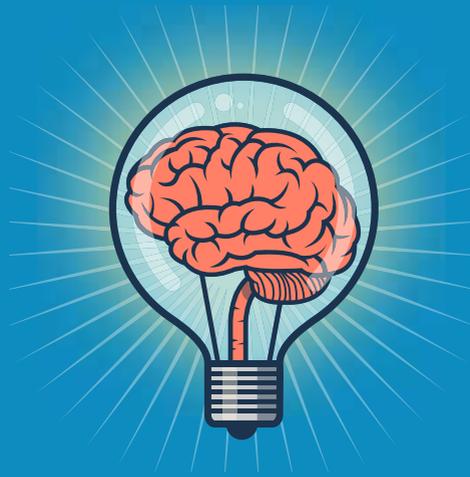
The following list can be used as a guide to follow when preparing for the programme. Each item must be present.

Things you will need

- Fully charged tablets or PCs with uploaded materials
- Videos uploaded to USBs or accessed via links
- Activity resources (Blank paper for intermediate; books for high schools; A3 paper for poster exercises)
- Learner activity log
- Working headphones
- Protocol Packs

Things to familiarise yourself with

- Read and reread the guide in advance to make sure you clearly understand the objectives of each activity
- Familiarise yourself with all content (protocols, videos, activities, posters etc.).
- Mock exercises (i.e. watching videos, running through activities and/or discussion guides) may assist in this regard.
- Understand the school's timetable, specifically pertaining to your relevant grades. A roll-out schedule must be negotiated with the school management team.
- Determine the school's available resources for roll-out. A roll-out plan must be developed using this and taking note of the school's specific context



Section 2: Protocol for Intermediate Phase learners

1. Phase Overview

1.1. Intervention Phase

The aim of the **Intervention Phase** is to:



The **intervention phase** should take place over **three consecutive weeks**. The phase is comprised of three sessions. Each session takes place over one full lesson. Each lesson comprises:

- Watch 2-3-minute video clips, and;
- Engage in discussions and complete group exercises corresponding with each video clip

A detailed activity guide can be found in Appendix 2a.



Facilitation tip: Throughout the different phases, there will be discussions and report-backs about learner's understanding of growth mindset.

Facilitators should provide learners with feedback on their understanding of the concepts, as this will ensure that learners have a shared understanding of the concepts. Appendix 2b. provides a framework to guide these conversations

Below is an overview of the activities. Learners **must** follow the video sequence accordingly.

Video Description	Key Video Messages	Activity Description	Time Recommendation
DAY 1: SESSION 1			
1. Video 1: A Secret About the Brain 	<ul style="list-style-type: none"> The brain is like a muscle and must be trained often to be more powerful No one is born stupid or smart. Everyone can train their brain to become smarter, through considerable effort 	<p>Group Discussion: Learners discuss the reasons behind Mojo's decision to give up and leave school.</p> <p>Class Discussion: Learners discuss what does it mean that the brain is like a muscle and that intelligence grows.</p> <p>Class Chant: Learners engage in a re-enactment of the story.</p>	45 Minutes
DAY 2: SESSION 2			
2. Video 2: The Magic of Mistakes 	<ul style="list-style-type: none"> You get smarter by continuously trying and trying again You get smarter by not being afraid of being wrong or failing Learning from mistakes can grow your brain 	<p>Group Discussion: Learners discussing the importance of learning from mistakes.</p> <p>Class discussion: Teachers describe a personal story about when they made a mistake and when they sought help from others. Learners engage by telling their own stories.</p>	20 Minutes



Video Description	Key Video Messages	Activity Description	Time Recommendation
 <p>3. Video 3: The Power of “Yet”</p>	<ul style="list-style-type: none"> Introducing learners to the concept of “not yet”, as opposed to “cannot” Asking other people for help is a part of learning There is no stupid question, thus do not be afraid to ask 	<p>Class Discussion: Learners discussing the importance of asking for help and why people are afraid of asking.</p> <p>Playing the “not yet” game: Further internalising the concept of “not yet” via reflective scenarios.</p> <p>Class Chant: Class repeats previous chant with additional messages from video 2 and 3.</p>	25 Minutes
DAY 3: SESSION 3			
 <p>4. Video 4: The World of Neurons</p>	<ul style="list-style-type: none"> Easy activities do not stimulate the brain. Find difficult and challenging problems, to stimulate and grow the brain. 	<p>Class Discussion: Learners discussing the different ways in which they can build connections in their brains.</p> <p>Learners discussing ways they can challenge themselves in school.</p> <p>Class Chant: Learners repeating the class chant with additional messages from video 4</p>	20 Minutes
<p>5. Video 5: Little-by-Little</p>	<ul style="list-style-type: none"> Learning to love challenges. Easy activities do not stimulate brain. Find 	<p>Class Discussion: Learners discussing their attitudes towards challenges</p> <p>Challenge contract: Learners enter into a</p>	25 Minutes

Video Description	Key Video Messages	Activity Description	Time Recommendation
	difficult and challenging problems, to stimulate and grow the brain.	'Challenge-seeking' contract with their facilitator (E.g. Appendix 2c)	



Facilitation tips: 1. When preparing stories before each session, you should ensure that they are relatable. A useful tip would be to encourage learners to prepare stories of their own.

2. Ask students to re-cap the previous session before starting a new one, and add additional re-caps as needed, this will assist learners to further internalise the concepts

3. If you notice that learners are not engaging in group discussions, encourage them to speak.

1.2. Refresher Phase

The aim of the **Refresher Phase** is to:



The **Refresher Phase** takes place in one full lesson and should be implemented 1 month after the intervention phase. This lesson involves learners:

- Reflecting on the progress of the challenge-seeking contract;
- Watching all Growth Mindset videos, and;
- Starting a group poster.

A detailed activity guide can be found in Appendix 2d.



Below is an overview of available activities for the refresher phase:

Activity	Activity Description	Time
1. Watch all Growth Mindset videos	Learners watch all the Growth Mindset videos after each other.	15 minutes
2. Progress on the challenge-seeking contract	Learners reflecting on how they are progressing with the challenge they have been working on.	15 minutes
	Appendix 2c. provides a detailed overview of the "Challenge-seeking" contract	
3. Drawing exercise	Learners drawing pictures of how to overcome challenges	Remainder of the session

1.3. Reinforcement Phase

The aim of the **Reinforcement Phase** is to:



The **Reinforcement Phase** takes place in one full lesson and should be implemented 1-3 months after the Refresher Phase. This session involves learners:

- Discussion of posters, and;
- Developing personalised Growth Mindset posters.

A detailed activity guide can be found in Appendix 2e.



Below is an overview of the activities associated with the Reinforcement Phase:

Activity	Activity Description	Time
1. Watch all Growth Mindset videos	Learners watch all the Growth Mindset videos after each other.	15 minutes
2. Discussing Growth Mindset posters	Learners receive a set of Growth Mindset posters and discuss the meaning thereof.	15 minutes



3. Poster exercise

Learners get together in groups and develop personalised Growth Mindset posters. Remainder of the session



APPENDIX 2a.

DAY 1: SESSION 1

Recommended Time Video & Discussion 1: 45 minutes

- Special preparation**
1. Ensure that you have **the required resources (i.e. computers, headphones, projectors etc.) for your session**
 2. Prepare **a story for activity 1B**
 3. Prepare each computer by loading the Session videos before the learners come in. This will ensure time effectiveness

Session 1		Video 1: A Secret About the Brain
Key message	1. The Brain is like muscle, and must be trained often to be more powerful 2. No one is born stupid or smart. Everyone can train their brain to become smarter, through considerable effort	
Activity		Facilitator's Guide
A	Learners watch video 1	
B	Group Discussion	After watching the first video, the teacher separates the class into smaller groups. The questions below should be discussed within groups. <ul style="list-style-type: none"> • Why does Mojo want to leave school? <u>Sample answers include:</u> <ul style="list-style-type: none"> ○ Math class becomes too hard for Mojo and he wants to give up ○ He thinks that because math is hard, he has to leave school ○ Mojo believes that you're either born smart or not smart, and he was born not smart • Do you know someone who has felt the way Mojo is feeling? Did they give up or keep trying and learning? • Provide examples of times you have tried at something and failed, making it relatable to the learners (learning a language, learning how to handwrite a letter). The aim of this is to contextualize the message of the video.
C	Class Discussion	Facilitators must ask the class the questions below. Each question is followed by sample answers. Ensure that learners' answers are aligned to the questions. <ul style="list-style-type: none"> • Katie said to Mojo that the "Brain is like a muscle". What does that mean? <ul style="list-style-type: none"> ○ It means that when you work it out, it gets stronger. Like when you work out your arm muscles, they get bigger. Your brain does the same thing.

		<ul style="list-style-type: none"> • Why is it important to understand <u>why</u> the brain is like a muscle? <ul style="list-style-type: none"> ○ We know from exercising, that when we have bigger muscles, we are stronger and can do harder things and pick up heavier objects. It is similar for the brain. When it is stronger, we can solve harder problems. ○ But, we have to remember that we do not get big muscles overnight, or by being lazy. We have to work hard for them. The same is true for our brains. We have to work hard to learn new things. ○ It is important to understand this, because it means that just like getting physically stronger, we can get mentally stronger and things we think we cannot do now, will become easier. • Think, what is your hardest subject in school? • What do you find really hard about this subject? Can you do everything in that subject easily? How can you grow your brain in your subject? <ul style="list-style-type: none"> ○ Practicing the subject very often ○ Using a considerable amount of effort when practicing the subject
D	Conclusion	<p>Before the Chant, the Teacher asks the class:</p> <ul style="list-style-type: none"> • What is your conclusion of the story?
E	Class Chant	<p>Teacher closes the session with the following Chant</p> <ol style="list-style-type: none"> 1. Everyone. (do: point to everyone in the class) 2. can be smart. (do: thumbs up) 3. The Brain. (do: point to head) 4. is like a muscle. (do: point to arm muscle) 5. It must be trained. (do: imitate lifting weights) 6. To be stronger! (do: tense muscles like bodybuilders) 7. If fails? (do: squat) 8. Try again! (do: stand and raise both hands) <p>Repeat several times. You can appoint a number of learners or group to repeat it, then the whole class.</p>

DAY 2: SESSION 2	
Recommended Time (Total = 45 minutes)	Session 2: 20 minutes Session 3: 25 minutes
Special preparation	<ul style="list-style-type: none"> • Ensure that you have the required resources (i.e. computers, headphones, projectors etc.) for your session • Prepare a story for 2D • Prepare scenarios for the “Not Yet Games” for activity 3C • Memorize the cheer for activity 3D

Session 2	Video 2: The Magic of Mistakes
Key message	<ol style="list-style-type: none"> 1. You get smarter by continuously trying and trying again 2. You get smarter by not being afraid of being wrong or failing 3. Learning from mistakes can grow your brain

Activity

Facilitator's Guide

A	Session 1 Review	Discuss the main takeaways from the first video: Brain is like a muscle; No one is born smart
B	Learners watch video 2	
C	Group Discussion	<p>After viewing the second video, separate the class into smaller groups. The following should be discussed in groups:</p> <ul style="list-style-type: none"> • How can we learn from our mistakes in school? Talk about a specific, recent example. (Note: guide the discussion away from moral mistakes such as hitting someone to learning from mistakes in the classroom). • What does the quote from the video "mistakes can make you smarter" mean to you? <u>Sample answers include:</u> <ul style="list-style-type: none"> ○ When you make a mistake, your brain is growing. You are figuring out different ways to solve a problem • If you were working on a project and kept making mistakes, what should you do? <u>Sample answers include:</u> <ul style="list-style-type: none"> ○ Remind ourselves that the mistakes are how our brain is learning ○ Don't give up ○ Try a different strategy ○ Ask for help • Why are people afraid of asking for help and why is it important to stop being afraid? <u>Sample answers include:</u>

		<ul style="list-style-type: none"> ○ Some people may become embarrassed ○ Many people simply do not know how to ask for help <p><i>When the discussions have completed, ask learners to report what they've learnt about each other. The aim here is to ensure that everyone has a common understanding of the message and to learn from each other's ideas.</i></p>
D	Case Study: Teacher's Experience	<p>Teachers should tell a short, personal story on facing a failure in their past. Tell learners about: 1) what your mistakes were, 2) the emotions you felt, and 3) the lessons you learnt.</p> <p>In this story, highlight:</p> <ol style="list-style-type: none"> 1. The importance of hard work; 2. Strategies to overcome failure, and; 3. Seeking help from others.
E	Case Study: Learner's experience	<p>Teachers should ask learners to reflect on their mistakes and/or failure they've experienced in the past.</p> <p>In their stories, ask them about:</p> <ol style="list-style-type: none"> 1. Whether they overcame their mistake or not; 2. If yes above, what strategies did they use, and; 3. If no for Q1, how would they overcome now. <p>NB. Teachers must link the strategies to the key messages in the video 2.</p>

Session 2	Video 3: The Power of "Yet"
Key message	<ol style="list-style-type: none"> 1. Not "cannot" but "not yet" 2. Ask other people is a part of learning 3. There is no stupid question, thus do not be afraid to ask

Activity

Guide for facilitator

A	Learners watch video 3	
B	Class Discussion	<p>Teachers should launch a discussion around the following questions:</p> <ul style="list-style-type: none"> ● What should you do if you are stuck on a project, math problem, or other learning? <u>Sample answers include:</u> <ul style="list-style-type: none"> ○ Ask a teacher for help



		<ul style="list-style-type: none"> o Ask a peer for help ● Think of a time you were afraid to ask for help. Why did you feel afraid? ● What does it mean to say "you cannot do this, YET"? <ul style="list-style-type: none"> o It is possible for you to eventually learn how to do the thing that you are stuck with o If you want to learn how to do it, you must continuously try and challenge yourself o If you need help, you mustn't be afraid to ask ● Remember – if you're tempted to say "I can't do this" You can say -- I can't do this YET. ● Think of a time when you struggled and made a lot of mistakes. How did you feel? What did you do about it? What will you do next time you make a lot of mistakes?
C	The "not yet" game	<p>Facilitator asks to the class (can be improvised to adjust to the class condition):</p> <ul style="list-style-type: none"> ● "Can you do multiplication and division?" ● "Can you assemble a computer?" <p>If the learners answers "no", correct them and say that the answer is not "no," but "not yet!". This is to instill the concept of "not no, but not yet!", meaning that they will be able to but with considerable effort and practice.</p>
D	Additional "cheer"	<p>Facilitator instructs:</p> <ul style="list-style-type: none"> • Now we have learnt something new. Let's add the new lesson to our cheer from last week! <p>The facilitator teaches two new moves for the cheer:</p> <ul style="list-style-type: none"> ● If you are confused? (do: hands of head, confused face) ● Just ask! (do: raise the right hand) <p>***Practice the cheer from the beginning after learners have learnt the additional moves***</p>

DAY 3: SESSION 3	
Recommended Time (Total = 45 minutes)	Video 4: 20 minutes Video 5: 25 minutes
Special preparation	<ul style="list-style-type: none"> • Ensure that you have the required resources (i.e. tablets, computers, projector etc.) for your session • Plan for examples for 4C and 5C • Practice new part of cheer in 4D

Session 3		Video 4: "The World of Neurons"
Key message	<ul style="list-style-type: none"> • Easy activities do not stimulate brain. Find difficult and challenging problems, to stimulate and grow the brain. 	
Activity		Guide for facilitator
A	Session 2 Review	Facilitator instructs: <ul style="list-style-type: none"> • Do you remember what we learnt in the last session? • After that, let's repeat the last session's cheer
B	Watch video 4	
C	Discussion: "What is a challenge?"	Facilitator asks to the class: <ul style="list-style-type: none"> • What part of the body did you learn about today? <u>Sample answers include:</u> <ul style="list-style-type: none"> ◦ Neurons • Think of an example where you made some new connections in your brain. What were you doing? <ul style="list-style-type: none"> ◦ Activities can include learning something new that was hard, making a lot of mistakes and learning from them, persisting through a challenging task • What can you do to make some new connections in your brain? Set a specific goal. This goal will be used in the next activity. • What's a new challenge you want to tackle that will help your brain grow?



D	<p>Additional “cheer”</p>	<p>Facilitator instructs:</p> <ul style="list-style-type: none"> • Now we learnt something new again. Let’s add it to our cheer! <p>Facilitator teaches two new moves for the cheer:</p> <ul style="list-style-type: none"> • Challenge? (do: clenched hands in the chest) • Like it! (do: finger pointing forward) <p>Learners do all cheer moves.</p>
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Session 3	Video 5: LITTLE BY LITTLE	
Key message	<ul style="list-style-type: none"> • Being able because of loving challenge. • Easy activities do not stimulate brain. Find difficult and challenging problems, to stimulate and grow the brain. 	

A	Watch video 5	
B	<p>Discussion: "What is a challenge?"</p>	<p>Facilitator asks the class:</p> <ul style="list-style-type: none"> ● What does it feel like when something is too challenging? <u>Sample answers includes:</u> <ul style="list-style-type: none"> ○ Because challenges are difficult, it seems daunting. ○ When we take on challenges, we don't always succeed. This can be discouraging. ● What kind of attitude should we take on when facing a challenge, and why is that important? ● Choose one challenge that you will try to grow your brain with. What is it? ● In groups, brainstorm phrases we can use to keep us going when facing a challenge (e.g. "Nice effort trying to learn how do the math problem!") <p><i>Demarcate a space on the classroom wall entitled "Challenge Seeking Motivation". Instruct learners to write their motivational phrases down on pieces of paper and decorate them as they wish. Once completed, they must stick their phrases on the "Challenge Seeking Motivation" wall.</i></p>
C	<p>Challenge-seeking contract</p>	<p>Using the challenge identified in the previous activity, learners must enter into a Challenge-Seeking contract with their facilitator and/or teacher. The contract must outline:</p> <ul style="list-style-type: none"> ● The challenge that the learner will try to work on, ● Details on how the learner can work on their challenge, and; ● The different motivational methods that the learner will use to keep them going <p>See appendix 2c. for an example of a challenge seeking contract</p>

APPENDIX 2b.

Remember, the aim of this intervention is to teach learners about the concept of growth mindset, with the ultimate aim of shifting a learner's attitude toward their learning and their intelligence. For this process to happen effectively, learners must demonstrate an accurate understanding of each video's key messages **and** how to effectively apply them.

You can assist the learning process by asking learners to **identify a video's key messages** and **to demonstrate the related behaviours**. The guide below provides an overview of each video's messages along with their related behaviours. This could also be used as a framework when providing learners with feedback about their understanding of each key message.

Videos and key messages	Related Behaviours
<p><u>Video 1: A Secret About the Brain</u></p> <ul style="list-style-type: none"> • You can get smarter with effort <ul style="list-style-type: none"> ○ Your brain is like a muscle ○ It can be trained and made stronger ○ Doing challenging things will make your brain stronger ○ Struggles can be conquered by effort and practice 	<ul style="list-style-type: none"> • Someone growing their brain, by... <ul style="list-style-type: none"> ○ Not giving up on completing an assignment ○ Asking for more practice problems ○ Putting extra effort into their schoolwork • Someone working through struggles and difficulties, by... <ul style="list-style-type: none"> ○ Trying hard ○ Asking for help ○ Staying positive when something is hard or feels impossible
<p><u>Video 2: The Magic of Mistakes</u></p> <ul style="list-style-type: none"> • Mistakes can make you smarter <ul style="list-style-type: none"> ○ When you make a mistake it just means you don't know it YET ○ Mistakes help you learn ○ If you keep trying and get stuck, ask for help 	<ul style="list-style-type: none"> • Someone learning from their mistakes by <ul style="list-style-type: none"> ○ Trying again and again ○ Saying "not yet" when they don't understand something ○ Asking a friend or teacher for help ○ Encouraging others to ask for help



Videos and key messages

Related Behaviours

Video 3: The Power of “Yet”

- **When you make a mistake it doesn't mean “cannot” do it, it means you don't know how to do it “yet”.**
 - Asking other people for help is a part of learning
 - There is no stupid question, thus do not be afraid to ask

- **Someone can seek help by...**
 - Asking a teacher or peer
 - Working on a challenging task with another person
 - Improving their courage

Video 4: The World of Neurons

- **You can grow new neurons by doing challenging things**
 - Growing new neurons makes your brain stronger
 - When you try new things that challenge you, your neurons connect
 - You have the power to change how your neurons connect by working hard

- **Someone making strong connections in their brain by...**
 - Working on challenging problems
 - Trying new challenges
 - Asking for harder assignment
 - Trying something that is hard for them

Video 5: Little-by-Little

- **Through practice and effort, we learn new things and grow our brains**
 - When we struggle, we are just learning new ways to improve
 - We must not be afraid to ask questions to help us learn
 - Learning challenging things is the only way to make the brain stronger

- **Someone seeking out challenges by...**
 - Asking for harder assignments
 - Trying something they've never done before
 - Trying something that is hard for them
- **Someone improving themselves by...**
 - Celebrating failing
 - Reflecting on their mistakes
 - Seeking challenges
 - Not giving up
 - Asking for help



APPENDIX 2c: Example for Session 3, Video 5

Challenge-Seeking Contract

I,, hereby commit myself to taking up the following challenge:

.....

I,, will use the following methods to work on my challenge:

1.
2.
3.
4.

I,, will keep myself motivated in the following ways:

1.
2.
3.

Signature:.....

Date:.....

Witness:.....

APPENDIX 2d: Refresher Phase

Activity Guide: Progress on Challenge-Seeking contract

Watch all Growth Mindset videos again, one after the other.

Learners will be expected to reflect on the challenge that they have committed to previously in their Challenge Seeking Contract. The aim is for the facilitator to understand how the learner has applied the Growth Mindset concepts in their 'real life'. For this activity, learners should be divided into small groups where they discuss the following:

1. How they have been working on their challenge?
2. Have they learnt any new ways to work on their identified challenge?
(besides the ways that they have detailed in their contract)
3. What types of barriers have they encountered to achieving their goal?
4. For number 3 above, how can they overcome the barriers?

During the learner report-back, facilitators should focus on affirming the feedback that reflect a Growth Mindset, and provide recommendations for those that do not.

Something to consider: Class teachers should be made aware of the challenge-seeking contracts that learners signed. This will allow teachers to not only follow up on progress, but it is also a useful tool for teachers to use with their next cohort of students.

Now learners should draw pictures of how to overcome the challenges they identified in their discussions.



APPENDIX 2e: Reinforcement Phase

Learners watch all five videos again, one after the other.

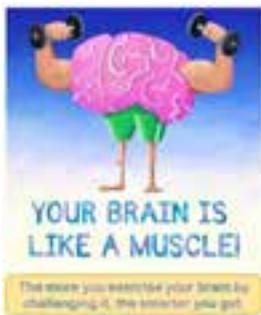
Growth Mindset Posters

The posters represented below will be printed for each class. Each poster represents a specific video in the Growth Mindset series.

For this exercise, the class should be split into groups of five. Each group will receive one of the 5 posters and will be required to:

- Discuss what they remember about the video that their poster represents, and;
- Discuss what the key messages were from the respective video.

Facilitators will be expected to hover between groups to ensure that each group is accurately discussing their video.



Activity Guide: Poster Development

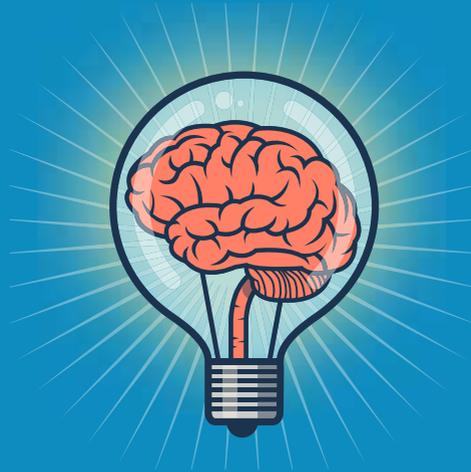
In this activity, learners will remain in their assigned groups to develop their own, personalised Growth Mindset posters.

Using pictures and/or captions from old magazines and newspapers, learners must represent the key messages and meanings from their assigned posters in the previous activity.

Once completed, groups must present their final posters to the rest of the class, telling them how what they designed represents the key messages. This will allow learners to be constantly reminded of the Growth Mindset concepts throughout the year.



Facilitator's tip: Preparation for this activity should be done in advance. Learners must be notified about the requirement to bring old magazines and newspapers. Facilitators should bring extra in case there are not enough.



Section 3: Protocol for Senior Phase learners

1. Phase overview

1.1. The aim of the **Intervention Phase** is to:



The **intervention phase** should take place over **three consecutive weeks**. The phase is comprised of three sessions. Each session takes place over one full lesson. Each lesson comprises:

- Watch 2-3-minute video clips, and;
- Complete reflective exercises corresponding with each video clip

A detailed activity guide can be found in Appendix 3a.



Facilitation tip: If you notice that learners misunderstand the concepts of growth mindset, you can refer to Appendix 3b which provides a framework to guide explanations.

Below is an overview of the activities. Learners **must** follow the video sequence accordingly.

Video Description	Key Video Messages	Activity Description	Time Recommendation
DAY 1: SESSION 1			
2. Video 1: A Secret About the Brain 	<ul style="list-style-type: none"> The brain is like a muscle and must be trained often to be more powerful No one is born stupid or smart. Everyone can train their brain to become smarter, through considerable effort 	Activity 1: Facilitating understanding of the message of video by having learners explain it to peers 	15 Minutes
3. Video 2: The Magic of Mistakes 	<ul style="list-style-type: none"> You get smarter by continuously trying and trying again You get smarter by not being afraid of being wrong or failing Learning from mistakes is how you grow your brain 	Activity 2: Helping learners connect the lesson to their own life through reflecting on a personal struggle and improvement 	30 Minutes
DAY 2: SESSION 2			
4. Video 3: The Power of "Yet" 	<ul style="list-style-type: none"> When you make a mistake it doesn't mean you "cannot" do it, it means you don't know how to do it "yet". Asking other people for help is a part of learning There is no stupid question, thus do not be afraid to ask 	Activity 3: Reflecting on the power of asking for help and internalising the message through motivating peers to ask for help when they struggle 	30 Minutes

Video Description	Key Video Messages	Activity Description	Time Recommendation
5. Video 4: The World of Neurons 	<ul style="list-style-type: none"> You can grow new neurons by doing challenging things Growing new neurons makes your brain stronger When you try new things that challenge you, your neurons connect 	Activity 4: Learners set a short term goal 	15 Minutes
DAY 3: SESSION 3			
6. Video 5: Little-by-Little 	<ul style="list-style-type: none"> Through practice and effort, we learn new things and grow our brains When we struggle, we are just learning new ways to improve We must not be afraid to ask questions to help us learn Learning challenging things is the only way to make the brain stronger 	Activity 5: Learners reflecting on the importance of challenges and internalising the message through motivating peers to take on more challenging work Activity 6: Learners reflecting on their future goals and thinking about the one thing they need to do in school in order for them to achieve their goal	45 Minutes



Facilitation tips: 1. It may be useful to include a discussion element after each video. For example, learners could discuss the main messages and themes from each video to improve their understanding of the concepts.

2. Facilitators could gather all learner's responses to activities and post them on the wall for other learners to gain insight from.

3. It would be useful to provide learners with feedback on their understanding of Growth Mindset. This is necessary to ensure that all learners have a similar understanding of the lessons and/or messages. It is important that you ask questions about learner's understanding of how to apply a growth mindset, and not just focus definitions. See Appendix 3b. for ways to guide these conversations

1.2. Refresher Phase

The aim of the **Refresher Phase** is to:



The **Refresher Phase** takes place in one full lesson and should be implemented 1 month after the intervention phase. This lesson involves learners:

- Reading e-posters;
- Answering reflective questions, and;
- Watching a video about the power of learning.

A detailed activity guide can be found in Appendix 3c.



Below is an overview of available activities for the refresher phase:

Activity	Activity Description	Time
1. Review e-posters 	Reading posters that remind learners of the following concepts: <ol style="list-style-type: none"> 1. Your brain is like a muscle 2. Learning from mistakes 3. The power of "yet" 4. Growing new neurons to become smarter 5. Taking on more challenges 	10 Minutes
2. Watch video about learning 	Learners watch a video that incorporates the lessons from Growth Mindset	5 minutes
3. Sharing and discussion	Learners pair up with a peer and discuss the ways that they have applied the lessons from the videos. The discussions will inform of the following activity.	15 minutes
4. Letter writing exercise 	Learners advising a fellow learner about overcoming a struggle.	15 minutes

1.3. Reinforcement Phase

The aim of the **Reinforcement Phase** is to:



The **Reinforcement Phase** takes place in one full lesson and should be implemented 2-3 months after the Refresher Phase. This session involves learners:

- Watching 2-5-minute videos;
- Completing a poster exercise, and;
- Answering a series of reflective questions.

A detailed activity guide can be found in Appendix 3d.



Below is an overview of the activities associated with the Reinforcement Phase:

Activity	Activity Description	Time
1. Watch a video in the Growth Mindset series	Watching the first video in the Mojo series.	3 Minutes
		
2. Poster exercise	Reading posters that remind learners of the following concepts: <ol style="list-style-type: none"> 1. Your brain is like a muscle 2. Learning from mistakes 3. The power of "yet" 4. How the brain works 5. Taking on more challenges 	2 Minutes
		
3. Watch a video about learning	Learners watch a video that describes the power of learning. The messages in this video reinforces growth mindset.	3 Minutes
		
4. Poster exercise	Learners developing posters that depict their goals and methods of achieving them.	30 Minutes
		

APPENDIX 3a.

DAY 1: SESSION 1

Activity 1 for Video 1



In this video we are introduced to Mojo and Katie. We learnt that Mojo has a dilemma: he wants to leave schools because it's too difficult. Katie explains that even though school is hard sometimes, the challenge is actually making him smarter



This is the way that the brain works: It becomes smarter by you taking on more challenges. Sadly, lots of learners do not know this. Many learners think that you are either born smart or not, and that won't change.

Think about a subject that some learners may find difficult. In your own words, how would you explain that it is possible for learners to become smart in that subject?

Write 1-2 sentences about how it's possible to get smarter in this subject:



Facilitation tip: Encourage learners to speak to their peers about a subject they struggle with. The discussion could then inform the advice they provide in this section.

DAY 1: SESSION 1

Activity 2 for Video 2



Mojo was building a robot and kept on failing. But, after trying multiple times, he eventually learnt from his mistakes, which got him closer to building his robot.

A lot of learners will try something new and not succeed at first. Some will keep trying until they succeed. It is important to continue trying, especially after you fail. This will help you learn from your mistakes and get closer to your goal.

Can you remember a time in your life when you did not succeed at first, but eventually got better?



Write 2-3 sentences about a time you made mistakes at first, but then got better:

A large, empty rounded rectangular box with a black border, intended for the student to write their response. The box is centered on the page and occupies most of the lower half of the page.

DAY 2: SESSION 2

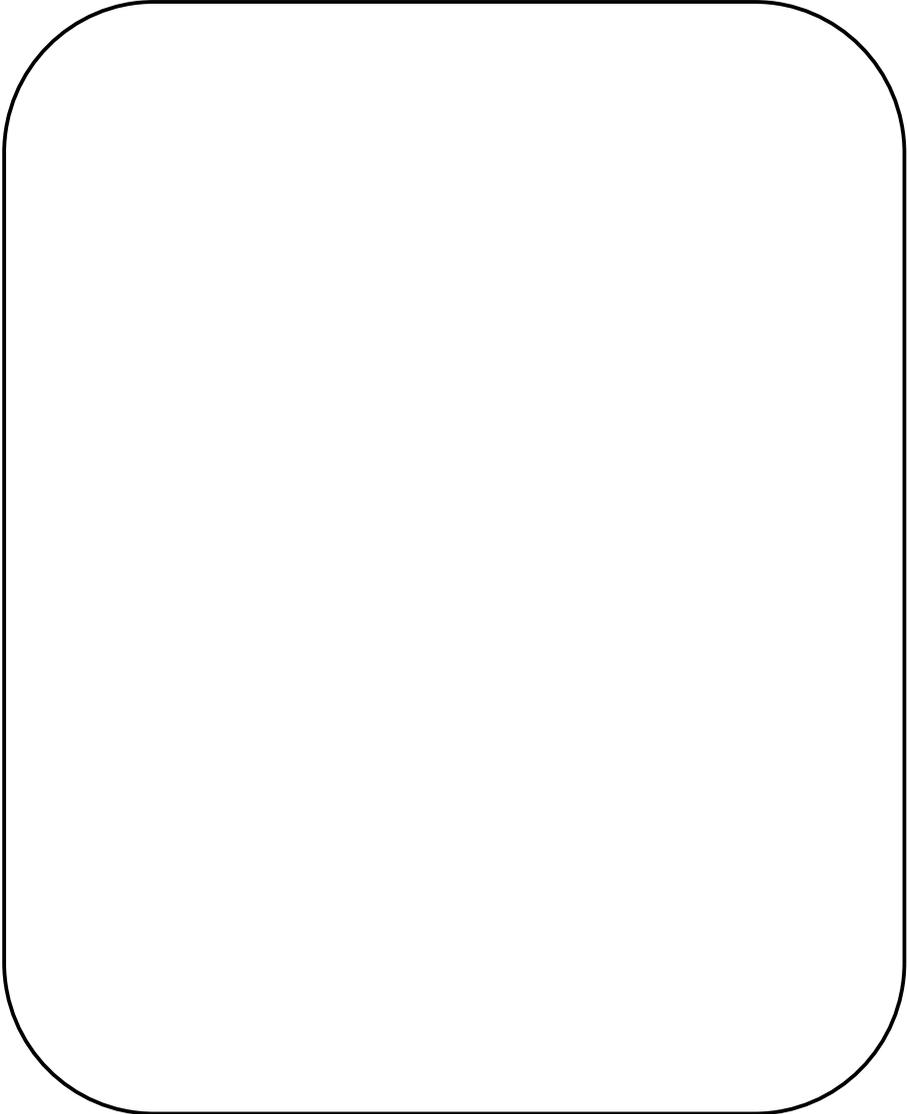
Activity 3 for Video 3: The power of “Yet”



In this video Katie learns that even if she doesn't know how to do something YET, she can learn how to do it eventually. One way for her to learn is to ask others for help.

Many learners struggle to admit when they don't understand something. They may be too embarrassed to ask others for help in school. Sometimes, they need to be convinced to ask for help.

How would you convince other learners that it's good to ask for help if they don't understand something? Write 4-5 sentences explaining your strategy.



DAY 2: SESSION 2

Activity 4 for Video 4: The World of Neurons



Katie and Mojo just learnt a lot about the brain. They learnt that their brain cells, called NEURONS, make new connections and get stronger when they work on challenging things.

Let's get practical. What can you do this week to try a challenge, and make some new connections in your brain? Set one specific, realistic goal for you to achieve before the next week is over. The more specific you are, the more it will help them.

Write down your goal for this week in 1-2 sentences.

DAY 3: SESSION 3

Activity 5 for Video 5: Little-by-Little



In today's video, Mojo and Katie set out on their biggest challenge yet. To get through it, Mojo explains that simply taking on challenges is not enough to learn from your mistakes. You need to **love** the challenges in order to push yourself forward and get what you want out of life.

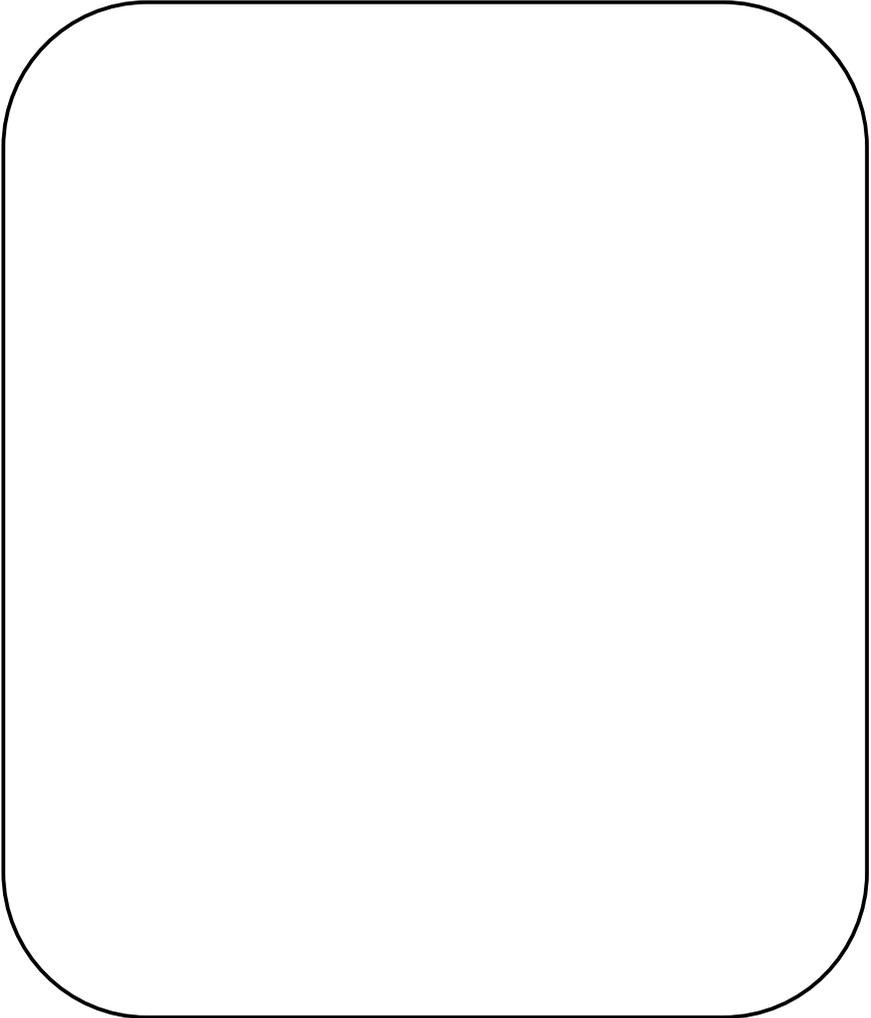
In the last session, **you set yourself a goal for the week**. Pair up with a peer to discuss the following:

1. Did you reach your goal?
2. If yes, what lessons did you learn about goal setting?
3. If no, what will you do differently?

After your discussion, report back to the class about what you learnt from each other.

Many learners tend to give up when they face too many challenges. The reason could be because they do not like challenges very much.

How would you motivate your peers to love challenges? Write 2-4 sentences explaining to your peers why it is worth it to take on challenges, even though it could get hard.



Guide for Teachers:

The aim of this activity is for learners to reflect on the importance of appreciating challenges in order for them to see its worth. Using best practice, learners can internalise this by convincing their peers to appreciate challenges through the provision of advice.



Facilitation tip: The letter writing exercise could be blended with a report-back discussion, where learners provide the class with different reasons for appreciating challenges.

DAY 3: SESSION 3

Activity 6 for Video 5: Little-by-little



Think about the goal you committed yourself to in activity 4. That was a goal that could be achieved in a short space of time. Let's think about a longer term goal, that would take a bit more time to achieve. Try to imagine yourself in the future, when you are finished with school. Discuss this with a peer.

Please write down the goal that you wish to achieve after school. Specify what you need to do to help you achieve your future goal. Your ideas will be used in a later activity. The more specific you can be, the more helpful it will be for you to complete the next activity.



Facilitation tip: Learner's commitment to their goals can be further influenced if you display their goals on the classroom walls. This will provide them with a reminder of their commitment.

Guide for Teachers:

The steps provided in this activity will be used for an activity in the Reinforcement Phase. Here, learners will be developing a poster based on their goals and the steps they need to make to achieve the goal.

For now, prepare for that session by organising A3 poster sheets and asking learners to gather extra newspapers and magazines from their homes. You should also start gathering your own newspapers or magazines in case some learners are not successful in finding any



Facilitation tip: Encourage learners to share their steps with each other through group discussions.



APPENDIX 3b.

Remember, the aim of this intervention is to teach learners about the concept of Growth Mindset, with the ultimate aim of shifting a learner's attitude toward their learning and their intelligence. For this process to happen effectively, learners must demonstrate an accurate understanding of each video's key messages **and** how to effectively apply them.

You can assist the learning process by asking learners to **identify a video's key messages** and **to demonstrate the related behaviours**. The guide below provides an overview of each video's messages along with their related behaviours. This could also be used as a framework when providing learners with feedback about their understanding of each key message.

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<p><u>Video 2: The Magic of Mistakes</u></p> <ul style="list-style-type: none"> • Mistakes can make you smarter <ul style="list-style-type: none"> ○ When you make a mistake it just means you don't know it YET ○ Mistakes help you learn ○ If you keep trying and get stuck, ask for help 	<ul style="list-style-type: none"> • Someone learning from their mistakes by <ul style="list-style-type: none"> ○ Trying again and again ○ Saying "not yet" when they don't understand something ○ Asking a friend or teacher for help ○ Encouraging others to ask for help



Videos and key messages

Related Behaviours

Video 3: The Power of “Yet”

- **When you make a mistake it doesn't mean “cannot” do it, it means you don't know how to do it “yet”.**
 - Asking other people for help is a part of learning
 - There is no stupid question, thus do not be afraid to ask

- **Someone can seek help by...**
 - Asking a teacher or peer
 - Working on a challenging task with another person
 - Improving their courage

Video 4: The World of Neurons

- **You can grow new neurons by doing challenging things**
 - Growing new neurons makes your brain stronger
 - When you try new things that challenge you, your neurons connect
 - You have the power to change how your neurons connect by working hard

- **Someone making strong connections in their brain by...**
 - Working on challenging problems
 - Trying new challenges
 - Asking for harder assignment
 - Trying something that is hard for them

Video 5: Little-by-Little

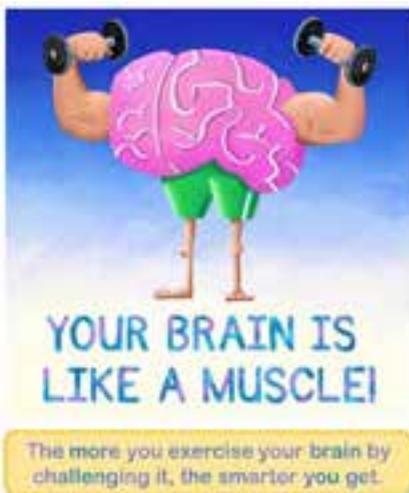
- **Through practice and effort, we learn new things and grow our brains**
 - When we struggle, we are just learning new ways to improve
 - We must not be afraid to ask questions to help us learn
 - Learning challenging things is the only way to make the brain stronger

- **Someone seeking out challenges by...**
 - Asking for harder assignments
 - Trying something they've never done before
 - Trying something that is hard for them
- **Someone improving themselves by...**
 - Celebrating failing
 - Reflecting on their mistakes
 - Seeking challenges
 - Not giving up
 - Asking for help

APPENDIX 3c: Refresher Phase

e-Posters

Some time ago you watched videos about Mojo and Katie and learnt about their experiences in school. We made some posters to remind you of the lessons from the videos.





Even if you can't do it YET,
you can learn to do it.



Being challenged is what makes your
brain cells grow the most.



Seeking out challenges, learning
from mistakes, and not giving up can
help you achieve your goals in life.

Activity 1

Pair up with a peer and share the following experiences with each other:

1. How did you apply the lessons from the videos? You can choose to focus on the message from a single video or the Class Dojo series holistically.
2. How successful were you when applying the lessons discussed in question one above?
3. If you can't think of anything you did, discuss how you will apply the lessons.

Activity 2

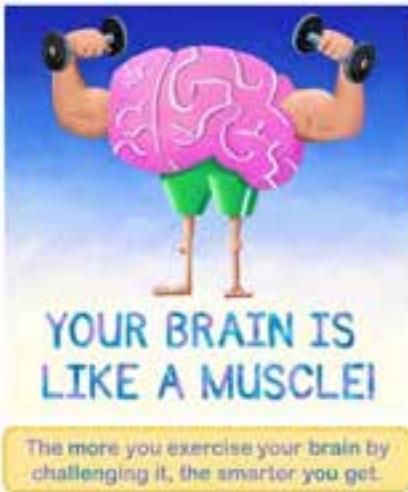
Take a moment to think of a time when you struggled to learn something. It could be anything - such as adding negative numbers, or writing an essay.

Write a letter to a future learner at your school about how you handled this struggle. In 3-5 sentences, tell this student your story.

APPENDIX 3d: Reinforcement Phase

e-Posters

Some time ago you watched videos about Mojo and Katie and learnt about their experiences in school. We made some posters to remind you of the lessons from the videos.







Activity Guide: Poster Development

In a previous activity (see Activity 6), you wrote down a long-term goal that you wanted to achieve in the future. You also wrote down specific steps that you need to take to achieve that goal.

In this activity, you will work in groups to develop your posters that represent your goals and steps you need to take meet your goals.

Using pictures and/or captions from old magazines and newspapers, represent the key messages and meanings from your goal and the steps you must take to meet your goal. You can be as creative as you need to be.



You are
Capable
of so much
more
than you can even
imagine



Caring



Competence



Integrity



Innovation



Accountability



Responsiveness