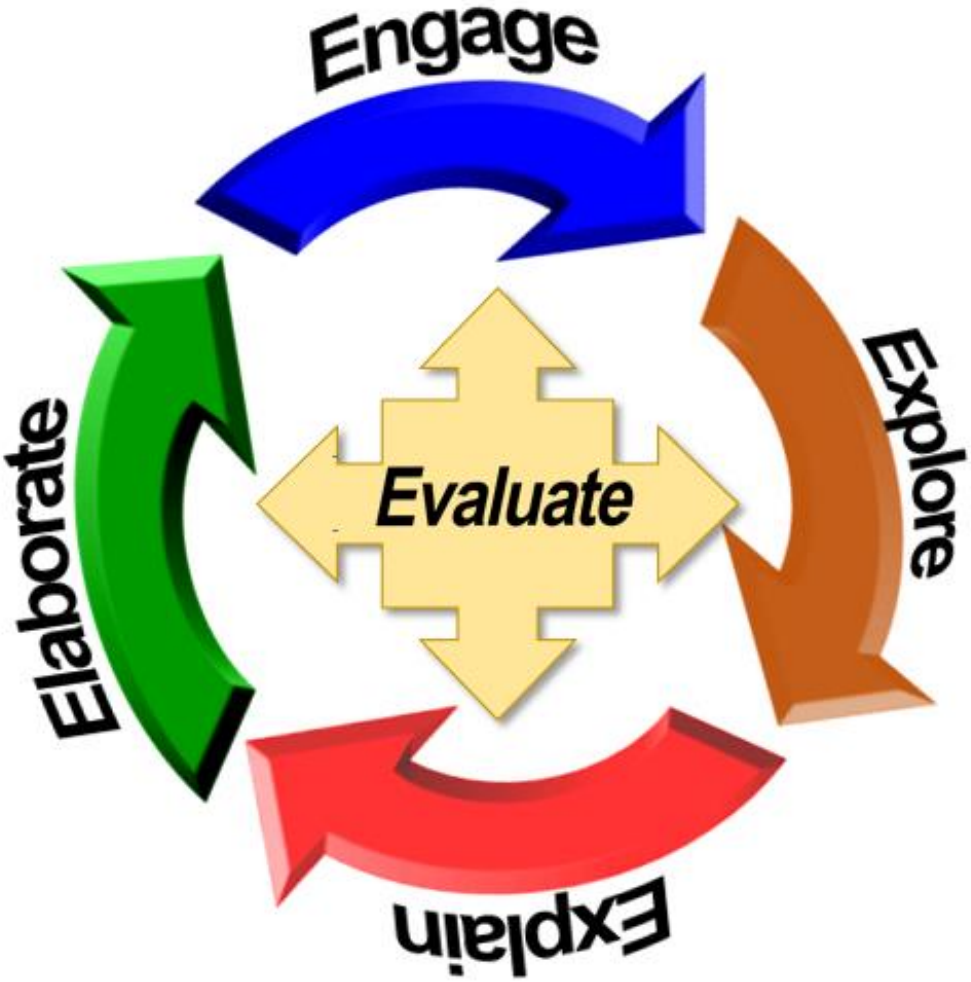
Inquiry-based Learning (IBL) Booklet



NET Section, CDI, EDB, HKSARG

Development of Text Sets

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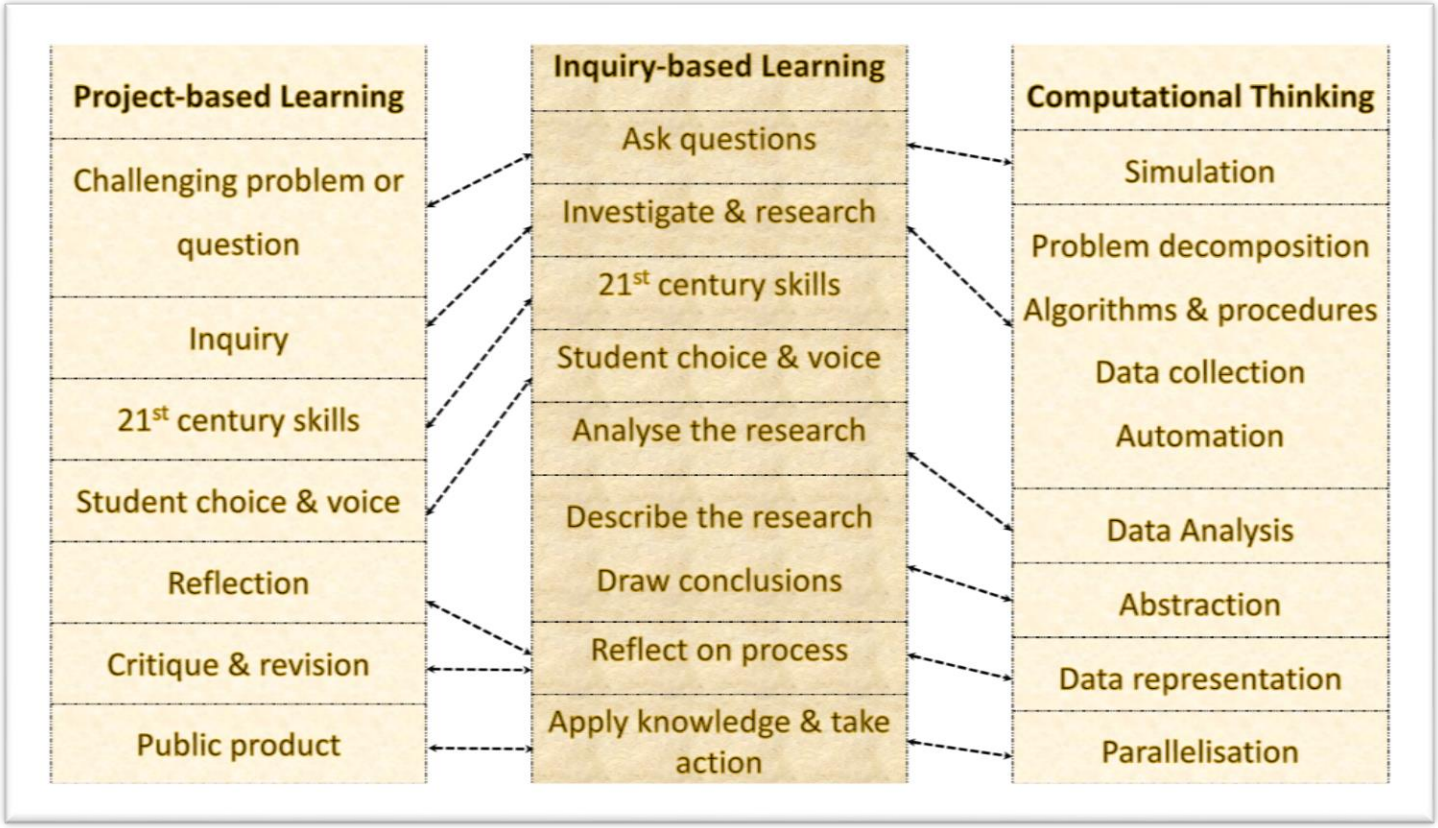
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The Inquiry-based Learning (IBL) Approach

1. How does Development of Text Sets (DTS) primary literacy programme link with IBL?

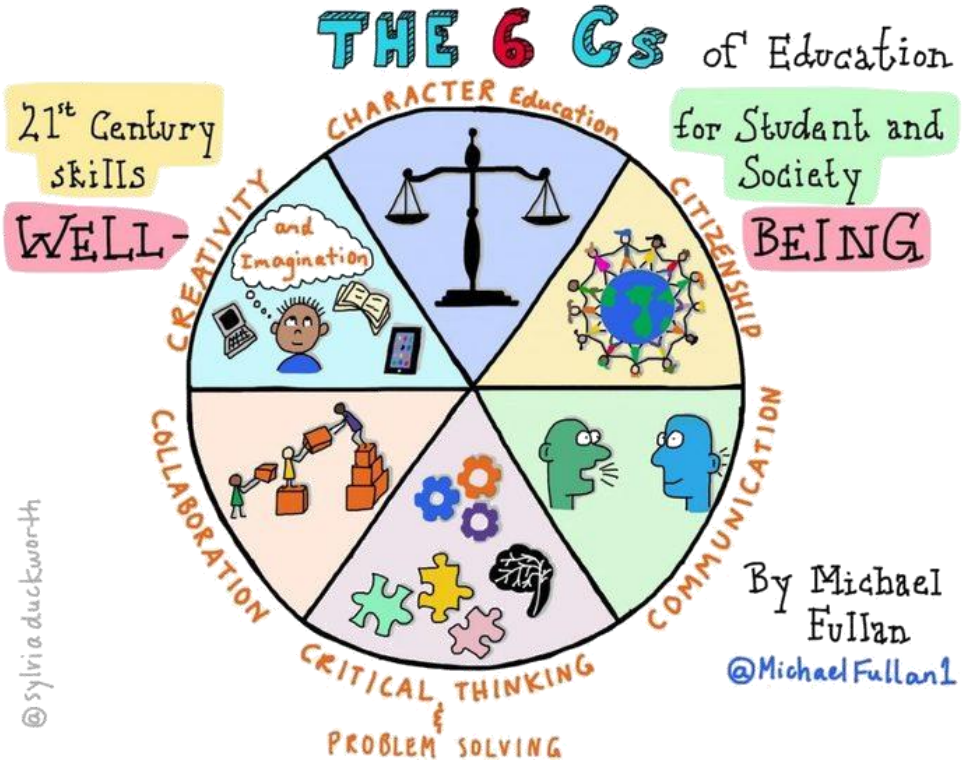
DTS is a real-life primary literacy programme with the goal of investigating the design and use of text sets to inform and support the development of effective strategies to enhance students' literacy development. Students navigate and explore various texts, both multimodal, i.e. print and digital-based texts, and multi-genre, e.g. fictional and non-fictional texts, around a common theme and concept, to answer a focus question. Answering the focus question aligns DTS with IBL. Generating curiosity and channelling student engagement are the main principles of inquiry.

This step-by-step guide endeavours to walk teachers through the process of integrating IBL as an instructional approach to plan and implement DTS units of work. IBL has similar traits to both project-based learning and the development of computational thinking skills. See adapted diagram below.



2. How does DTS deliver on the 21st-century skills?

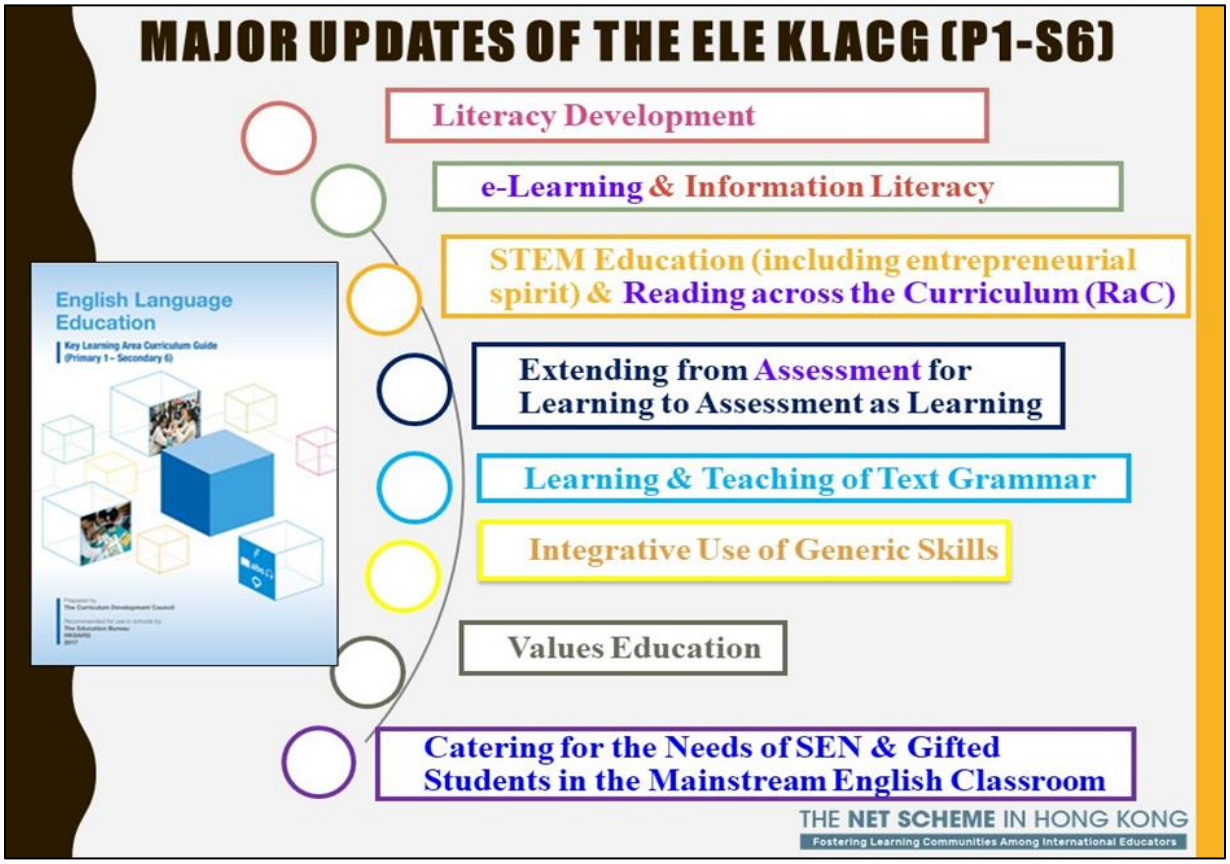
In today's ever-evolving digital world, a plethora of information is available to anyone, anywhere, anytime at the click of a button. Therefore, 21st-century students need to be adept in the ability to find and evaluate information. They need critical literacy skills to be able to ask questions**,** be active critical thinkers and use problem-solving skills efficiently and effectively to solve authentic problems in creative ways. Students collaborate with their peers to construct and communicate their knowledge. They share their knowledge as a digital citizen, which requires them to be creators of knowledge not merely consumers of it, by creating their own multimodal and multi-genre texts.



Inquiry-based learning aims to increase students' engagement in learning and problem solving by giving them agency and choice. The students remain engaged in active learning thereby developing their hands-on and minds-on skills. Students are engaged in activities, both physical and mental, whereby they are able to use higher-order-thinking and problem-solving skills to evaluate their new learning thereby formulating their own conclusions. The use of text sets allows a deeper understanding of a topic and its associated concepts.

3. How does DTS support the implementation of the ELE KLA CG?

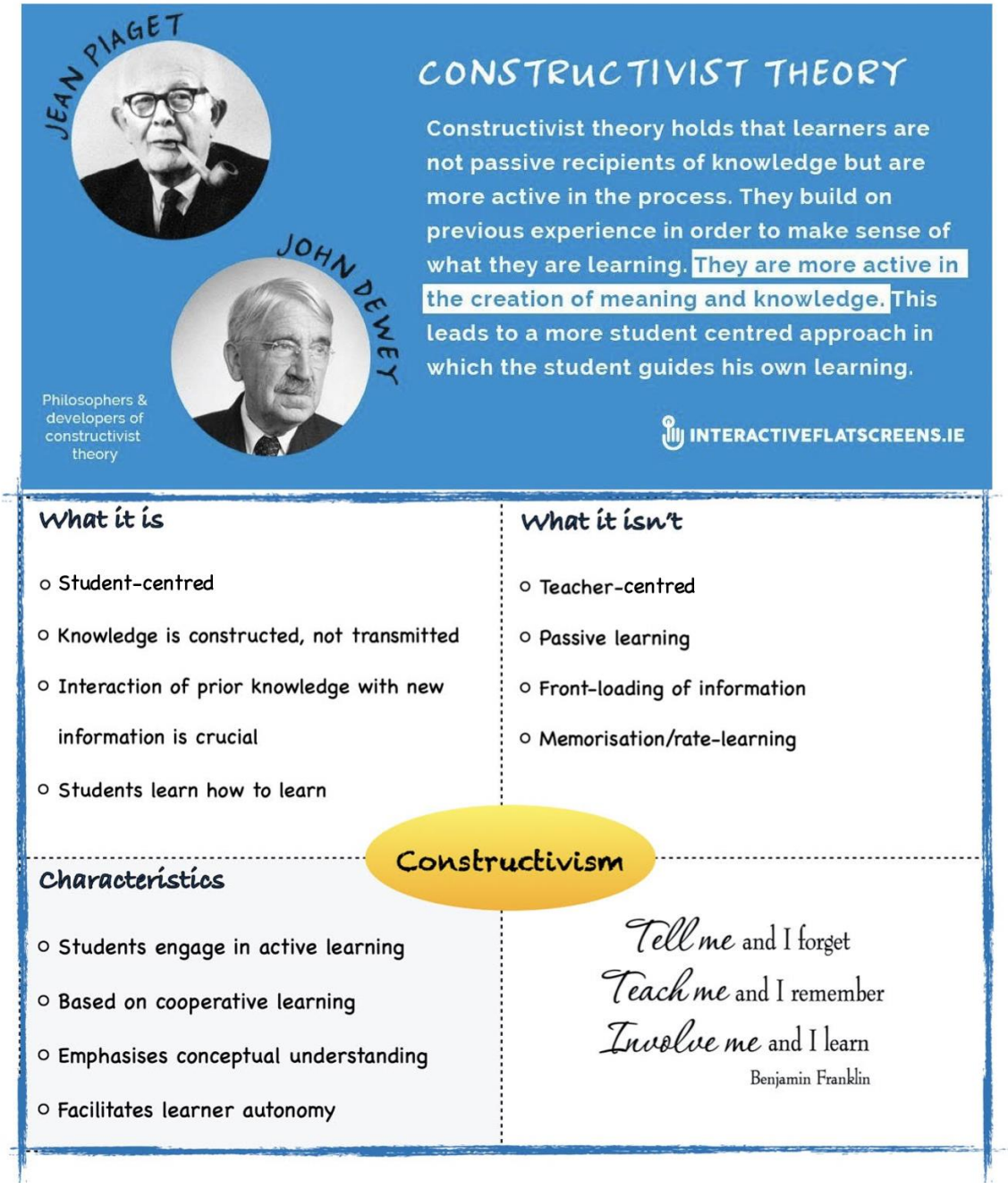
The DTS programme offers a meaningful opportunity to plan and deliver on some of the major updates in the 2017 English Language Education Key Learning Area Curriculum Guide (ELE KLA CG).



4. What is the origin of IBL?

IBL is a student-centered constructivist approach where students create their own knowledge by being led through a process of discovery and creation.

The IBL approach differs from traditional approaches because it reverses the order of learning. Instead of presenting information or the answer up-front, teachers start with a range of scenarios, questions and problems for students to navigate. Students explore and investigate a real-life problem or scenario in order to reach learning objectives that can be varied from teacher-centred to student-driven.

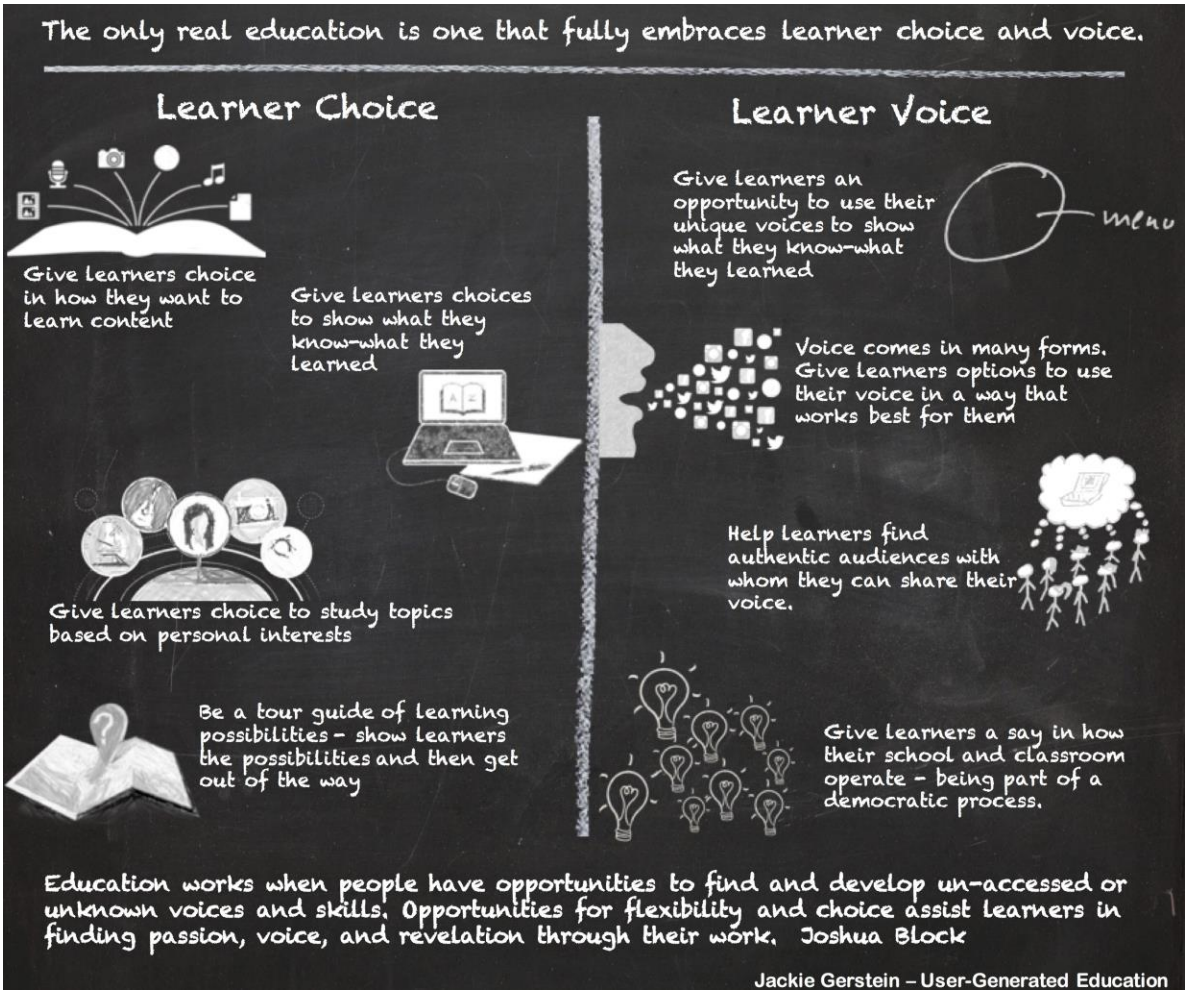


IBL progresses students towards becoming life-long independent learners by giving them choice and a voice in their learning.

Direct instruction as the sole primary mode of delivery deprives students of active learning. Providing voice to students allows them to share what they believe in. Encouraging voice fosters a change in the learning environment as students move towards agency of voice by taking more control and responsibility for their own learning, i.e. how they learn and what they learn.

> *"Young people want to be heard. They have ideas and perspective on their lives and the world around them, and when their voice is incorporated in learning, good things happen."*
>
> *McCarthy*

As students progress towards increased responsibility around voice, they can also build ownership for their learning by moving towards agency of choice. When the students choose the content from a list of texts or activities provided by the teacher, the teacher is ultimately the one responsible for the learning and not the students. However, the suggestions regarding student choice and voice below shifts the responsibility for learning from the teacher back to students.



Providing students with agency of choice and voice not only creates more engagement in learning, but empowers them to become self-directed learners.

One of the ways is to give students a choice board. Choice boards are graphic organisers that are composed of various numbers of squares. Each square is an activity which helps students learn or practise a primary skill, while allowing them a choice. Students can be instructed to choose one or more of these activities to complete. They can progress from one activity to another, either in an organised or random order, choosing their own learning path.

Choice boards are not limited to face-to-face classroom use only. They can be used in virtual classrooms too. Below is an example of each.

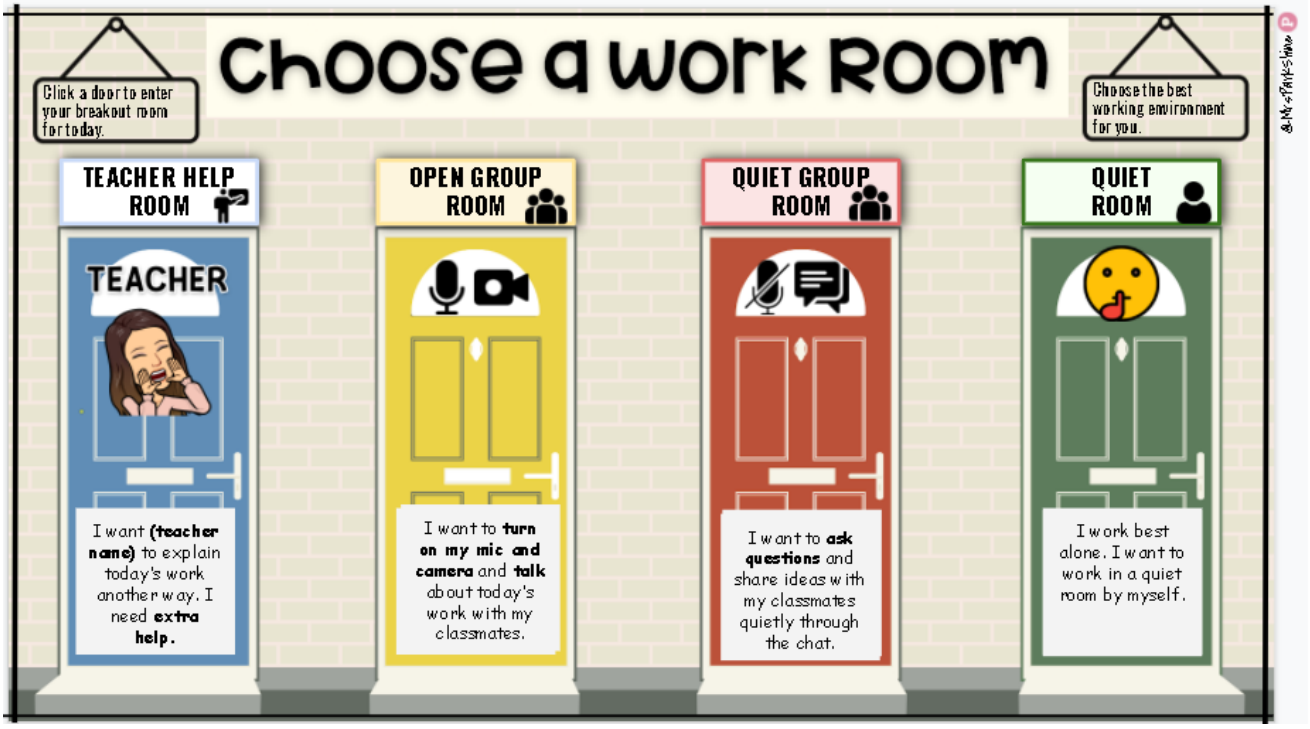
Example 1: Choice board used in an existing DTS Friends (KS1) unit

Theme: **Friends**
Key Concept: **To have a good friend, you have to be a good friend.**
Focus Question: **What makes a good friend?**

To achieve my learning goal, I will….. **(Colour the boxes that you choose to do.)**

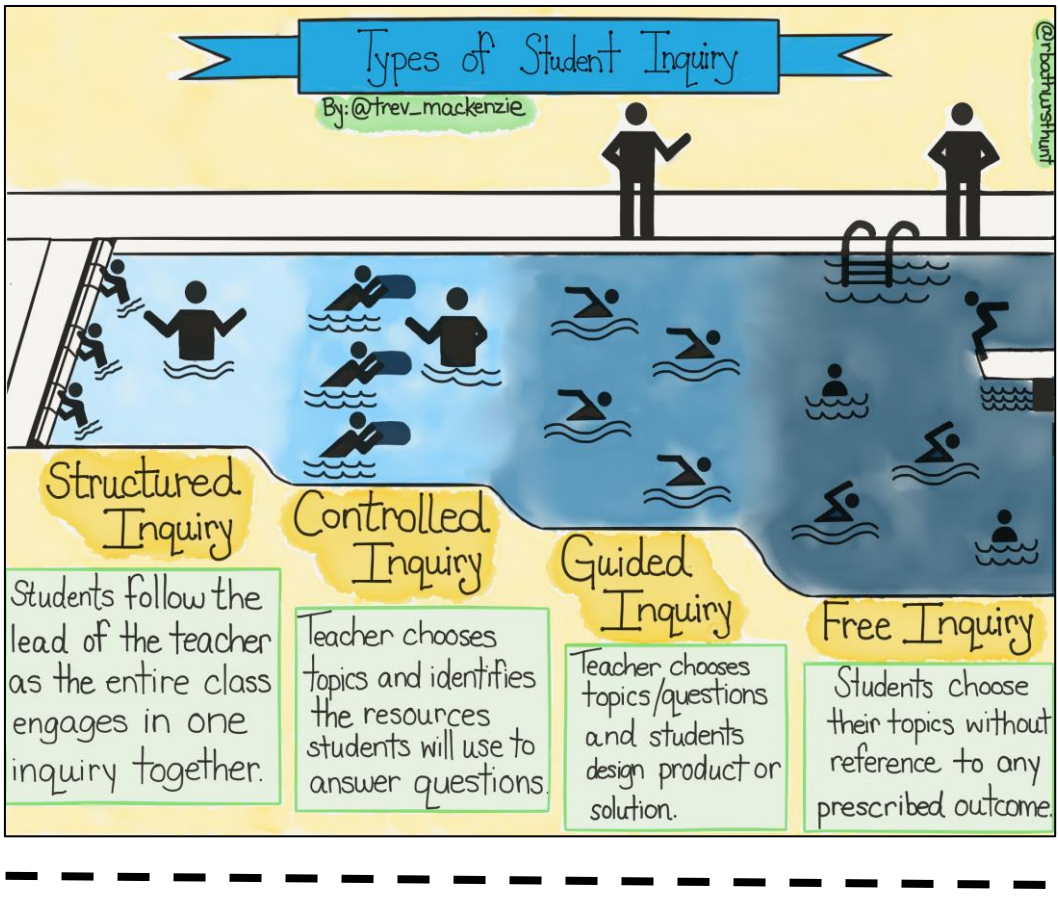
Concept Building	**Reading / Listening/ Speaking**	**Writing**	**Vocabulary**	**Language Art**
(DO ALL ☺!)	(Choose at least 2)	(Choose at least 1)	(Choose at least 2)	(Choose at least 1)
Make a "Be a Good Friend" Plant	**Watch 3 videos** about friendship	Create my **own poem / chant**	Learn more **adjectives** describing people's physical appearance	**Recite a poem / chant** about friendship and perform in class
Make a "The Perfect Friend" poster	**Read 3 books** about friendship	Send a **Friendship Card** to my friend	Learn more personality **adjectives**	**Sing a song** about friendship to your friends
Make a "My Almost Perfect Friend" poster	**Listen to 3 songs** about friendship		Learn more **vocabulary** items about what friends do together	**Retell a story** using my own words
Make a friendship _____	**Read 3 poems / chants / Friends quotes** about friendship			

Example 2: A visual representation of a virtual choice board for how students want to work.



5. Are all approaches to IBL equal?

There are several approaches to IBL that may be viewed as a continuum ranging from structured to free. Free inquiry is also often referred to as open inquiry. The objective of each type of inquiry is to gradually remove scaffolds while students progress towards taking complete ownership for their own learning.

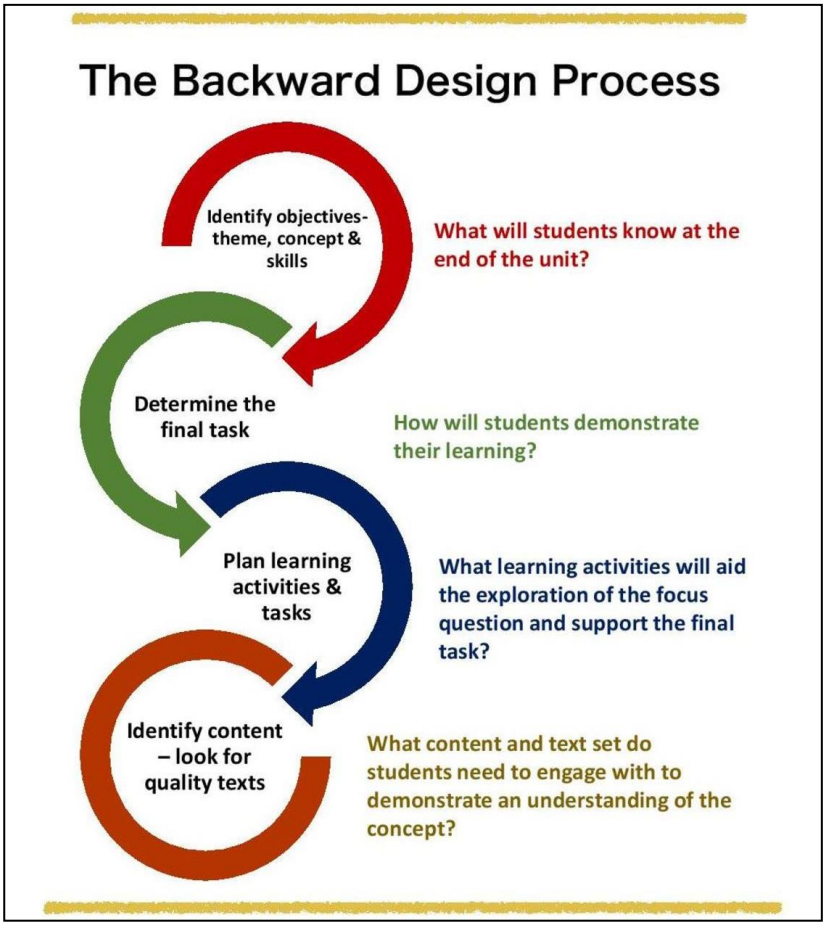


Structured is teacher-guided inquiry wherein the teacher chooses the questions, resources and activities, and all the students are engaged in one inquiry together.	***Controlled*** is when the teacher controls the topic and the resources, but students have the choice of which resources to use to answer questions.	***Guided*** is when a topic and the questions are given by the teacher, but students lead the inquiry on their own chosen resources with the teacher acting as a facilitator.	***Free*** is where students generate their own questions and resources and formulate their own approach to learning as well as how to present their evidence of learning.

For the purpose of this resource, we will focus on the structured inquiry approach since it incorporates a similar approach to the way DTS units are planned.

6. What makes the structured model ideal for DTS?

The structured model of inquiry is ideal for DTS since it allows students time to investigate teacher-formulated guiding questions and the entire class engages in the same inquiry. Similar to DTS, structured inquiry uses the backward design process which can be an effective planning approach to create units that allow for 21st century skills development, and student metacognition and student engagement.



7. How does planning with CLAP link to IBL?

The DTS planning suggests using the acronym CLAP to develop a unit overview and the resource analysis chart (RAC).

Choose a theme

Look for quality texts

Analyse and organise the resources

Plan the lessons

The **unit overview** helps teachers to establish the integral parts of a DTS unit.

Theme: Eat Smart (KS2)

The theme is related to students' interests and experience. It needs to be motivating and relevant.

Concept: Facts vs Opinion

The big idea encourages deep thinking around a topic.

Core Text: Mr Fact and Miss Opinion

A quality text is central to the whole DTS unit. It encourages students to think broadly about the topic.

Focus Question: How can I be a smart eater?

The BIG question we hope students can answer by the end of the unit.

Guiding Questions:

What is a fact? / What is an opinion?

What are the facts and opinions about foods?

What kinds of food help me to stay healthy?

How much should I eat each day to stay healthy?

Why do I need a balanced diet?

How can I make a smart meal plan?

Guiding questions help students to answer the focus questions. Guiding questions are scaffolded from literal to inferential questions to gradually encourage students to think critically.

Objectives:

Knowledge (What students know)	Attitude & Behaviour (What students understand)	Skills and Strategies (What students are able to do)
Students will know: • Food groups and nutrition • Vocabulary that describe food smells, tastes and textures • What is a fact, and what is an opinion • Text features, grammatical concepts and language used in poems, recipes, information and persuasive texts	**Students will understand the concepts of:** • The differences between food facts and opinions • The facts about health and nutrition • The importance of making smart food choices • The importance of making a smart meal plan • The influence of advertisement on food choices	**Students are able to:** • Do self-assessment of readiness to learn (what I know about the theme) • Set learning goals (what I want to learn) • Complete an independent reading contract • Re-assess and alter learning goals as required during learning process • Use a range of reading comprehension strategies, i.e. make and revise predictions using new information in the text, make inferences, retelling the story, ask and answer questions to clarify meaning • Incorporate tables, posters, lists to support information • Use pictorial and contextual clues to work out the meaning of new vocabulary • Sort, classify, and distinguish among a variety of food items • Research on the theme, i.e. write an email to other schools about their lunch arrangement • …nd knowledge about the topic, i.e. healthy recipe, letter … P1 students • Do self-evaluation of learning

The final task showcases the students' understandings attained from this text set unit.

Final/Assessment Task: 1. A Letter to Principal (Persuasive Text) 2. Food Report (Information Text)

RAC

Through the development of the RAC, all possible multimodal and multi-genre resources are analysed and labelled as either core or supported texts. The teacher also decides on the teaching strategies for reading that are appropriate for specific texts. For some texts the teacher also determines the level of difficulty.

Theme: Eat Smart

Resource Analysis Chart (RAC)

Multi-genre

Text Title	Text Type	Modality	Main Ideas	Possibilities	Sequence
Core Text (CT): Mr Fact and Miss Opinion *Melissa Polyakov* (ISBN 9780399247491)	Story	Print	• This book is a lively and lyrical story about unlikely neighbors, a goat named Mr. Fact and a pig named Miss Opinion. This book uses endearing characters to introduce terms such as objective and subjective by personifying fact and opinion.	• Read aloud • Supported Reading • Reciprocal Teaching • Understand the concept of fact and opinion • Identify facts and opinions Literary features, e.g. personification, rhymes	
Supporting Text: What's for Lunch? *Lisa Greathouse* (ISBN 9781433336393)	Information	Print	• The importance of eating lunch • Information about lunch, i.e. lunch time, suggested lunch menu, healthy food choices	• Reciprocal Teaching • Separate facts from opinions • Find out lunch arrangement in other schools box or lunch line • Research on pamphlets of different lunch pr • Form personal opinions for school lunch arra • Form personal opinions for designing a balan school lunch • Write a persuasive letter to teachers/principal/school board • Debate – strongly agree, agree, strongly disagree, disagree	
Supporting Texts: Your Healthy Plate: Grains Your Healthy Plate: Protein Your Healthy Plate: Dairy Your Healthy Plate: Vegetables Your Healthy Plate: Oils and Fats *By Katie Marsico*	Information	Epic e-books	• The importance of eating grains, protein, dairy and vegetables • The importance of having less oil and fat in meals	• Independent/Home Reading • Practise reading skills • Make a smart meal plan • Self-directed learning	
Amazing Food Detective http://www.primarygames.com/science/nutrition/games/amazingfooddetective/index.htm	Information	On-line games	• Learn about healthy foods and exercise habits • Problem solving	• Solve eight mysteries of why some kids are unhealthy	
Food advertisement	Persuasive	Video/ Poster		• Discussion • Make a poster	
DK Findout http://www.dkfindout.com/uk/	Information	On-line	• Information about the theme	• On-line research	
Facts http://www.sciencekids.co.nz/	Information	On-line	• Information about the theme	• On-line research	

Teaching Strategies for Reading

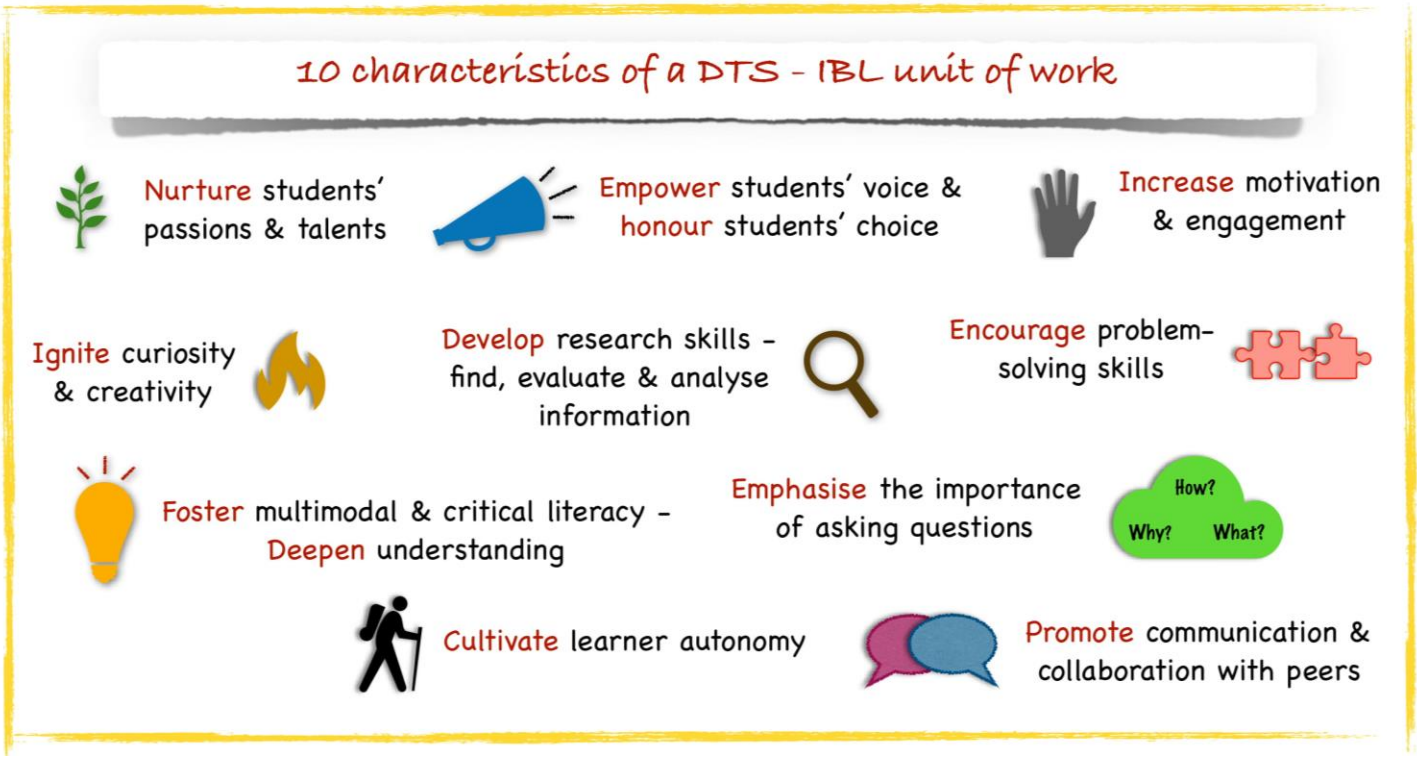
Multimodal

Once the unit overview and the RAC have been developed, the teacher moves on to the development of the lesson plans. The 'Plan the lessons' stage of the CLAP model provides the opportunity to go deeper using IBL.

During the planning process, guiding questions are usually scaffolded from literal to inferential, encouraging the gradual move from foundational to multimodal and ultimately towards developing critical literacy skills.

Critical literacy skills involve understanding the messages in texts which are contestable by nature. Authors and text designers position readers and viewers according to their intended purposes. The readers and viewers consciously or subconsciously respond to the text.

8. What are the characteristics of a DTS - IBL unit?



9. The 5E Instructional Model

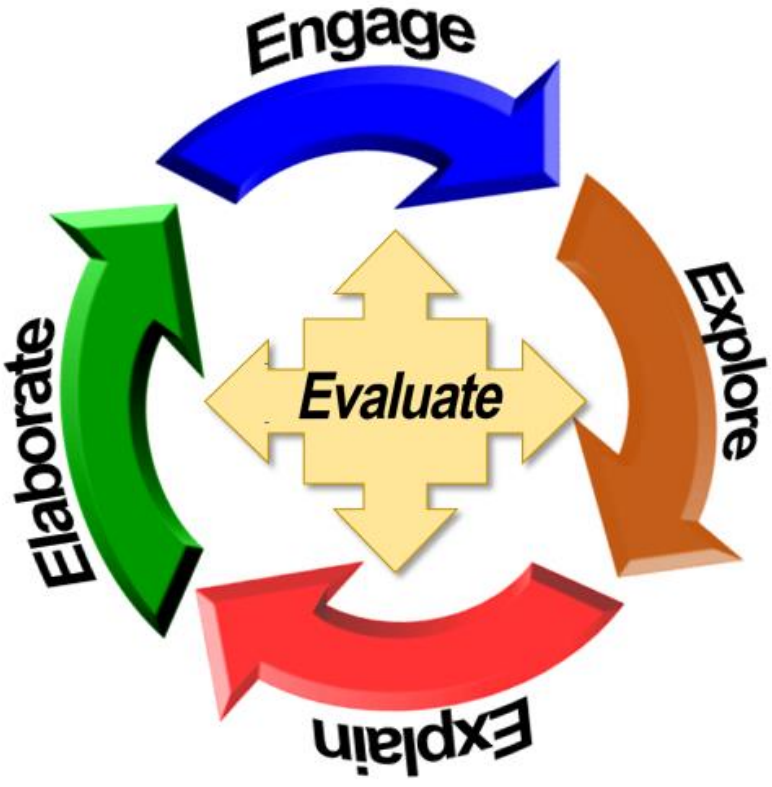
9.1 Which instructional model best suits the learning and teaching of DTS - IBL units?

To facilitate inquiry, the learning cycle of the 5E model can be used. In contrast to the traditional teaching approach of direct instruction, the 5E instructional model involves active student participation where students are given choice and a voice throughout the learning process enabling them to take ownership of their learning.

For more information on the theoretical foundations of the 5E instructional model, please refer the link below.
https://lesley.edu/article/empowering-students-the-5e-model-explained

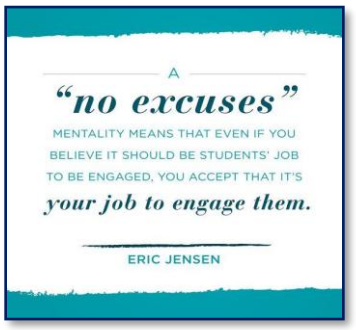
The 5E learning and teaching instructional model includes the following five phases:

I. Engage
II. Explore
III. Explain
IV. Elaborate
V. Evaluate



9.2 Engage – How can the theme and concept be introduced?

9.2.1 What happens in the engage phase?



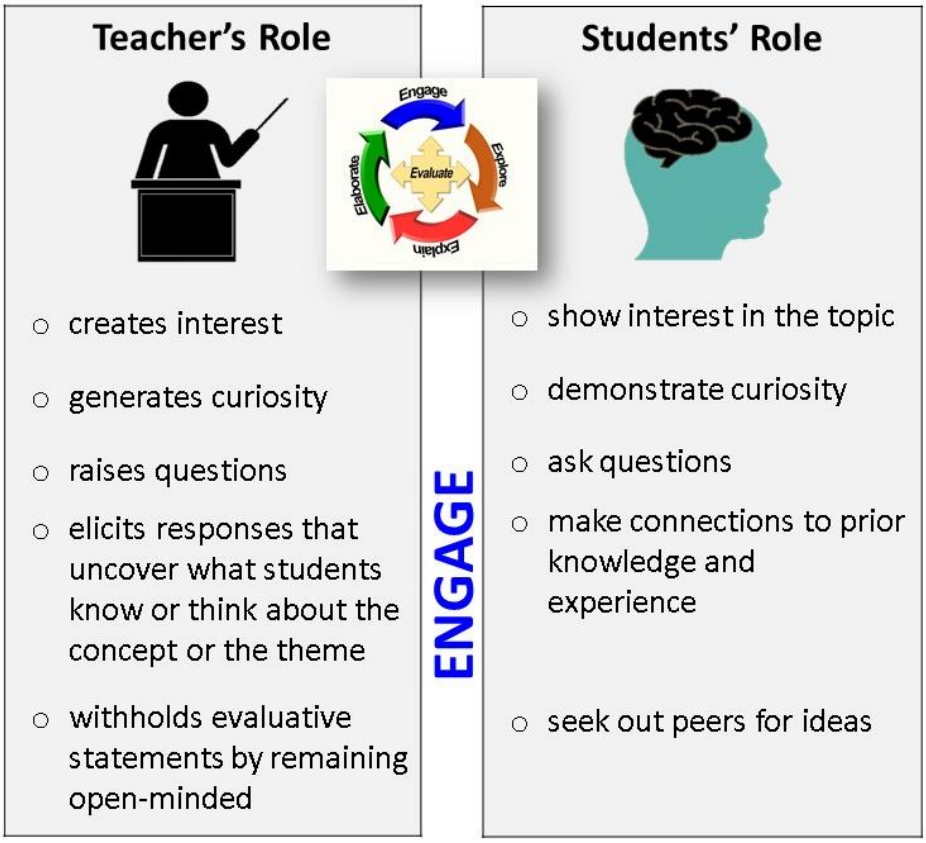
Engagement is the first phase of inquiry where teachers activate and elicit students' prior knowledge and establish their current understanding of the topic. The aim is to pique students' curiosity and sustain their 'need to know' as a motivation that will drive students' learning throughout the unit.

> *"Brain research from Carnegie Mellon psychologists confirms that it's easier to learn something new when we can attach it to something we already know."*

9.2.2 What is the significance of text sets in this phase?

Introduction to a multimodal and multi-genre text set around a theme stimulates students' prior knowledge and generates interest in the topic as they provide an opportunity for students to be exposed to a wide range of text types while developing new concepts.

9.2.3 What are the roles of the teacher and the students?



9.2.4 How to plan for the engage phase?

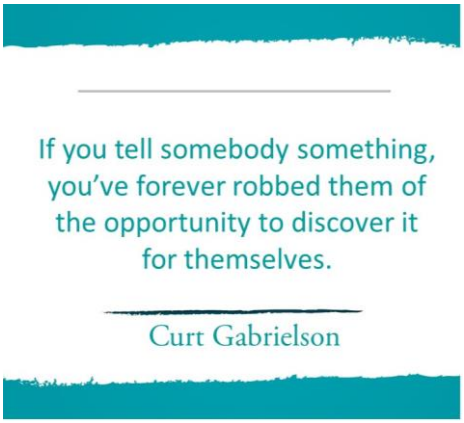
During the planning of the engage phase, teachers should consider:

What activities will be used to engage the students?	The following are a few suggestions: ○ teaching strategies for reading, e.g. reading aloud and shared reading; ○ multimodal resources, e.g. videos or songs; ○ pre-assessment tools, e.g. Kahoot! or Google Forms; and ○ experiential learning, e.g. virtual or augmented reality, field trips.
How will students' prior knowledge be accessed and how will students be supported to make connections to their everyday lives?	The following are a few suggestions: ○ brainstorm using a mind map or graphic organiser, e.g. KWHL chart - see Appendix, Resource 1.
What criteria should be considered when formulating guiding questions?	Guiding questions scaffold students to answer the focus question at the end of the unit. They are usually scaffolded from literal to inferential, gradually encouraging students to dive deeper into the theme and concept, and think critically. Guiding questions are: ○ posed at the start and revisited at the end of each lesson;

	○ answered over one or more lessons; and ○ multiple, depending on the number of lessons in the unit.
Which type of formative assessment will be used in this phase?	The following are a few suggestions: ○ direct observation; ○ a quiz; ○ a pre-test; ○ a survey; or ○ a graphic organiser.

9.3 Explore – How to explore the theme and develop the concept?

9.3.1 What happens in the explore phase?

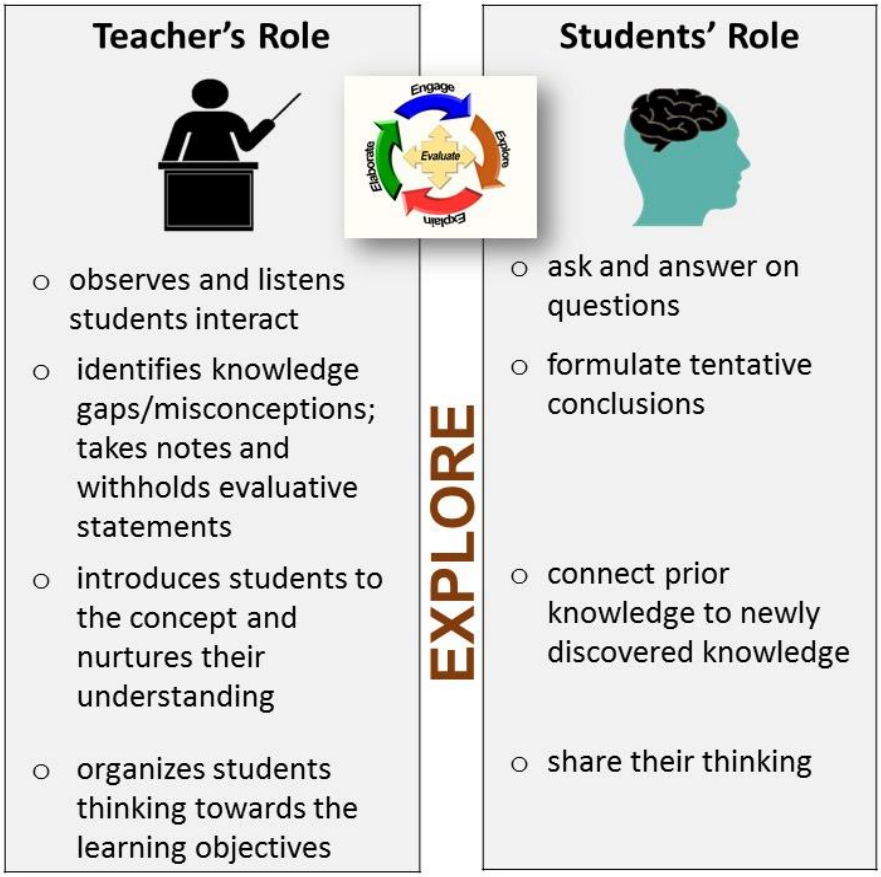


The exploration phase is a loosely guided time of exploration and finding information. The lessons are focused but open-ended: students are allowed to make mistakes while discovering new ideas. The key is for them to engage in a common activity which allows them to explore the theme and develop the concept, by actively participating in hands-on tasks and activities through which they experience a concept change. This phase also provides information that will be a springboard for rich discussion in the explanation phase.

9.3.2 What is the significance of text sets in this phase?

The role of text sets in the explore phase is to allow students to see ideas and vocabulary being introduced and used multiple times in diverse ways. This helps in reinforcing the meaning thereby building stronger connections with the theme and the concept.

9.3.3 What are the roles of the teacher and the students?



9.3.4 How to plan for the explore phase?

During the planning of the explore phase, teachers should consider:

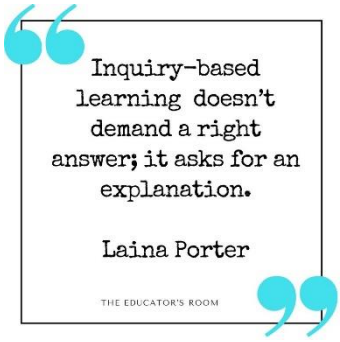
How will the teacher act as a facilitator during the exploration stage?	As a facilitator, the teacher: ○ encourages cooperative learning; ○ observes and listens to students interact; ○ asks questions to support the exploration; ○ allows wait time for students to answer questions; ○ allows students to answer the questions rather than provides the answers; and ○ prompts students to think deeper.
What content will the teacher provide the students to explore?	To illustrate the content, see the following example: ○ Unit Theme: Animals ○ Concept: Animals that make good pets ○ Focus Question: Is (animal name) a good pet? ○ Factual content to be explored could include: animals' appearances, habitats, abilities, eating habits, etc.

What modalities and texts will be used to introduce the content?	For example: o Modality Print: information report, picture book, text book, brochure, poster, etc. Live: performance, oral storytelling, presentation, expert visit, etc. Digital: video, animation, film, podcast, etc. o Text type narrative, information, exchange, procedural, explanatory and persuasive - see Appendix, Resource 2.
What activities will be included to provide students with a common experience?	The following are a few suggestions: o conduct an experiential learning activity, e.g. visiting the Society for Prevention of Cruelty to Animals (SPCA); o engage in a cooperative learning activity where the students share their pet experiences; o invite a professional or expert to visit the school, e.g. Dr Dog, Prof Paw; and o conduct a pet survey with peers or family members.
Which teaching strategies for reading will be used?	The following teaching strategies for reading are suggested: o for modelling, e.g. storytelling and reading aloud; o for modelling and sharing, e.g. shared reading; o for guided practise, e.g. guided reading, group reading and buddy reading; and o for independent application, e.g. reciprocal teaching of reading, independent reading and home reading.
Which reading skills will be taught to the students and which activities will be used?	The following are a few suggested reading skills: o reading decoding skills, e.g. blending sounds, chunking words; o reading comprehension strategies, e.g. prediction, questioning; - create a parking lot in the classroom – see Appendix, Resource 3; and - using the 5 'Wh' questions – see Appendix, Resource 4.
What criteria should be considered when formulating guiding questions?	Think about the following: o Importance**:** Does the guiding question help answer the focus question? o Knowledge required**:** Do the students have the content knowledge or the English subject knowledge to answer the question? o Complexity**:** Is the question structured in a student-friendly way that is not too challenging?

	○ Critical literacy skills: Are the texts being explored, analysed, compared and critiqued?
Which type of formative assessment will be used in this phase?	The following are a few suggestions: ○ direct observation; ○ questioning; ○ feedback; and ○ graphic organiser.

9.4 Explain – How do students explain and share their thinking and learning?

9.4.1 What happens in the explain phase?

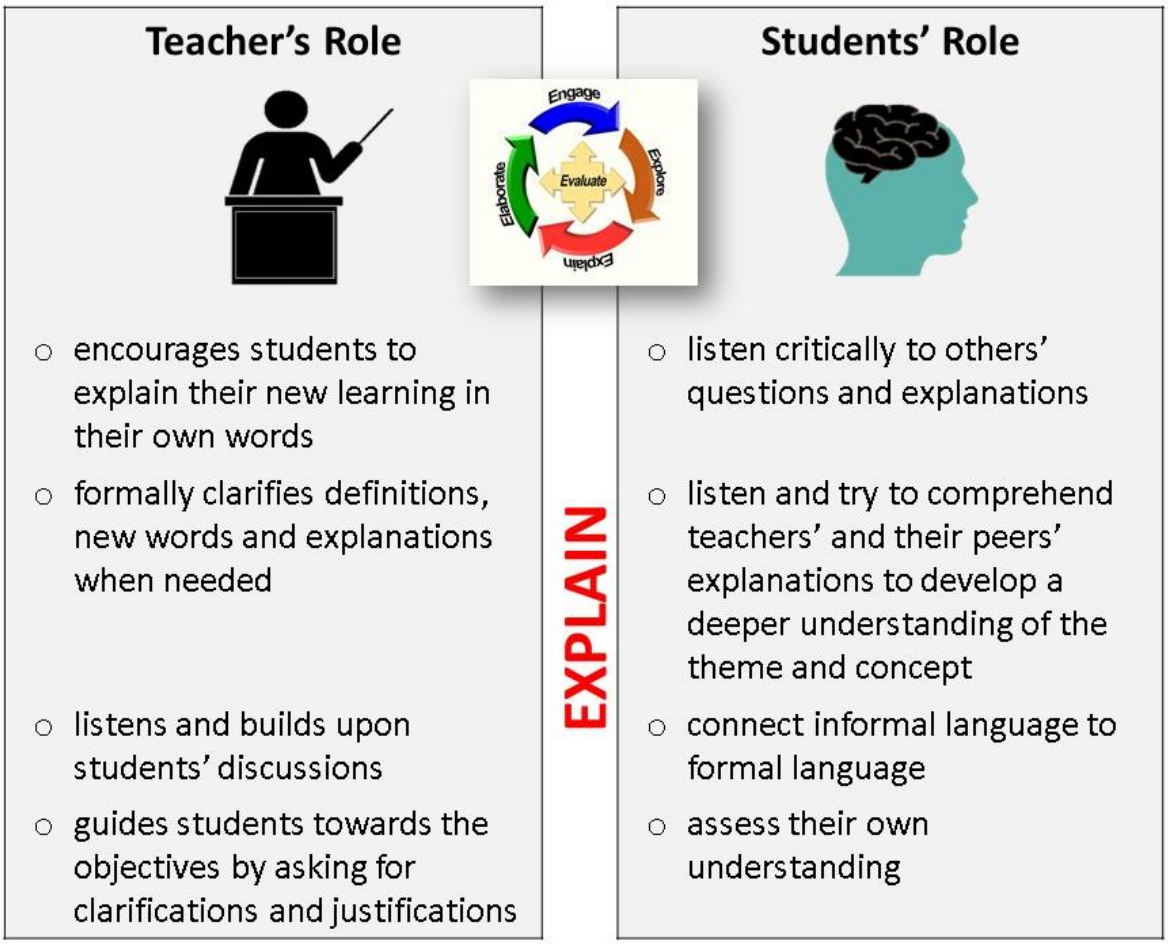


In the explanation phase, students connect their prior knowledge to the new knowledge acquired during the engage and explore phases. They begin to summarise, synthesise and share their learning in their own words to showcase their understanding and learning achieved. The teacher also provides further explanations for any misunderstandings and clarifies misconceptions.

9.4.2 What is the significance of text sets in this phase?

Text sets provide students with the opportunity to read widely across various texts. The students follow up with a collaborative discussion about their new findings by using vocabulary and/or structures from the texts read and viewed.

9.4.3 What are the roles of the teacher and the students?



9.4.4 How to plan for the explain phase?

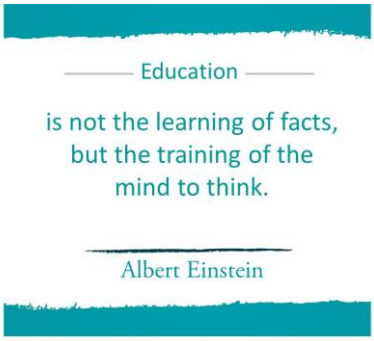
During the planning of the explain phase, teachers should consider:

What activities will help facilitate dialogue among students to share their understanding of the theme or concept?	Some suggestions are: ○ Think-pair-share for individual students to think about their own learning, pair up with a partner to discuss before they share their thinking. ○ Group discussions to share, discuss and explain their thinking. ○ Shared writing for the whole class to jointly construct their ideas on paper, before they draft their own thinking in groups or individually.
How will the teacher support students to use specific language structures or vocabulary?	Suggestions on how students can formalise language: ○ Revisit texts explored in previous phases to reinforce vocabulary and sentence structures, etc. ○ Provide language prompts for discussions.

	○ Encourage students to explain their thinking in their own words. ○ Provide framework of questions to be answered during group discussions. ○ Use direct instruction to clarify students' misconceptions.
What criteria should be considered when formulating guiding questions for group discussions?	Have the students been explicitly taught to: ○ express their ideas by connecting their prior knowledge and experiences; ○ describe and/or explain their observations; ○ provide a rationale for their own thinking with evidence; ○ interpret ideas of others; ○ clarify and summarise their own thoughts and the thoughts of others; ○ re-evaluate and adjust their own ideas based on the group sharing; and ○ draw reasonable conclusions?
Which type of formative assessment will be used in this phase?	The following are a few suggestions: ○ graphic organiser; ○ observation of group discussion; ○ feedback from think-pair-share; ○ peer evaluation; and ○ teacher assessment.

9.5 Elaborate – How do students go deeper and think critically?

9.5.1 What happens in the elaborate phase?



The elaboration phase focuses on students applying what they have learned by completing their final task. Students expand their knowledge by applying their understanding to a new but similar situation which helps develop a more critical and deeper understanding of concepts. The concepts become anchored in students' minds as their understanding is deepened and the concepts are generalised.

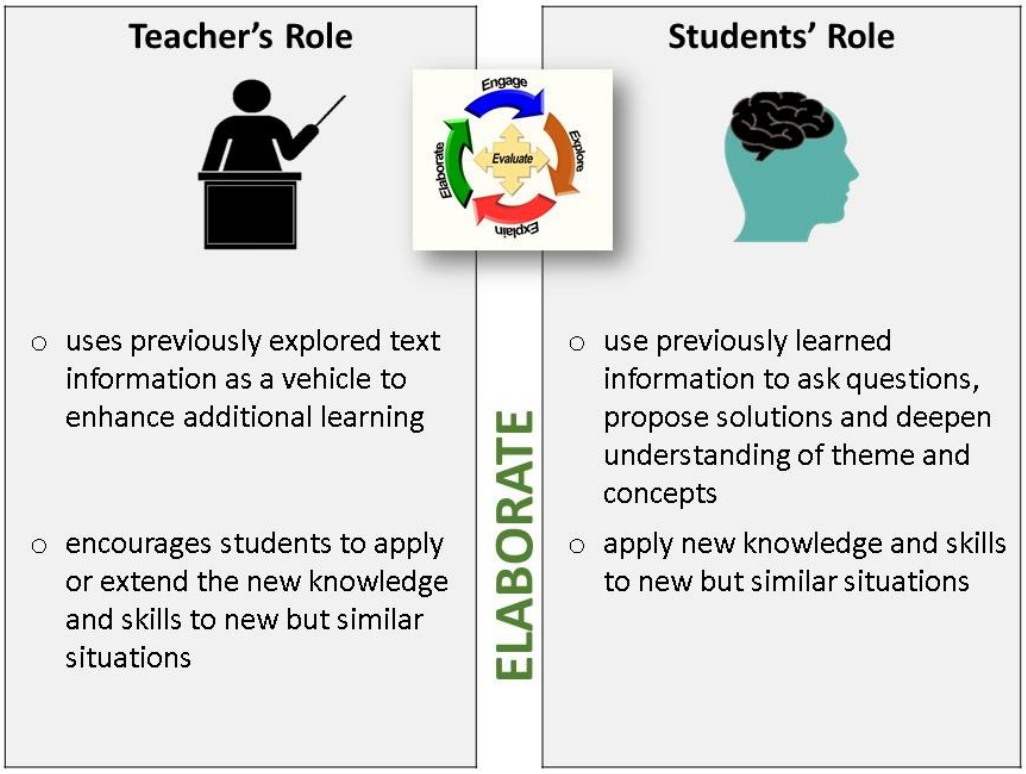
This is the phase where the evidence of learning can be differentiated giving students the agency of choice and the freedom to express themselves creatively.

Revisiting some of the explored activities provides more scaffolding which ensures deep and meaningful understanding.

9.5.2 What is the significance of text sets in this phase?

In this phase, students think critically about their findings. Text set materials are revisited to gather more information to confirm or revise their conclusions.

9.5.3 What are the roles of the teacher and the students?



9.5.4 How to plan for the elaborate phase?

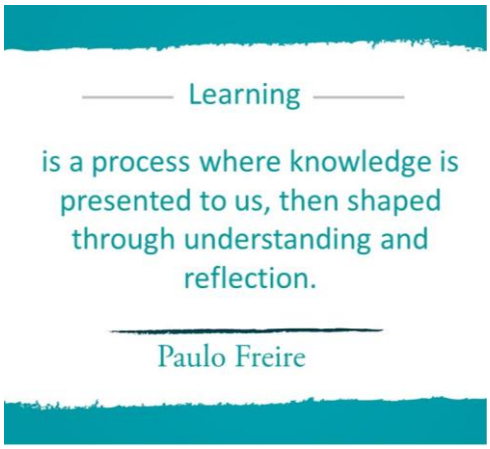
During the planning of the elaborate phase, the teacher should consider:

How will you facilitate opportunities and use resources to extend or enrich students' critical literacy by providing a deeper understanding of the theme and concept?	The teacher plans activities that: ○ provide a new but similar situation, e.g. after a pets unit with the focus question: What animal makes a good pet?, the teacher could deepen students' learning through a discussion about which animal would make a good 'class' pet; and ○ help students understand that: - texts give messages; - texts are contestable; - authors position their readers; and - readers and viewers respond to texts.
What criteria should be considered when students are completing their final task allowing for differentiation and learner diversity?	The following criteria should be considered when students are completing their final task: ○ Have the students used a variety of texts to demonstrate their understanding of the theme and concept? ○ Have the students been provided with open-ended focused questions?

	○ Is there a checklist and/or rubric to guide the quality of the students' final task with clear criteria of how to meet the objectives? ○ Have students been provided with varied options for demonstrating their learning, e.g. writing tasks, oral presentations, videos, diagrams, or 3D models? ○ Have students been allowed to work in a variety of group settings, e.g. pairs, groups or individually?
Which type of formative assessment will be used in this phase?	Some suggestions are: ○ peer assessment; ○ checklist and/or rubric; ○ final task; and ○ graphic organiser.

9.6 Evaluate – How do students demonstrate their learning and how do teachers evaluate the learning and the teaching?

9.6.1 What happens in the evaluate phase?

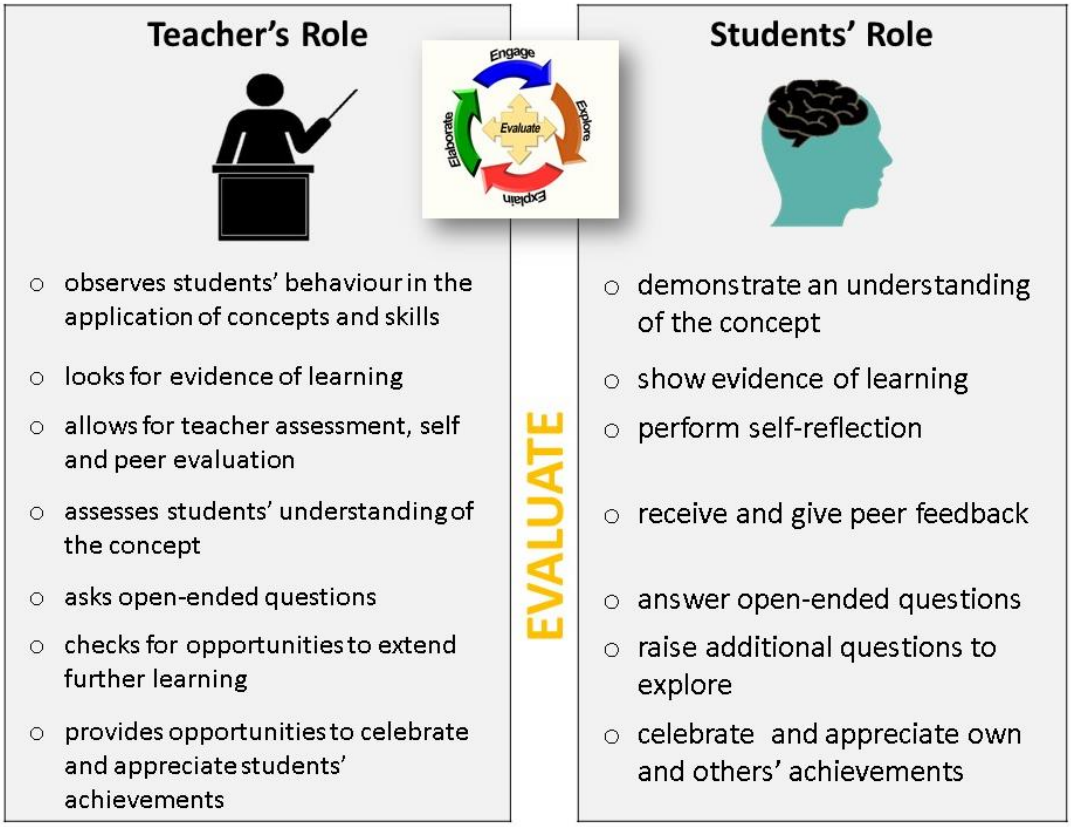


Formative assessment is an ongoing process in each phase as the teacher checks for students' understanding and re-adjusts the teaching accordingly. At this point, the change in students' knowledge, skills, values and attitudes should be evident and measurable. Therefore, a summative evaluation of learning can be planned for the final phase. The summative assessment could be in the form of teacher, peer or self-evaluation. However, self-evaluation is the most important as it provides an opportunity for students to reflect on their learning over a period of time and gain a better understanding of their individual learning styles and progress. The students will demonstrate the knowledge and skills they have gained as well as the changes in their understanding of the theme and concept. Therefore, a checklist should be shared with the students at the beginning of the unit to ensure they understand the objectives of the unit and the expectations of final task.

9.6.2 What is the significance of text sets in this phase?

In this phase, students collaboratively have created a new text set. Therefore, students are transformed from being mere text users to being text creators. They publish and share their text with their peers which can be revisited at a later stage during independent activities.

9.6.3 What are the roles of the teacher and the students?



9.6.4 How to plan for the evaluation phase?

During the planning of the evaluation phase, the teacher should consider:

What will be the success criteria for the summative assessment or the final task?	Following are a few suggestions: ○ Think about the learning objectives and align the assessment with them. ○ Will it be a self-reflection, peer-evaluation or teacher-assessment? ○ Ensure students understand and are aware of the success criteria. ○ How will the teacher know that their teaching has been effective?
Which types of formative and summative assessments will be used in this phase?	Following are a few suggestions: ○ self-reflection; ○ peer evaluation; ○ teacher assessment; ○ post-test; and ○ graphic organiser.

10.What online tools can be used to teach the five phases of IBL?

Over the next few pages is a list of possible online tools that may be used during the five phases of a DTS-IBL unit. Included is also an explanation of possible activities for each phase. Please note that some of the terminology used are taken directly from the individual online tools, e.g. streamline (sequencing) which might not be familiar.

Online Tool	Phases and Activities
padlet https://bit.ly/32fIcY6	☑ Engage o class brainstorms a topic ☑ Explore o teacher streamlines and shares text sets o students ask questions anonymously ☑ Explain o teacher clarifies misconceptions ☑ Elaborate o class collaborates and shares ☑ Evaluate o peer-to-peer and teacher feedback (Like, Upvote, Star, Grade)
Mentimeter https://bit.ly/3snlXu5	☑ Engage o class brainstorms (Word Cloud, Multiple Choice) ☑ Explore o students ask questions anonymously ☑ Explain o students express understanding (open-ended Q & A) ☑ Elaborate o teacher encourages critical thinking (open-ended Q & A) ☑ Evaluate o teacher creates quizzes o students self-reflect (Poll, Scales, Ranking)
Kahoot! https://bit.ly/3nxXjWT	☑ Engage o teacher sets pre-test o teacher activates prior knowledge ☒ Explore ☒ Explain ☑ Elaborate o students extend their learning by creating their own quizzes ☑ Evaluate o teacher creates quizzes (assessment for, of and as learning)

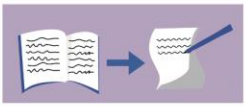
Online Tool	Phases and Activities
YouTube https://bit.ly/2KJF8JZ	☑ Engage o teacher piques students' interests and builds curiosity ☑ Explore o students research ☑ Explain o students extend their learning by creating their own YouTube videos ☑ Elaborate o teacher differentiates and encourages critical thinking (assigns more complex videos) ☒ Evaluate
edpuzzle https://bit.ly/3mMyOVA	☑ Engage o teacher piques students' interest and builds curiosity ☑ Explore o teacher shares videos for self-paced learning ☑ Explain o teacher clarifies misconceptions about texts by explaining the video content (Live Mode, Voiceover, Comment) ☑ Elaborate o teacher differentiates and encourages critical thinking (assigns more challenging videos and asks open-ended questions) ☑ Evaluate o teacher creates formative assessment (multiple choice and open-ended questions) o teacher gives feedback
nearpod https://bit.ly/32eA3Dq	☑ Engage o teacher activates prior knowledge (Poll, Draw It, Time to Climb) ☑ Explore o teacher shares text sets o class participates in experiential learning (VR, Field Trips and Simulations) ☑ Explain o students revisit to reinforce key terminologies (Matching Pairs) o class collaborates and shares (Collaborate) ☑ Elaborate o teacher encourages critical thinking (Open-ended Questions) ☑ Evaluate o teacher creates formative assessment (Open-ended Questions, Video, Fill in the blank, Memory Test, Matching Pairs) o teacher creates auto-graded summative assessments (Quiz, Time to Climb) o students self-reflect (Poll, Draw It)

Online Tool	Phases and Activities
Google Forms https://bit.ly/3dg8ksh	☑ Engage o teacher sets pre-test to establish students' current understanding of the theme ☒ Explore ☒ Explain ☒ Elaborate ☑ Evaluate o teacher creates formative assessments (auto-graded quizzes) o teacher provides feedback
Flipgrid https://bit.ly/2RyiiwJ	☑ Engage o students record videos about what they know about the theme o teacher activates prior knowledge ☒ Explore ☑ Explain o teacher clarifies misconceptions about texts through explanatory videos o students share understanding (videos only) ☑ Elaborate o students share and comment on new learning ☑ Evaluate o teacher gives feedback o peers give feedback o students self-reflect
Seesaw https://bit.ly/3e6uWuu	☑ Engage o students record videos about what they know about the theme o teacher activates prior knowledge ☑ Explore o teacher streamlines and shares text sets ☑ Explain o class collaborates and shares learning and understanding o teacher records teaching videos to supplement learning activities ☑ Elaborate o students share new learning and understanding ☑ Evaluate o teacher gives feedback o peers give feedback o students self-reflect

Online Tool	Phases and Activities
Wordwall https://bit.ly/2Q5jEib	☑ Engage o teacher establishes vocabulary knowledge ☑ Explore o teacher introduces additional vocabulary through interactive games o students engage in self-study of vocabulary ☑ Explain o students revisit to reinforce vocabulary ☑ Elaborate o teacher creates differentiated tasks to cater for individual needs ☑ Evaluate o teacher sets auto-graded comprehension and vocabulary quizzes
Google Jamboard Google Tool	☑ Engage o class brainstorms a theme using sticky notes or graphic organisers o teacher conducts storytelling by importing or drawing images ☑ Explore o students share their thinking through annotation o students ask questions anonymously ☑ Explain o class collaborates and shares files, images and texts o students demonstrate their understanding of the theme ☑ Elaborate o teacher encourages critical thinking through open-ended questions ☑ Evaluate o teacher gives feedback o peers give feedback
Screencastify https://bit.ly/3tnzd34	☑ Engage o teacher activates prior knowledge o students record videos about what they know about the theme ☒ Explore ☑ Explain o teacher provides content o teacher clarifies misconceptions about texts through explanatory videos and digital manipulatives such as whiteboards o students share their understanding through videos ☑ Elaborate o teacher creates differentiated videos to address individual needs ☑ Evaluate o teacher gives verbal feedback

11.Appendices

Resource 1 – KWHL Chart

K	W	H	L
What do I KNOW?	What do I WANT to know?	HOW will I find out?	What have I LEARNED?
			

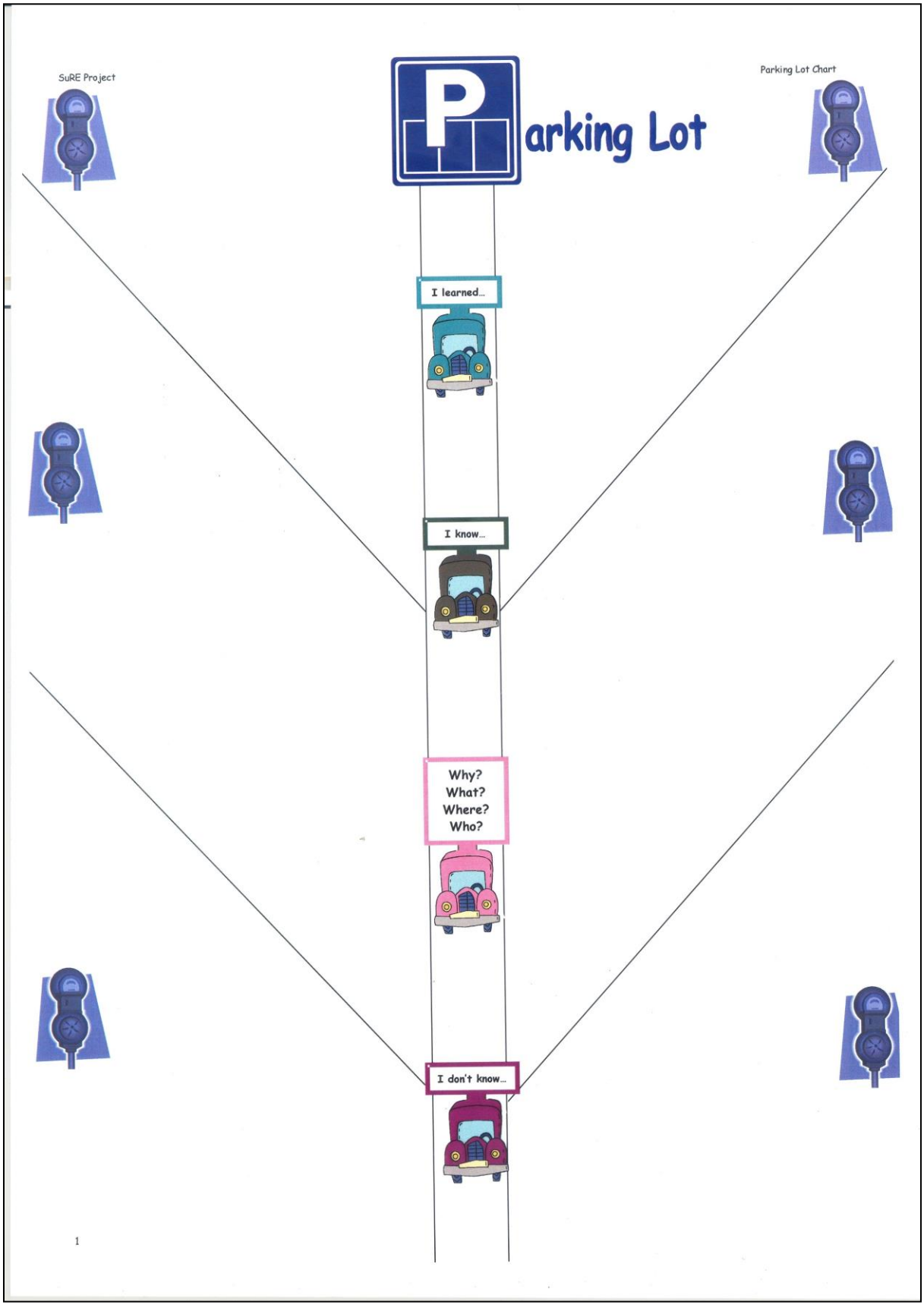
Resource 2 – Examples of Text Types for Key Stage 1 and 2

Categories of Text Types*	Examples of Text Types for Key Stage 1	Additional Examples of Text Types for Key Stage 2
Narrative Texts	• Cartoons and comics • Diaries • Fables and fairy tales • Personal recounts • Poems • Rhymes • Songs • Stories	• Accounts • Autobiographies • Biographies • Jokes and riddles • Journals • Myths • Plays • Tongue twisters
Information Texts	• Charts • Coupons • Expositions • Labels • Leaflets • Lists • Menus • Notices • Personal descriptions • Picture dictionaries • Product information • Rules • Signs • Tables • Time-tables	• Announcements • Catalogues • Children's encyclopaedias • Dictionaries • Directories • Informational reports • Maps and legends • News reports • Pamphlets • Questionnaires • Weather reports
Exchanges	• Cards • Conversations • Notes and messages • Personal letters • Postcards	• E-mails • Formal letters • Telephone conversations
Procedural Texts	• Directions • Instructions	• Procedures • Recipes
Explanatory Texts	• Captions • Illustrations	• Explanations of how and why
Persuasive Texts	• Advertisements • Posters	• Brochures • Discussions • Expositions

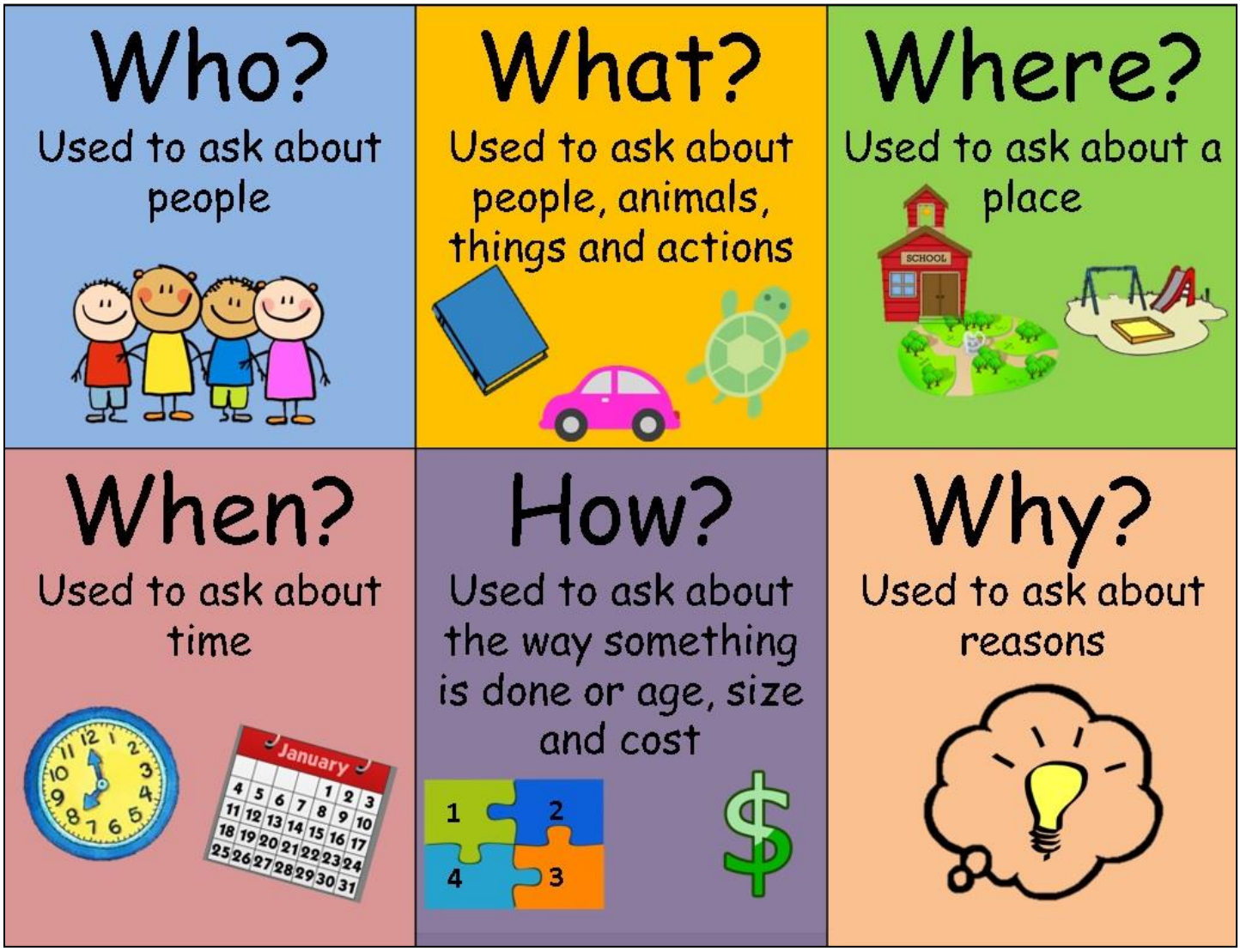
* The sequence of the categories of text types presented here is **not** a prescriptive one to be followed strictly for learning and teaching.

Resource 3 – Parking Lot

Teaching Technique: Parking Lot Description
This technique provides a way for students to ask questions when they think of them. Instructions: ○ The teacher should always welcome questions from students. Unfortunately, some students feel their questions are dumb or may be in the middle of a video and not remember what they wanted to ask. The Parking Lot technique provides a way for the teacher to allow questions at any time. ○ The teacher draws a simple "parking lot" on flip chart paper and posts it in the room where students have easy access, e.g. near the classroom door. (Sample drawing on the next page) ○ Distribute Post-it notes to each student. ○ Instruct students to write down any questions they may have on the Post-its during the lesson. When instructed, e.g. during a break, the students post their questions on the parking lot. Questions may be answered during the next lesson.
Key Learning Points This technique will encourage the learner to ask questions during class.


SuRE Project
Parking Lot
Parking Lot Chart
I learned...
I know...
Why?
What?
Where?
Who?
I don't know...
1

Resource 4 – 5 'Wh' Questions



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