Primary 4 English: An Overview

In this KB Story, we follow Elizabeth* and her team of P4 English teachers on their KB classroom journey. The teachers conducted four KB lessons: the first focusing on the familiarization of students with Knowledge Forum 6 (KF6), the second on idea generation, the third progressing to idea improvement and the last being idea generation again. The team of teachers also used KF6 for their Professional Learning Community (PLC) and reflection sessions. The following shows an overview of the lessons, with respect to the KB Pedagogical Framework. Here, we also note that the framework does not always proceed in a linear fashion.

**Figure 1: KB Framework on ‘Honesty’**

### Iteration 1

**Teacher designs activities and provide space for students to generate ideas**

The team of teachers collectively agreed on the topic ‘Animals and I’ for the first lesson. In class, Elizabeth posted trigger questions on KF6 for her students to generate ideas and familiarise them to the use of the forum. This also served to initiate the class into a knowledge building culture. Elizabeth took this opportunity to rectify any technical issues regarding the use of KF6.

### Iteration 2

**Teacher designs activities and provide space for students to generate ideas**

To start the topic on ‘Honesty’, Elizabeth showed a video to students as a trigger activity. She paused the video at various timings and held class discussions based on the video. At two specific points in the video, Elizabeth used KF6 to aid her in the class discussion. She posted trigger questions on KF6 and her students responded to her questions on the forum. This was done with the intent to get the students to generate ideas.
Teacher provides scaffolds for students to connect ideas
Elizabeth provided guiding questions and the scaffolds ‘I see’, ‘I think’ and ‘I wonder’ to guide her students in their idea generation. At the end of the lesson, she guided her students to link what they saw in the video to their school values.

Iteration 3

Teacher designs activities and provide space for students to generate ideas
The next lesson continued on the topic of ‘Honesty’. Elizabeth posted two pictures on KF6 and provided guiding questions based on the pictures. The students responded to the questions by posting their ideas on KF6.

Teacher provides scaffolds for students to connect ideas
Elizabeth provided the scaffolds ‘I think’ and ‘I wonder’ to guide her students in idea generation.

Teacher works with class to refine and improve ideas and explanations
After the students responded to the trigger questions, Elizabeth demonstrated how to build onto other notes on KF6 by modelling the process. She then posted more guiding questions on KF6 and instructed her students to build onto their classmate’s notes.

Teacher to understand students’ development and provide space for students to conduct self-assessment
Thereafter, Elizabeth instructed her students to write a composition based on the two pictures shown. In their reflection sessions, through monitoring the students’ notes on KF6 and student artefacts, the teachers determined that their students had insufficient ideas to do a rise-above. Therefore, they decided to proceed with another round of idea generation on the same topic of ‘Honesty’, instead of moving onto the next step of the KB Pedagogical Framework.
Primary 4 English

i. Knowledge Building in the Classroom

Knowledge Building (KB) emphasizes collective learning to achieve knowledge advancement as a community. Individuals contribute different ideas and build up a wealth of ideas collectively. By building up on the ideas of their peers, new knowledge can be constructed and the class moves on to a more advanced level of understanding.

A team of P4 English teachers identified some core targets for their students. They hoped to see their students generate diverse ideas and provide details in their writing. With reference to the Learning Objectives (LOs) of the Primary English Language Syllabus, they focused on the area of Writing and Representing skills:

| LO3: Generate and select ideas for writing and representing for a variety of purposes, audiences, contexts and cultures
| LO4: Develop, organise and express ideas coherently and cohesively in writing and representing for a variety of purposes, audiences, contexts and cultures
| LO5: Review, revise, proofread and edit to improve writing and representation

Figure 1: Adapted from 2010 English Language (Primary and Secondary — Express / Normal (Academic)) Syllabus

The team of teachers executed KB lessons around the theme of ‘Honesty’, a suggested theme of the Primary 4, Unit 3 STELLAR guidelines. The first lesson focused on orientating students to Knowledge Forum 6 (KF6), whilst the lessons after focused on the topic proper. In the section below, we will follow Elizabeth through the KB journey she had embarked on with her class.

ii. Fostering a Knowledge Building Culture

Elizabeth and her team of P4 English teachers used KF6 for their lesson design and reflection sessions. In one of the reflection sessions, the teachers shared that using KF6 for their design and reflection sessions was helpful as they could see the core design of the lesson as a team and also leverage on the ideas of other teachers. By using KF6 for their Professional Learning Community (PLC) sessions, they were also able to learn how to use the forum to facilitate lessons. The following is an example of a view for a PLC session:
In addition to the discussion, the teachers also created a curriculum mapping document. This document contained the learning objectives and aims of each lesson planned.

To begin, the team of teachers decided to hold an orientation lesson to familiarize students to idea generation and the use of KF6, at the same time initiating their students into the knowledge building culture. They also wanted to take the opportunity to rectify any potential technical issues regarding the use of KF6, so as to ensure that the smooth progress of their classroom practice in subsequent lessons.

**Teacher designs activities to get students to generate ideas**

Collectively, the team of teachers had selected the topic ‘Animals and I’ for the orientation lesson. Figures 3.1 and 3.2 shows a snippet of their discussion:
The criteria for selecting the topic was that it was simple, familiar and required students to respond based on their personal experiences – and hence facilitating the contribution of ideas by students, who may be unfamiliar with the idea-driven nature of a knowledge building discourse.

In their KF discussion, the teachers also designed a trigger question to start the cycle of Knowledge Building. They decided to have students to choose an animal and share how they were similar to the animal they chose.

**Initiating activity and providing scaffolds for students to connect ideas**

As previously planned to kick-start the KB process proper with her class, Elizabeth posted four trigger questions on KF6. Each question differed only by the animal. She then asked her students to pick one animal and elaborate on how they were similar to the animal they chose. The following shows her trigger question on the eagle:

![Figure 4.1: Trigger question by Elizabeth](image1)

Students proceeded to respond and generate ideas on KF6. In response, a student posted:

![Figure 4.2: Initial idea generation by students](image2)

Building on the above idea, another student posted:
The teachers held a reflection session on KF6 after the lessons. In particular, they shared some student artefacts and explained how the artefacts matched to the LOs identified. Elizabeth shared the notes as shown above. She chose to share these notes as it showed that the student was able to select a friend’s post that resonated with her and gave reasons to justify her choice. This also fulfilled LO3, which was for students to generate and select ideas for writing and representing for variety of purposes, audiences, contexts and cultures.

Following the orientation lesson as seen above, the subsequent lessons were focused on the main theme, ‘Honesty’. The second lesson focused mainly on idea generation.

**Teacher designs activities to get students to generate ideas**

Similar to what they had done prior to the orientation lesson, the team of teachers discussed about the trigger activity they wanted to use, potential guiding questions and overall lesson structure for the first lesson on ‘Honesty’ in KF6.

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One teacher proposed the use of a video or newspaper clip for the session. Upon further discussion, the team of teachers decided collectively that the students would watch a video as the trigger activity. They thought that a video could set learning in motion by introducing the class to the topic of honesty in an interesting manner, and hence also helping to sustain the interest of the students. They selected a video that showed a staged incident where someone dropped a wallet along a pavement. A man then picked up the wallet.

The following shows the proposed lesson flow:

**Trigger activity**
Show youtube video and pause at various points.
https://www.youtube.com/watch?v=YnZKD1C-rvY

**Pupils will post their responses to the following questions on KF (I think/ I wonder...)**

1:05
What do you think he will do with the money?

1:55 (Post on KF)
What do you think is happening here?

3:10
Why do you think he is looking at the ID?

4:18
What is the man in blue implying when he asked, "I'm a little bit confused, what did you buy?"

What do you think happen next? (Post on KF)

What did you learn from the video?

**Flow of session**
After watching the video, guide pupils to link the video to our school values.

Guiding questions:
Did he spend the money that he had found?
Did he return the wallet to the rightful owner?
Which of our school values are his actions linked to? Why do you say so?

To conclude the lesson, teacher will select promising ideas and share them with the class.

Figure 5.2: Proposed lesson flow

**Initiating activity and providing scaffolds for students to connect ideas**

As discussed earlier, Elizabeth first showed the video to her class. She paused at various points along the video to hold a class discussion based on the video. Specifically, Elizabeth used KF6 to aid her discussion at two points in the video. At 1.55, she paused the clip and posted the following trigger question on KF6:
The trigger question served to get students to generate ideas and thoughts relating to the video. Elizabeth instructed her students to respond to the trigger question with the scaffolds ‘I see’, ‘I think’ or ‘I wonder’. The students proceeded to respond to her question on KF6. The following are some examples of notes by her students:

- **I think** - he is a traveller and he does not know where is the police station. He went to a shop to ask the counter to ask where is the nearest police station.

- **I wonder** - whether if he is asking the cashier what is the person’s identity or buying something expensive.

After responding to the trigger question, the students continued to watch the video. At 4.18, Elizabeth paused the clip again and posted the next trigger question:

- **What do you think happen next?**

Once again, Elizabeth asked her students to generate ideas and respond to the question with the scaffolds ‘I see’, ‘I think’ or ‘I wonder’:
After the video, Elizabeth guided the students to link what they saw in the video to school values with the use of guiding questions. She then selected promising ideas and shared them with the class. By connecting ideas to real life contexts, students could apply what they learnt in Knowledge Building to their daily lives. We could also see here that a KB Classroom - with the aid of KF6 - provided a safe platform for sharing ideas, even if they were incomplete ones. Students were free to express their ideas and views on KF6.

Once again, the team of teachers conducted a reflection session on KF6 after their respective first lesson on the topic of ‘Honesty’. In general, the teachers thought that their students had diverse and relevant ideas. This observation was supported by the word network analysis done on Elizabeth’s class in particular, as shown in Figure 7.1, where three distinct networks of associated words relevant to the topic had been surfaced by the students. This suggests that distinct ideas had arisen in the process of the discourse, showing diversity of thought amongst the students.

Elizabeth also noted that her students looked forward to the ending of the video and thought of possible scenarios as they watched the video; they had enjoyed the plot twist at the end of the video as well.
From post-lesson analysis, it was observed that there were lack of idea improvement as most of the students were primarily engaged in idea generation. Furthermore, most of the ideas generated lacked depth of thinking – be it through lack of elaboration, or through the narrow perspective employed in discussion. The feedback enabled Elizabeth to more accurately reflect upon her classroom practice - she expressed that she could perhaps have improved the KB process if she had provided more guiding questions, as well as encouraged students to elaborate on their ideas rather than providing one-liners.
With the above considerations in mind, the teachers set out to improve upon their classroom practice. The next lesson was to be a continuation on the topic of ‘Honesty’. As the students had gained some existing ideas on the topic from the previous lesson, this allowed them to generate ideas more effectively and build on them in this subsequent lesson.

**Teacher designs activities to get students to generate ideas**

The following shows some notes of the teachers during the lesson planning session on KF6. The team decided to show students two pictures for the trigger activity and discussed the guiding questions to use during the lesson.

![Figure 8.1: Trigger picture and potential guiding questions](image-url)
The teachers focused on idea generation in the previous lesson. However, from the following post below, we could see that for this lesson, the teachers wanted to focus on getting the students to build onto their peers’ ideas and ask questions when reading their peers’ notes.

![Figure 8.2: Setting a focus for lesson planning](image)

In response to the above post, Elizabeth shared some questions that she hoped the students would ask and some possible scaffolds that the teachers could use for the lesson:

![Figure 8.3: Idealizing classroom expectations](image)

Elizabeth hoped that her students would take note of specific ideas in their peers’ notes by looking out for verbs used and also considering the consequences of the actions stated. These questions aimed to
allow students to think about the course of actions and the representation of actions in words in greater depth - facilitating the process of building up ideas.

To encourage the improvement of ideas, the teachers also decided to demonstrate how to build onto notes in KF6. Together with the other teachers, Elizabeth shared how they planned to model the process of building onto other notes on KF6:

1) Teacher select a pupil’s note.
2) Refer to guiding questions (We want our pupils to ask...) and elicit responses from the pupils.
3) Type out pupils responses in a new post (build on). Remind pupils to use scaffolds.

Figure 8.4: Modelling the process of building on

The modelling process aimed to show the students how to improve each other’s ideas, and hence kick-start the idea improvement process in the class. The teachers planned to select a student’s note and elicit responses from the students with the help of guiding questions. They would then demonstrate to the students how they could contribute their ideas on KF6 via building-on to their classmate’s ideas, using the responses surfaced by their students.

After modelling how to build onto other notes, the teachers would assign students to build onto one post each. After which, they would gather the class to discuss the progress and difficulties they had whilst building onto other notes. The teachers would then select a few build-on notes to illustrate to students how they could better refine their classmate’s notes. Finally, the students would go back to KF6 to read the build-on notes of their classmates, and have the chance to build onto other notes.

Initiating activity and providing scaffolds for students to connect ideas

Once again, to start the KB process, Elizabeth posted the following trigger question on KF6. She instructed the students to look at the pictures and answer the guiding questions that she had provided. She also reminded the students to use the scaffolds ‘I think’ and ‘I wonder’.

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Figures 9.1 and 9.2: Trigger activity by the teacher

The students posted their responses to the questions on KF6. The following is an example of a note posted. We can see here that the notes contained more elaboration, possibly because more guiding questions were provided.
Teachwer works with class to refine and improve ideas and explanations

After the students had responded to the trigger questions, Elizabeth demonstrated to her class the process of building onto a note in KF6. She selected a few posts and discussed with her class how they could improve them, such as ways to make an idea clearer or more vivid so that readers could better understand the character. Elizabeth also used guiding questions and scaffolds to help her students better understand the process of idea improvement. The following was what she posted as a demonstration of building on:

- I think - the boy will give the money to a trusted shop owner and he must know the adult.

The reason why he did that was because he imagined himself putting him into the owner of the money's shoe.

He thinks that after he had done that he will feel good.

- I think - the owner of the money will feel grateful as the boy did not use the money but decided to return the money.

Figure 9.3: Student A’s response to the trigger by the teacher

- I think - the boy will return the money to the police station.

The consequence is “if you take the money that doesn't belong to you and spend it, it may be a money dropped from hell and you will be pulled to hell.”

- I need to understand - where did you hear the rumours of being pulled to hell from?

- A better theory - is that you could make this into a dream. Let us assume that the boy used the money and he was so scared and guilty that he had a bad dream.

Figure 10.1: Teacher modelling of a build-on

After modelling the process, Elizabeth encouraged the students to build onto the ideas of their peers by providing guiding questions and scaffolds. She posted the following on KF6:
The students went on to build onto other posts on KF6, with the help of guiding questions and scaffolds provided by Elizabeth. The following shows a note that a student posted to build onto the note mentioned above:

With reference to the post above, the student was seeking information about a note written by a classmate in order to improve on it. His question demonstrated that he had thought deeply about the consequences of the character’s actions and wanted to know what his classmate thought. Consequently, the question would also serve to probe his classmate to think deeper. From such inquiry, students could collectively improve on ideas and develop deeper understanding together.

1. Did my friend write about an action (look for verbs, e.g. ‘return’ or ‘spend’)?
2. Did my friend state the consequences of the action? (e.g. What would happen if he returns/ spends the money?)
3. What are the questions that I have for my friend?
4. What ideas do I want to add to my friend’s post?

**Scaffolds:**
I need to understand
A better theory

Figure 10.2: Instructions to guide the building-on process

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In the reflection session after their respective lessons, the teachers noted in their KF discussion that the questions were simple and most students could respond to them. The students also remembered the video from the previous lesson and made use of some ideas from the video. Therefore, we could see that Knowledge Building is a continuous process.

The teachers also shared that they found a few posts with improved content after students built onto the ideas of their peers. This was supported by the analytics, which reflected an improvement in the quality of responses by students.

With the addition of building on and improving ideas to the KB process, we can now see that more notes fell into the category of reasoning. There were also more questions asked, which spurred the idea improvement process. There were also notes that considered different perspectives – essential components to the building up and improving of ideas.
Furthermore, they noted that students were able to log into KF6 quickly and use it effectively with minimal assistance, as they were more familiar with the process after two sessions previously. The teachers also thought that modelling the process of building on a note and making clear what they would like to see from the students were instrumental in engaging the class in the Knowledge Building process.

Following the two sessions on KF, the teachers tasked the students to write a composition based on the two pictures. Student artefacts showed that many students incorporated the idea of feeling guilty in their stories. This was consistent with the idea of guilt that some students shared on KF6. They also demonstrated that the boy had more than one choice of action and had a dilemma. Despite the choices made by the boy in the story, students were able to bring in the value of honesty at the end of their stories, suggesting that they were able to comprehend the theme of honesty through Knowledge Building.

The teachers reflected on their KB lessons thus far after the session. Each teacher shared some student artefacts that demonstrated the Knowledge Building process. They also thought about some reflection questions:

Figure 11.3: Usage of scaffolds for the view used for the second ‘Honesty’ lesson

Figure 12.1: Post-lesson reflection by teachers
Elizabeth posted the following response to the questions above:

1) Pupils were able to give more details in their responses when guided by the teacher. When pupils give one-liner as their answer, teachers can lead them into giving a more elaborated response by quality questioning.

2) For Session 2, I could see that some of my pupils have learnt when they were able to highlight the actions and consequences in their friends’ response, as well as provide a suggestion for their friends to improve on the response.

3) , who is relatively weaker in language as compared to her classmate, is now more confident and able to give an elaborated response. (Please see image below) Such responses were highlighted in class and I got pupils to state why the response is considered a promising one.

The teachers also noted areas of improvement for KB lessons:

1. With scaffolding questions, pupils still complete the sentence in one liner.

2. Use classroom discussions first (using a template for group discussions), before going on KF platform. It is not necessary to go to the laboratory every week.

3. Create more scaffolds to connect ideas - eg I would like to add, I think maybe..., I predict that...

The team of teachers thought that in future, they could perhaps provide more scaffolds that aim to connect ideas and hold classroom discussions before going on KF6 to provide students with more ideas.
**Teacher to understand students’ development and provide space for students to conduct self-assessment**

Subsequently, in their KF6 discussion, the teachers assessed the progress of their students to determine how they could carry out the next lesson:

Let’s design how we plan to bring CW 3 [on Honesty] to a close.

1) Do our pupils have sufficient ideas and details [idea development] to record on KF a rise-above or refined Introduction, Complication and Resolution [to the complication]?

   a) If Yes, let's plan how we intend to guide them to refine their idea generation and development

   b) If No, how are we going to guide pupils to build-on each other's notes so that there may be new ideas or build-on to elaborate on ideas or seek and clarify ideas [idea development]

![Figure 13.1: Assessment of classroom progress](image)

The teachers determined that the students did not have sufficient idea development to synthesize their ideas and create a rise-above:

"1) Do our pupils have sufficient ideas and details [idea development] to record on KF a rise-above or refined Introduction, Complication and Resolution [to the complication]?" (Lesson Design by )

"b) If No, how are we going to guide pupils to build-on each other’s notes so that there may be new ideas or build-on to elaborate on ideas or seek and clarify ideas [idea development]" (Lesson Design by )

1) Categorise pupils' post based on the different decisions (returning, spending etc.)

2) Teacher models how to build on a post
   - Add in dialogues/ thoughts
   - Add in feelings
   - Add in consequences

3) Teacher demonstrates how to do a Quick Write using pupils' ideas and elicit from the class which are the ideas that are promising. Then, pupils do their own Quick Write.

![Figure 13.2: Brainstorming on subsequent lesson plan](image)

Therefore, the teachers wanted to focus on modelling how to elaborate and build on ideas with the aim of getting their students to develop a story. With a lack of ideas, the teachers chose to have another session and activity to improve idea generation instead of moving on the stage of rising above.
The teachers did an overall reflection on the KB lessons at the end of the term. The following shows the questions posted on KF6 that they reflected on:

"3 things that have gone well in your KB lessons in Term 2
2 things that you would like to do better
1 thing that you would like to do away completely" (reflection by 3-2-1)

Figure 14.1: Teacher reflection questions

Elizabeth posted the following response to the questions:

**3 things that have gone well**
1) was able to go into the lab regularly.
2) Pupils were eager to post their responses on KF.
3) Pupils learnt to ask questions to help their friends develop their responses.

**2 things that I would like to do better**
1) Provide scaffolding to help pupils add in more details to their posts.
2) Provide samples to show pupils how to build on their friends' responses.

**1 thing that I would like to do away completely**
1)

Figure 14.2: Elizabeth's response to the above reflection questions

In general, the teachers noted that students got accustomed to the use of KF6. Trigger activities successfully piqued their interests, which got them to respond enthusiastically. This was a good start for idea generation. Students also learnt to ask questions to help their friends develop their responses, an important step for idea improvement.

However, the teachers noted that they could have provided more scaffolds to guide the students towards having more detailed ideas. They could also have provided more examples of building on ideas so that students have a clearer idea on the process and expectations. Some teachers mentioned that students should be given sufficient time to read their friend's posts, in order to be able to identify the variety of ideas present in the discussion and to note the similarity of some of their ideas.
In summary, we can see how the teachers executed the process of Knowledge Building in steps, from the initial orientation lesson to focusing on idea generation and finally, the building-on of ideas. We can also see that this was not always a linear process, as teachers could choose to repeat a stage of inquiry if they deem that there were insufficient ideas or idea improvements to move onto the next stage of Knowledge Building. Furthermore, we observe how engaging trigger activities could elicit eager responses from students and result in a collaborative KB Classroom practice for both teacher and students.

In addition to the learning objectives of the syllabus, we can also see how the KB process fulfilled some learning objectives of the STELLAR guidelines. Students learnt to respond to texts and questions and listened for information and instructions from their teacher and classmates. Through videos and pictures, they predicted the story and contributed ideas for writing. The students also had the opportunity to make simple judgements of characters. They answered questions in full sentences, added details to ideas and wrote a short composition.