Community of Practice Toolkit

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Table of Contents

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Why should you start a Community of Practice?

Starting a Community of Practice (CoP) is an excellent way to foster ongoing professional development for teachers in your community. It ensures that they stay informed about the latest educational strategies and technological advancements. By creating a collaborative and supportive environment, a CoP benefits everyone involved, ultimately enhancing the learning experience for students.

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In this guide, we share the tools and teaching methods developed over four years of the **KPLAY** program to help you start your own CoP and inspire more creative, playful learning through technology. We've compiled everything we've learned—from teacher-approved tools to best practices and lessons gained along the way. We have also made this toolkit interactive with space for you to answer questions and write notes. We hope this resource not only serves you but empowers you to adapt it to your own needs.

— Lucy Maina, KPLAY Programme Director

WHAT DO YOU THINK? Write down three reasons why you would like to start a Community of Practice:

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Chapter 1: What is a Community of Practice (CoP)?

First, let's understand what a CoP is. A Community of Practice is a group of people who share a common interest or profession and come together regularly to share ideas, solve problems, and improve their skills. In an educational setting, a CoP is all about teachers collaborating to enhance their teaching practices and improve student outcomes.

The KPLAY program serves as a fantastic model for implementing a CoP. Over the past four years, KPLAY has introduced teachers to creative and playful learning through technology. By sharing teaching methods that make learning more engaging, KPLAY has shown how a CoP can foster continuous professional development and innovation in teaching.

Stories from the field; how does it look in action?

KPLAY has really improved teaching and learning in our school. My teachers have organized meetings after the training sessions organized by IREX and trained the fellow teachers. There is more peer observation and teaching in the school. One of the main emphases in our community of practice is supporting one another, and this has helped my teachers depend on each other when preparing resources for the lessons. Our regular meetings have helped us identify the areas where we need support and we have also identified champions within our school who are good in coming up with different activities, the collaboration among my teachers has improved and this has made learning more fun for our learners.

Perani Primary School , Kwale County, HOI – Abdalla Vesso.

The third teacher professional development workshop that my teachers attended at Waa Primary School opened the teachers to the world of technology, we had a few digital devices at the school and after training our colleagues after the training, I sat down with my board of management and we made a decision to purchase more digital devices to make teaching and learning through technology possible, my teachers are now more confident using the projector in the classroom and assisting learners in using the tablets in classrooms, teaching has become more fun in the school. We have set aside time for more practice in the community of practice to help improve our own technology skills, thank you KPLAY for training us on digital literacy

Matuga Primary School, HOI – Khadijah Mwakimira

Mr. Joel of Kasindi primary school began a scratch coding club and invited others to join the scratch COP under the umbrella of the KPLAY COP's. About 15 schools nurtured scratch clubs and enrolled learners. The learners attended club sessions each time they were free and learned how to code. Mr. Joel and his team approached IREX to support.

Perani Primary School , Kwale County, HOI – Abdalla Vesso.

What makes a CoP successful?

A successful CoP thrives on several key characteristics and values. These include a shared vision, regular interaction, mutual respect, and a commitment to continuous learning. **Here are some values that teachers included in the KPLAY CoPs:**

- Growth Mindset: Encourage a belief in the potential for continuous improvement and learning.
- Creativity: Foster innovative thinking and problem-solving in teaching practices.
- Playfulness: Integrate fun and engaging activities in professional development.
- Collaboration: Promote teamwork and collective problem-solving among members.
- Inclusivity: Ensure all members feel valued and respected in the CoP.
- Respect: Promote mutual respect and active listening in all interactions.
- Openness: Encourage transparency and open communication within the group.
- Commitment: Demonstrate dedication to the CoP's vision and goals.
- Innovation: Promote the use of new technologies and teaching methods.
- Reflection: Foster regular self-assessment and reflection on practice.
- Empowerment: Support members in taking initiative and leading projects.
- Community: Build a sense of belonging and shared purpose among members.

CHOOSE YOUR VALUES As you kick off your CoP, have each participant write down their core values, make sure to write your own too:

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Chapter 2: Creating a CoP Chapter

It's a good idea to start by setting up a CoP chapter in your community and hosting a first meeting where you take everyone's input in these key elements

Step 1: Write Mission Statement

A mission statement describes the purpose of your CoP and the actions you will take to achieve your vision.

Example: *"Our mission is to foster a culture of continuous learning and collaboration among teachers, leveraging creative and playful learning methods introduced by the KPLAY program to improve student outcomes. We aim to support each other, share best practices, and integrate new technologies to keep our teaching methods effective and engaging."*

WRITE YOUR MISSION STATEMENT When writing your mission statement consider the following points:

- Clearly state why your CoP exists.
- Describe the key activities your CoP will engage in.
- Ensure it aligns with the needs and goals of your members.

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Step 2: Define Roles and Responsibilities

To make a CoP work, it's essential to have clear roles and responsibilities:

- Facilitators: Facilitators play a crucial role in guiding discussions, encouraging participation, and ensuring that the CoP stays focused on its goals. They help create an inclusive environment where all members feel valued and heard.
- Members: Members of the CoP are the teachers who actively participate, share their experiences, and collaborate on solving problems. Their engagement and willingness to learn from each other are what drive the CoP's success.
- External Stakeholders: External stakeholders, such as local education authorities, play a supportive role by providing resources, policy support, and recognition. Their

involvement ensures that the CoP aligns with broader educational goals and can access necessary support.

WHAT ROLES DO YOU THINK WOULD BE VALUABLE FOR YOUR COP?

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Step 3: Create Meeting Schedules and Norms

Regular meetings are essential for maintaining momentum and engagement in your CoP. When planning your CoP meeting schedule, consider:

- Frequency: Decide how often your CoP will meet (e.g., monthly, quarterly).
- Duration: Set a consistent length for each meeting to ensure they are productive and manageable.
- Timing: Choose meeting times that accommodate the schedules of all members.

Example Meeting Schedule:

- Monthly Meetings: First Monday of each month, 3:00 PM - 5:00 PM.
- Quarterly Workshops: First Saturday of every third month, 9:00 AM - 1:00 PM, focusing on KPLAY tools and techniques.
- Annual Retreat: A full-day event in December for in-depth training and planning, incorporating KPLAY strategies and resources.

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USE THIS SPACE TO CREATE YOUR OWN MEETING SCHEDULE:

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In addition to a schedule, establishing norms helps create a respectful and productive environment. When setting norms, consider:

Example Meeting Norms:

- Arrive on time and come prepared.
- Actively participate and share insights.
- Listen respectfully and value diverse perspectives.
- Keep discussions confidential.
- Focus on actionable outcomes.
- Provide and receive constructive feedback.

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Chapter 3: Facilitating Effective CoP Meetings

We've all attended meetings that felt like a total waste of time. To ensure your Community of Practice (CoP) meetings are productive and that teachers are engaged and feel supported, here are some ways you can carefully plan, structure, and facilitate your meetings. And don't forget to have fun. An enjoyable meeting is one people always want to come back to!

Step1: Set an Agenda:

- Purpose: A clear agenda helps keep the meeting focused and ensures that all relevant topics are covered.
- Steps: Create the agenda in advance and share it with members at the beginning of the meeting, including time allocations for each item.

Tip: Make it a habit to always ask after sharing the agenda, "Is there anything missing that you would like to add?" This ensures you solicit input from members who might not have had a chance to contribute and helps the agenda reflect their needs and interests.

Example:

Date: August 15, 2024
Time: 3:00 PM - 5:00 PM
Location: Jumbini Primary School, Room 12

Agenda:

1) *Welcome and Play Icebreaker (10 minutes)- Joseph*
1) *Agenda for the day (5 minutes)- Joseph*
2) *Teacher Share Out: Using Scratch to teach Fractions (30 minutes) - Purity*
3) *Breakout Session: Collaborative Lesson Planning (30 minutes)- Divide into small groups to brainstorm and plan a lesson incorporating the techniques shared by Purity*
4) *Agenda Setting for Next Meeting (15 minutes)*

Step 2: Prepare Materials and Resources

Gather and prepare any materials needed for the meeting, such as handouts, presentations, or digital resources. Ensure that all materials are accessible to members, particularly if meetings are held in a classroom that has no wi-fi access.

Tip: Always download the offline version of Scratch when using that tool to ensure you can have access to it even with spotty wifi.

Step 3: Use Facilitation Techniques That Model, Celebrate, Enable

To ensure your Community of Practice (CoP) meetings are productive, engaging, and supportive for teachers, it is important to use effective facilitation techniques. We recommend using the "**Model, Celebrate, Enable**" approach highlighted in the KPLAY curriculum documents.

Here's how the "Model, Celebrate, Enable" facilitation technique works: This powerful approach, rooted in Angela Duckworth's growth mindset research, can make a big difference in your meetings. When you **model** a concept, you demonstrate and problem-solve with teachers, boosting their confidence and easing anxieties. This approach emphasizes that teachers are not just holders of knowledge but facilitators who help solve problems collectively. When you **celebrate**, you help teachers recognize the pioneering work they're doing and highlight the importance of celebrating their students' achievements. And when you **enable**, you support educators in exploring content and give them opportunities to learn, fostering a dynamic and supportive learning environment.

For example, for introducing the concept of creativity:

Model It
Don't just ask educators to do an activity, participate in it as a learner yourself.

Celebrate It
Make time to share the wins of each day and even the challenges.

Enable It
How did you feel when...
I was most proud...
At the end of each activity, use playful prompts to reflect together.

1) **Model** Best Practices:

As a facilitator, it's crucial to lead by example. Demonstrate the best practices you wish to see in the CoP meetings. For instance, show how to structure and conduct a lesson using creative learning techniques.

Example: When demonstrating how to integrate technology in teaching, deliberately make a simple mistake and ask the group to help you solve it. This models a growth mindset and emphasizes that everyone, including the facilitator, is a learner.

2) **Celebrate** Contributions:

Celebrate the successes and efforts of your CoP members. Recognition boosts morale and encourages further participation.

Example: After a group presents their collaborative lesson plan, highlight what they did well and thank them for their effort. Use phrases like, "Wow, there are so many unique ideas in this room," and "I didn't know you could build your Scratch animation using this strategy; thank you for teaching me."

3) **Enable** Opportunities and Support:

As the leader of the CoP your job is to empower members by giving them the tools, opportunities, and support they need to succeed. This involves creating an environment where teachers feel safe to share their ideas and challenges.

Example: Prompt teachers to share what was difficult for them and how they overcame it using a structured framework. Encourage statements like, "I encountered this problem, I solved it this way, and I improved on this skill." This fosters a culture of open communication and shared problem-solving. Encourage quieter members to share their thoughts. Use breakout groups for more detailed discussions and activities.

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Chapter 4: Using a Framework, The 4Ps of Creative Learning

During the KPLAY training, we learned that one of the most effective approaches to incorporating creative learning in your classroom is the **4Ps framework: Project, Peers, Passion, and Play.** These components are like magic ingredients that foster deep learning. If the teachers in your group are new to this idea, spend some time reviewing them in detail.

Project: engaging, hands-on activities that involve students in problem-solving and real-world challenges.

Example: Creating a structure with blocks or sticks, making a poster, inventing a song.

> **Tip:** Encourage teachers to break tasks into smaller, manageable steps and set achievable goals. This not only makes the project less daunting but also provides a clear path to success and enhances student problem-solving skills.

Peers: opportunities for students to work collaboratively, share ideas, and support one another in learning.

Example: Group discussions and projects.

Tip: Encourage teachers to facilitate teamwork, even in large classrooms, by creating easy desk groups of pairs, assigning roles and responsibilities, and creating a supportive environment for open communication.

Passion: nurturing students' existing interests and helping them develop a love for learning.

Example: Allowing students to explore topics related to their hobbies or interests, such as art, sports, or technology.

Tip: Encourage teachers to incorporate student choice but maintain boundaries and constraints according to their educational needs. This balance helps students stay engaged while ensuring that learning objectives are met.

Play: integrating fun, exploration, and experimentation into the learning process.

Example: Using games and interactive activities to teach mathematical concepts.

Tip: Encourage students to learn through trial and error, and create a safe space for taking risks and making mistakes. This approach promotes creativity and resilience as students learn that mistakes are a valuable part of the learning process.

How do you introduce the 4Ps to your CoP?

A creative way to introduce the 4Ps framework is through hands-on activities that spark imagination and collaboration. One such activity we have used in the KPLAY training is called **Magic Paper** (15 mins).

Give each participant a single piece of paper and challenge them to turn it into something imaginative—whether it's a ball (image 1), a snake (image 2), a hat (image 3), or their own new invention. Encourage participants to explore freely, embracing *Play* and following their *Passions*. After a few minutes, have everyone share what they created, discussing the process and how it reflects *Project*-based learning. Did they draw inspiration from others (*Peers*) or adapt their designs based on feedback?

USE YOUR OWN WORDS TO DESCRIBE THE 4P'S OF CREATIVE LEARNING

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Chapter 5: Socio Emotional Learning Activities

The benefits of social and emotional learning (SEL) are well-researched, with evidence demonstrating that an education that promotes SEL yields positive outcomes for students, teachers, and school communities, improving student attendance and a student's sense of connection to the school community.

We've handpicked our most popular activities for you to incorporate into your CoP meetings, each designed to help teachers address common challenges when integrating Creative Learning into the classroom. These playful activities target key areas such as enhancing focus and calm, fostering a growth mindset through seeing and reframing, and nurturing connection and empathy.

Quieting & Focus

Hands Up: raise your hand so that everyone can see you. When your hand is up it means there is no talking. A verbal variation of this is to say "Can you hear me? Clap once, can you hear me, clap twice, and so forth" so the students focus on you and quiet down.

5 Finger Breathing Game: a simple yet powerful activity designed to help children regulate their emotions and calm their minds.

Leading the game:
1. In this game we will use our fingers as a visual guide to quiet our mind. Starting with the thumb, inhale slowly while tracing up one finger, then exhale slowly while tracing down the same finger.
2. Repeat this process for each finger, taking deep breaths and focusing your attention on the sensation of the breath and the movement of the fingers.

Talking points: Can you think of a situation when this game could be useful in daily life?(maybe to calm down when your little brother makes you upset, or to help you concentrate)

Seeing & Reframing

The Power of Yet: is a simple game that helps children develop a growth mindset by adding the word "yet" to challenges they face, reinforcing the idea that with practice and effort, they can improve

Leading the game: In this game, we are going to practice using the word "yet" to help us change how we think about challenges. When you feel like you can't do something, add the word "yet" to your sentence. For example, if you think, "I can't solve this math problem," you'll say, "I can't solve this math problem yet."
To start, think of something you find difficult right now. Say it out loud, then add "yet" to the end of your sentence. For example, "I don't understand fractions yet" or "I can't ride a bike yet."

We'll go around in a circle and everyone will take a turn saying something they can't do *yet*. After each turn, we'll all repeat together, "But we can learn and get better!"
Talking points:
- Can you think of a time when using "yet" could help you feel more confident? (Maybe when you're learning something new in school or practicing a skill in sports.)
- How does adding "yet" to your sentence change the way you feel about challenges?

Pinky Pointing: we point a pinky finger- up, down and to the side to help us notice how we 're feeling and communicate it to others.

Leading the game
1. We can feel a lot of different ways, sometimes we feel happy or sad or angry and these are all natural feelings.There is no right or wrong way to feel and our feelings change. We probably feel different now than we felt this morning at home. Sometimes we feel the same as someone else sometimes we feel different, and that is ok.
2. Take a breath and notice how you feel right now
3. I'm going to ask a question and everyone will share their answers by pointing a pinky.
4. Ready? I will ask, is it easy to sit right now? If the answer is no, point a finger to the ground (everyone who feels no points their pinky to the ground) Ok, who feels like its easy to sit right now, point your finger to the sky.
5. Keep your pinky pointing so we can all see how everyone is feeling right now. Remember there is no right or wrong answer.
6. Continue asking questions as long as children are engaged. This is a fun way to ask logistical questions "Who is ready to take a break?" but mostly to understand how children are feeling in that moment "Who is feeling low energy?Do you feel calm or tense?"
7. By keeping the pinkies in the air children see how others answered this question.

Life is Good: roll a ball to each other in a circle naming one thing that bothers you and then adding the phrase "and life is good"

Leading the game
1. We are going to roll this ball to each other and when the ball comes to you, you are going to share something that is bothering you.
2. I 'll go first "I lost my necklace today…" Roll the ball and add "and life is good"
3. Now you name something and roll the ball. Guide players to speed up the game as the ball keeps rolling.

Caring & Connecting

Rainbow Meter: use poster paper and make the shape of a ruler, then color inside in various colors from lighter to darker, like a rainbow. Then stick it to the wall so children can see it and reach it.

Leading the game
1. I am going to ask a question and we will all point at a color at the rainbow meter at the same time.
2. Ok, when I say go point to the lightest color (i.e. yellow) if you are feeling "low energy" right now and to the darkest color (i.e. purple) if you are feeling "high energy". You can also point to other colors if you are somewhere in between. Remember there is no wrong or right answer.
3. Use this method to get the class to share how they are feeling on a variety of topics, both to encourage self-awareness and the idea that others might feel the same way.

Pass the Cup: Using teamwork and paying attention to what is happening around us we pass a cup around a circle filled with water without spilling a drop. First we do it with our eyes open then with our eyes closed.

Guiding questions:
What do we have to pay attention to for the water not to spill?

Notes: Fill the cup high enough that it's challenging for children not to spill the water but not too high that they cannot be successful at the game.

CHOOSE ONE OF THE ACTIVITIES ABOVE TO INTRODUCE TO THE TEACHERS IN YOUR FIRST COP MEETING:

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Chapter 6: Model Lesson Plans

We've selected five lesson plans that have been especially successful with teachers in the KPLAY program. Developed collaboratively by teachers and KPLAY curriculum designers, these lessons align directly with the KLB workbooks used in Kilifi and Kwale, integrating both creative learning and technology. Teachers can use them as they are or adapt them to meet the unique needs of their classrooms. Each model lesson is designed to support the 4Ps of creative learning: project, peers, passion, and play.

Lesson Plan 1: Science & Technology, Composition of Air created by Katana Kitsao, Takaye Primary

Introduce this lesson to support your teaching of the chapter on the Composition of Air, in the Science & Technology Grade 6 Workbooks

LEARNING OBJECTIVES

- Understand that air is a mixture of gases.
- Identify the key components of air, such as oxygen, nitrogen, and trace gases.
- Demonstrate the presence of oxygen in the air through a simple experiment.
- Create a visual representation (e.g., pie chart) showing the percentage composition of gases in the air.
- Appreciate the importance of air, particularly oxygen, in sustaining life.

CBC CONNECTIONS

Critical Thinking, Learning to Learn, Digital Literacy, Collaboration
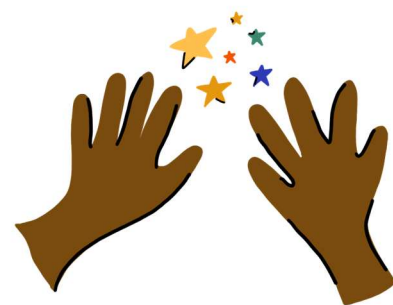
LOCALLY AVAILABLE MATERIALS

- ▶ Digital Device
- ▶ Course Book
- ▶ A chart showing composition of Air

TO START, INTRODUCE THE ACTIVITY:

Today we're going to work in teams to discover what makes up the air we breathe

STEP 1

Start by asking your students what they think is in the air around us. Students can raise their hands and suggest answers like "Oxygen," "Nitrogen," or "Carbon dioxide." Write these ideas on the board. Then, explain to them that air is made up of many different gases, and today they will be investigating and identifying those gases. Pair students up and ask them to research or discuss the different components of air and their functions. Each team will make a list of the components they discover.

STEP 2

Once they have their list, provide them with visual aids such as charts or pie charts that show the composition of air. Ask the students to draw their own version of a pie chart, labeling the gases and their percentage in the air (e.g., Oxygen 21%, Nitrogen 78%). Go from desk to desk, helping students with their charts, asking questions like:

- "Why do you think nitrogen takes up such a large percentage of air?"
- "What do you think would happen if there was less oxygen in the air?"
- "What's one thing you learned from creating this pie chart that surprised you?"

These questions will encourage critical thinking and a deeper understanding of the lesson.

STEP 3

Feedback time. Introduce a feedback system where students share their pie charts with another pair. Using prompts like "I like how you represented…", "I'm confused about…", or "I have an idea for improving…", each team will provide constructive feedback to help refine their classmates' charts. Set a 5-minute timer to keep the process efficient and structured.

STEP 4

After feedback, ask each group to present their pie charts to the class. Celebrate their work by displaying all the charts on the classroom wall. Engage the class in a discussion about the importance of air and its components, helping them connect the lesson to real-world applications like breathing and environmental science.

HOW DOES THIS LESSON ALIGN TO THE 4PS?

PROJECTS

Students create meaningful work by producing a visual representation (pie chart) of the composition of air, which helps solidify their understanding of the lesson.

PEERS

Students collaborate by working in pairs to research and discuss the components of air, then share feedback on their pie charts, fostering teamwork and peer learning.

PASSION

The lesson taps into students' natural curiosity about the environment and air, encouraging them to engage deeply with the material by visualizing and explaining the gasses we breathe every day.

PLAY
Students take on the roles of scientists, conducting research and creating visual models to understand the composition of air. This brings a fun, exploratory element to learning about something essential to life.

Lesson Plan 2: English Language, Grammar, Tenses by Madam Asya Omar. : Takaye Primary

Introduce this lesson to support your teaching of the chapter on Grammar, Tenses

LEARNING OBJECTIVES

- Identify present and past continuous forms of verbs in both oral and written contexts.
- Use the present and past continuous tenses correctly in sentences, both in speaking and writing.
- Appreciate the role of present and past continuous tenses in effective communication.

CBC CONNECTIONS

Critical Thinking, Learning to Learn, Digital Literacy, Collaboration

LOCALLY AVAILABLE MATERIALS

- ▶ Chalk, chalkboard
- ▶ Course Book

- ▶ Video or digital content explaining continuous tenses (optional)
- ▶ Ball to toss

TO START, INTRODUCE THE ACTIVITY:

Today, we are going to learn how to describe actions that are happening now or were happening in the past using the present and past continuous tenses, which help us talk about ongoing events like 'I am reading' or 'I was reading,' and we'll practice these tenses in sentences while having some fun with activities.

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STEP 1 Begin by explaining the basic structure of the present continuous tense (e.g., I am reading) and the past continuous tense (e.g., I was reading).
Write a few examples on the board and ask students to come up with their own sentences using both tenses. Tip; try to turn it into a story like this

"Let's imagine a story about two friends, Amina and Hassan, who live in Kilifi. Right now, Amina is helping her mother weave baskets, while Hassan is playing football with his friends near the beach. Yesterday, though, Amina was swimming in the ocean, and Hassan was climbing a coconut tree to get madafu. Now, let's think of what other things they could be doing! Can you help me come up with sentences about what they are doing right now and what they were doing yesterday?"

STEP 2
Use a ball-tossing activity to engage learners. Toss the ball to a student and ask them to describe what they are doing using the present continuous tense (e.g., I am holding the ball). Then, ask the same learner to describe what they were doing before using the past continuous tense (e.g., I was waiting for the ball).
- Continue tossing the ball around the class until all students have had a chance to construct sentences in both tenses.

STEP 3
- Show a short video that demonstrates the difference between actions happening now and actions that happened in the past. If you don't have a video, you can read a short story that uses a lot of present and past continuous tenses.
- After watching the video or listening to the story, ask learners to point out examples of present and past continuous tenses in the story.
- Have learners do the exercise in page 90 of the learners book

STEP 4
Form groups of 2-4 students.
Provide each group with a short paragraph written in simple past or present tense. Make the paragraphs about something they might find funny or relevant.
Ask them to rewrite the paragraph using either the present continuous or past continuous tense.
For example, if the original sentence is He played football, the students should rewrite it as He was playing football (past continuous) or He is playing football (present continuous).

STEP 5
Ask each group to share a few of their transformed sentences with the class. Write these sentences on the board and discuss as a class whether they have been correctly transformed. Encourage learners to reflect on the role of helping verbs like "are,am, were". To conclude the lesson, ask learners: "Why do we need to use continuous tenses when telling a story?" Highlight that these tenses help express actions that are in progress and can be useful in storytelling or explaining events.

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HOW DOES THIS LESSON ALIGN TO THE 4PS?

PROJECTS: Students engage in meaningful tasks like creating sentences and stories about local activities, demonstrating their understanding of present and past continuous tenses by relating them to everyday life in their community.

PEERS: Learners collaborate with each other by working in pairs and groups, sharing ideas about local activities and helping each other build sentences using tenses. This encourages teamwork and peer learning.

PASSION: By using local examples of activities children do, the lesson taps into students' everyday experiences, making learning more relevant and exciting, sparking their interest in language and communication.

PLAY: The lesson introduces playful elements through storytelling, a ball-tossing game, and local cultural references, making it fun and interactive. Students enjoy acting out sentences and imagining familiar scenarios, keeping them engaged.

Lesson Plan 3: Mathematics,Understanding Place Value by Fredrick Odhiambo, Mabarikani primary

Introduce this lesson to support your teaching of the chapter on the Composition of Air, in the Science & Technology Grade 6 Workbooks

LEARNING OBJECTIVES
- Recognize and read numbers up to the hundreds place.
- Understand and identify the place value of digits (ones, tens, hundreds).
- Demonstrate place value using locally available materials

CBC CONNECTIONS
Critical Thinking, Learning to Learn, Collaboration

LOCALLY AVAILABLE MATERIALS

- Chalk, chalkboard
- Course Book

- Stones, sticks, or shells (represent ones, tens, hundreds)
- Cutout number cards (simple paper numbers

TO START, INTRODUCE THE ACTIVITY:

Today, we are going to learn about place value, which helps us understand the value of numbers by separating them into ones, tens, and hundreds. We will use stones and sticks to help us see how numbers can be grouped and counted.

STEP 1

Start by explaining the basic structure of place value. For example, in the number 245, the '2' stands for 200, the '4' stands for 40, and the '5' stands for 5. To make this more engaging, turn it into a simple story:

"Imagine you are at the market in Kilifi, and you are counting coconuts. You have 245 coconuts. You can group them by hundreds, tens, and ones. You have 2 bundles of 100 coconuts, 4 smaller bundles of 10 coconuts each, and 5 single coconuts. Let's think about how you would count them!"

Ask the learners to share how they would group and count large numbers at a market or at home.

STEP 2

Use a grouping activity with stones and sticks to engage learners.
- Divide the learners into small groups and give each group stones (for ones) and sticks (for tens and hundreds).
- Ask each group to represent different numbers using their materials. For example, if the number is 346, learners would use 3 bundles of sticks for hundreds, 4 sticks for tens, and 6 stones for ones.
- Walk around the class, checking their work and asking questions like, "How did you decide how many bundles of tens to use?" or "What would happen if we had 10 ones? What would that become?"

STEP 3

Draw a large place value chart on the chalkboard with columns for hundreds, tens, and ones.
- Have students come to the board and place their stones and sticks in the correct columns based on the numbers you give them.
- For example, for the number 523, they would place 5 sticks in the hundreds column, 2 sticks in the tens column, and 3 stones in the ones column.
- As a class, practice reading the numbers aloud and ask learners to explain why they placed certain numbers in each column.

STEP 4

Introduce a real-life market simulation.
- Present the class with a scenario like this: "You are at the market in Kwale, and you need to buy 358 oranges. How will you count them? Think about how many bundles of hundreds, tens, and ones you would need."

- Ask the learners to represent the number with their stones and sticks. Once they've grouped the objects, ask them to explain how they reached their total.

STEP 5

Ask each group to share their number representation with the class.

- Write their numbers on the board and discuss if they used the correct amount of stones and sticks for the hundreds, tens, and ones.
- Encourage learners to reflect on why place value is important when counting large numbers. To conclude the lesson, ask learners: "Why do we need place value when counting or buying things at the market?"
- Highlight how place value helps us easily group and count large numbers, making it easier to manage and understand.

HOW DOES THIS LESSON ALIGN TO THE 4PS?

PROJECTS

Learners actively engage in a hands-on project by physically grouping stones and sticks to represent numbers based on place value. This project helps solidify their understanding of how numbers are structured.

PEERS

Learners collaborate in groups throughout the lesson. They work together to solve problems, share materials, and explain their thinking to one another, fostering teamwork and communication.

PASSION

By using relatable, real-life scenarios like buying fruits at the market, the lesson connects math concepts to the learners' everyday experiences, making the content more meaningful and sparking interest in practical applications of math.

PLAY

The use of stones, sticks, and interactive activities like the market simulation adds an element of play to the learning process. Learners enjoy experimenting with physical objects and role-playing real-world situations, making the lesson more engaging and fun.

Lesson Plan 4: Literacy, The Tasty Mandazi, 35 mins

Introduce this lesson to support your teaching of the chapter on Creative Writing, page 162, Unit 8, The Farm on KLB Workbooks

KPLAY

LEARNING OBJECTIVES

- Understand the key elements of writing composition, including plot, character, setting, and dialogue.
- Develop the ability to write engaging and cohesive paragraphs.
- Foster creativity and imagination in writing.
- Collaborate with peers to share ideas, provide feedback, and enhance creative writing skills.

CBC CONNECTIONS

Creativity & Imagination, Collaboration

LOCALLY AVAILABLE MATERIALS

- ▶ Paper
- ▶ Composition Book
- ▶ Pen
- ▶ Scissors
- ▶ Digital version of the book

TO START, INTRODUCE THE ACTIVITY:

Today we're going to read the story A Tasty Maandazi, by Kwame Nyong'o and work in teams of two to write our own ending.

STEP 1

Read the story and stop at the end of the page where Musa asks his father if he can borrow money. Ask students to identify the problem Musa is facing in this story. Students can raise their hand to answer. For example, Musa is dealing with an emotional problem (wanting a Maandazi) as well as a financial one (he has no money to get one). Write down students' answers on the chalkboard.

STEP 2

Ask learners to turn to the person next to them and in pairs and come up with a solution to help Musa get a Mandaazi. Give them a blank piece of paper and ask them to answer these questions (write them on the chalkboard)
The solution we propose for Musa is:
One reason why we believe this is the best solution for Musa is:

STEP 3

Feedback time. Introduce your students to a feedback system like the color-coded one you learned during the training. I like that you, I found confusing when, I have an idea for you. Each team has to pair with another team behind or next to them, read their solutions and provide each other feedback within a set timeframe i.e. 5 minutes on a timer, to help with classroom management.

STEP 4

After gathering feedback, instruct students to use their composition books to write their final stories. Provide an example for guidance. Celebrate their imagination and creative writing abilities by inviting a few pairs to share their stories and then reading the actual ending from the book. As a class, reflect on how creative writing is about having a unique point of view, and how each of us has our unique approach to telling a story.

HOW DOES THIS LESSON ALIGN TO THE 4PS?

PROJECTS

Students engage in meaningful hands on work by creating a final project that demonstrates they understand the learning objectives

PEERS

Students collaborate and share their creations with their peers during the lesson. They can exchange ideas, learn how to provide feedback, and learn from each other's approaches to improving their stories.

PASSION
Students actively engage with their own ideas through a story book, a medium that is aligned to their interests.

PLAY

This lesson incorporates play by encouraging students to engage in creative writing as a form of play. Students have the freedom to experiment and play with language, characters, and plot development, emphasizing the joy and creativity inherent in storytelling.

## Lesson Plan 5: Literacy + Scratch, Creative Writing, 70 mins

Introduce this lesson to support your teaching of the chapter on Creative Writing, page 162, Unit 8, The Farm on KLB Workbooks

LEARNING OBJECTIVES
- Understand the key elements of writing composition, including plot, character, setting, and dialogue.
- Develop the ability to write engaging and cohesive narratives.
- Foster creativity and imagination in writing.
- Collaborate with peers to share ideas, provide feedback, and enhance creative writing skills.

CBC CONNECTIONS
Creativity & Imagination, Collaboration

LOCALLY AVAILABLE MATERIALS

KPLAY

- ▶ Paper
- ▶ Composition Book

- ▶ Pen
- ▶ Scissors
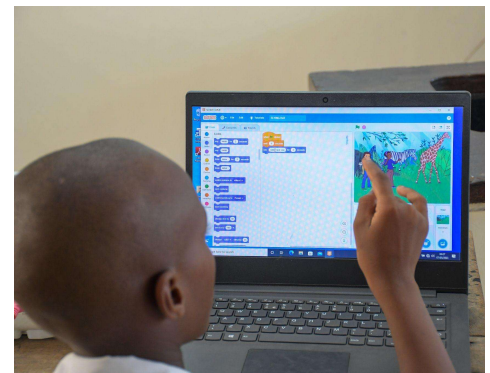
- ▶ Scratch [Tell A Story tutorial](#)

TO START, INTRODUCE THE ACTIVITY:

Today we're going to create an animated story with Scratch that takes place in a farm

STEP 1

In pairs students use the pen and paper to draw 1) 3 characters who will be part of their story and 2) their farm setting. Their drawing should include details like the names of the characters and what is in the farm. For inspiration you can preface this with a visit to a local farm, or show them a video from a local farm .

STEP 2

Ask learners to use their composition books to write down 5 key events that happen in their story. Remind them their story needs to have a beginning, middle and an end.

STEP 3

Feedback time. Introduce your students to a feedback system like the color-coded one you learned during the training. I like that you, I found confusing when, I have an idea for you. Each team has to pair with another team behind or next to them, read their key events and provide each other feedback within a set timeframe i.e. 5 minutes on a timer, to help with classroom management.

STEP 4

Once everyone has collected their feedback, ask students to write their final story and incorporate dialogue. Make sure to provide an example.

STEP 5 - note; this could take an entire lesson period if your students are new to Scratch

Introduce Scratch; Together with your students go through the [Tell A Story tutorial](#) and ask your learners to recreate their story with Scratch. Celebrate your learners' growth mindset by providing them an opportunity to share one thing they found challenging and one thing they are proud of when creating their final Scratch animation projects.

HOW DOES THIS LESSON ALIGN TO THE 4PS?

PROJECTS

Students engage in meaningful hands on work by creating a final project that demonstrates they understand the learning objectives

PEERS

Students collaborate and share their creations with their peers during the lesson. They can exchange ideas, learn how to provide feedback, and learn from each other's approaches to improving their stories.

PASSION

Students actively engage with their own ideas through storytelling and animation creation on Scratch, a medium that is aligned to their interests.

PLAY

Introducing Scratch as a tool for storytelling adds an element of play and experimentation, where students can bring their stories to life through animation.

WHICH LESSONS DO YOU WANT TO INTRODUCE FIRST TO THE TEACHERS IN YOUR COP?

_____

_____

Chapter 7: How to Help Teachers Create Lesson Plans in CoP Sessions

In this engaging activity, successfully tested throughout the KPLAY program, you will guide teachers as they collaborate in pairs or small groups for 2 hours (which can be divided into two consecutive CoP meetings). Together, they will create custom lesson plans based on their chosen sections from the KLB or Moran workbooks.

Step 1: Pair Up

Have teachers pair with a friend or form small groups.

Step 2: Choose a Topic

Select a chapter or activity from your CBC workbook. Focus on simple activities that can assess knowledge, or on themes that students find challenging or disengaging.

Step 3: The 4Ps of Creative Learning

Write on the blackboard these questions and give 15 minutes to the teachers to answer each section:

PROJECT & PASSION

- *How can you turn this lesson/activity into a project?*
- *What will be the end goal or product of the project?*
- *How can you incorporate elements of student interest and personalization in this project?*

PEERS & PLAY

- How can you involve collaborative work in this project?
- What roles can each student play to make the project engaging and fun?
- What elements of play can you introduce to enhance the learning experience?

Step 4: Make a Poster

Invite teachers to use their answers to the following questions to put together a poster of their lesson plan. Share this detailed outline with them to guide their planning:

WRITE THE SECTIONS TEACHERS NEED TO INCLUDE ON THE BLACKBOARD:

1. Teachers' Names
2. Grade Taught
3. Strand
4. Lesson Title
5. Learning Objectives (Reference KLB Chapter)
6. Lesson Project, What are the students making to achieve the learning objectives?
7. Project Steps & Time Allocation
   ○ What do the students need to do first, second, etc.?
   ○ Estimate the time needed for each part of the lesson.
8. How does this lesson connect to the 4Ps?

**WHAT ELSE WOULD YOU ADD?**

_____

_____

_____

Step 5: Showcase Everyone's Work and Gather Feedback

Guide teachers through these steps to showcase everyone's work.

● Give teachers five minutes to set up their posters.
● Depending on how large your group is, give teachers 7-10 minutes to share their lesson plan and get feedback from the group. Use post-its or colored pencils to

invite feedback in the format below:

It's confusing to me that …

I like that you …

I have an idea for you
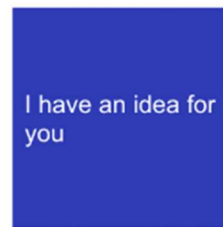
Chapter 8: Professional Development Opportunities

Keeping your members engaged and continually learning is crucial for the success of your Community of Practice (CoP). Here are some effective strategies to ensure ongoing professional development for your teachers:

1. Have Teachers Share Their Work and Be the Experts:
   - Encourage teachers to present their successful lesson plans and projects to the group. This not only builds confidence but also allows others to learn from their experiences.
   - Create a regular schedule for teacher-led workshops where they can share new techniques, tools, and resources they've found useful.
   - Facilitate peer feedback sessions where teachers can give and receive constructive feedback on their work, fostering a collaborative learning environment.
2. Invite Someone from a Different School in the KPLAY Network:
   - Expand your CoP's perspectives by inviting educators from other schools within the KPLAY network to share their unique insights and strategies.
   - Organize joint workshops or virtual meetups with these external educators to discuss common challenges and innovative solutions.
   - This cross-pollination of ideas can lead to new and exciting ways of thinking about teaching and learning.
3. Take Part in the Scratch Community :
   - Encourage teachers to start a Scratch Meetup or find one close enough to attend. They can find meetups at ScratchEd Meetup.
   - Invite them to enroll in the Learning Creative Learning course, a FREE online resource designed to deepen their understanding of creative learning using Scratch.

Chapter 9: Evaluating and Sustaining the CoP

KPLAY

Evaluating and sustaining a Community of Practice (CoP) is essential to ensure its long-term success and impact. This chapter provides strategies and tools to help you assess the effectiveness of your CoP and implement measures to maintain its vitality.

How do you know the CoP is working?

An Easy Framework to Get Started: An easy way to assess the activities and impact of your group is to observe the "behaviors" they engage in. In research, we call this "behavioral goals" rather than just goals,, aligning with how people naturally think and act. Here's a quick example:

Example Behaviors:

- Teachers welcome each other in the community.
- Teachers share issues with the group and show vulnerability, which contributes to a safe environment.
- Teachers feel ownership of the space, whether virtual or physical.
- Teachers respect each other's privacy and confidentiality.
- Facilitators model vulnerability by sharing specific difficulties faced weekly.

Your Turn: Write down three behaviors you would like to see in the Community of Practice.

Collecting Feedback from Members

Regularly collecting feedback from CoP members is essential to understand their needs, preferences, and experiences. Use this information to make improvements and ensure the CoP remains relevant and effective.

Example Questionnaire:

- How satisfied are you with the current activities of the CoP?
- What topics would you like to see covered in future meetings?
- How comfortable do you feel sharing your challenges with the group?

- What can we do to improve your experience in the CoP?

Recognizing and Rewarding Contributions:

- Acknowledge members' achievements and contributions during meetings.
- Implement a system for awarding certificates or small prizes for outstanding participation.
- Highlight members' successes in newsletters or on the CoP's online platform.

Sharing Success Stories and Best Practices

- Encourage members to share their success stories and best practices with the group.
- Create a dedicated section on your CoP's online platform for posting these stories.
- Organize events or meetings focused on celebrating these successes and learning from them.

By implementing these strategies, you can create a dynamic and supportive learning environment that continuously enriches your teachers' professional growth. This not only improves their teaching practices but also positively impacts student learning outcomes.

Chapter 10: Lessons Learned

What do KPLAY CoP Leaders Say?

KPLAY has successfully implemented and run COPs in the participating schools. Through weekly or monthly meetings with recorded minutes and pictures shared, teachers can interact, share knowledge and skills, and communicate with other teachers on best practices for teaching and learning in their schools. Below are some experiences shared by teachers on their interaction in the COP:

'The KPLAY COP has provided a collaborative environment that I have used effectively in writing my lesson plans and resource and learning aids development. Through regular meetings and sharing, I have gained skills that I can directly apply in my work,' said a teacher from Kijiwetanga Primary School in Kilifi County.

'As a special needs school, our COP has enabled us to integrate skills we received at the teacher training for teaching and learning,' said a teacher from Kakuyuni School for the Deaf.

Teachers from Maereni Primary School developed a work plan to guide their meetings and COP activities. They met weekly and shared on different topics from lesson plan

development, resource development, and sensitizing the other teachers who had not attended the KPLAY training.

In Perani Primary School in Lunga Lunga, the teacher cell conducted a full training workshop for the other teachers who were not part of the training attendants. This was over two days and was led by the school head of the institution.

Lessons Learned from KPLAY CoP Superstars

- Schools that had proactive headteachers and play ambassadors had successful COPs. The buy-in from the headteachers was instrumental in ensuring that COPs were well run.
- The commitment of the ambassador is key to ensuring continuity of learning, cohesion of the group and deep learning by the teachers.
- Teachers can also take the lead and it doesn't have to be the head teacher or other leaders. Eg. Teachers were able to post prompts in the groups for others to respond, we also had the scratch learning at school level that was teacher-led and eventually a scratch conference was held to motivate the teachers and learners.
- The teachers in that COP must have a growth mindset

Common challenges and strategies to overcome them

- Connectivity Problems: some areas had no connectivity / power issues due to the floods, Some schools do not have connectivity, some use solar panels that are affected by weather. During the rainy season, the floods affected the power lines so some schools remained in darkness for long. Some teachers took the devices home to charge them and avail them.
- Access to devices: There are schools with limited numbers of devices, hence learning becomes difficult even for the teachers within the school. The school may have only the new KPLAY laptop that is working.
- The teachers' technological capacities are varied. Some teachers are very good in technology while others are struggling.

APPENDIX A: SCRATCH RESOURCES

The lessons above use Scratch Tutorials that require no knowledge of Scratch from the teachers. They are designed to provide step by step introduction for the students. However if you want to dive deeper into Scratch before your lesson, we recommend this appendix as well as completing the [Tell A Story tutorial](#) yourself.

Scratch Interface: Main Interface
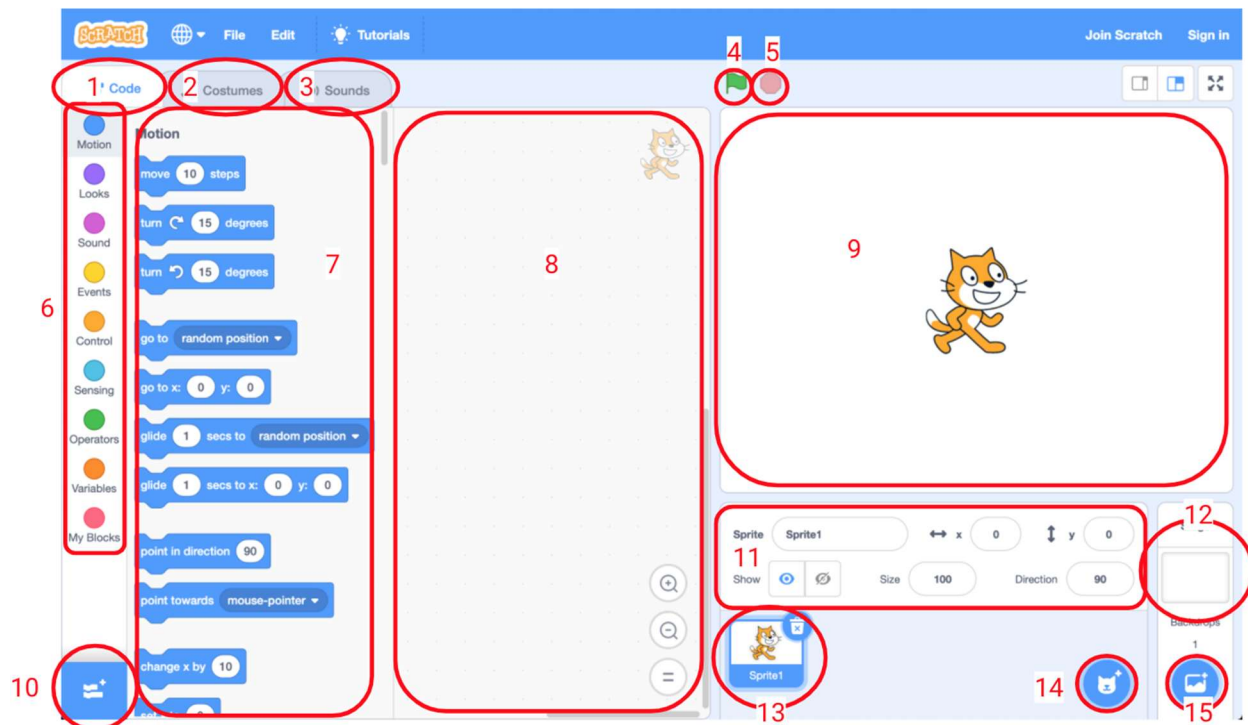
1. Code Tab: This tab displays all of the categories and blocks of code that are available for use in a project.
2. Costume Tab: This tab displays all of the options for sprites in the project (see diagram below).
3. Sounds Tab: This tab displays all of the options for sounds in the project (see diagram below).
4. Green Go Flag: This button can be used to make a project's code run, if the green flag event code block is used.
5. Red Stop Sign: This button halts all blocks of code in a project.
6. Code Block Categories: These are categories of code blocks available for use in the project. Clicking on a category will jump to that portion of the code block library.
7. Code Block Library: A list of all available blocks of code for use in a project.
8. Workspace: The area where code blocks are placed, dragged, and linked together. Once the blocks are in the workspace, they are a part of the project. To place a code block in the workspace, click on the block in the code block library and drag it to the workspace. To remove a code block from the workspace, it can be dragged back to any part of the code block library.
9. Stage: The area where the project, in its current state, can be tested, viewed, and played.
10. Extensions Button: Clicking this button will open the code extensions library, allowing for the importation of additional code block categories.
11. Sprite Options Window: When a sprite is selected, this window will allow for the sprite to be renamed, moved around the stage, change the size, change the direction, and show or hide the sprite on the stage.

12. Active Backdrops: This area displays the backdrop(s) that are currently in the project.
13. Active Sprites: This area displays the sprite(s) that are currently in the project.
14. New Sprite Button: Clicking this button will open the sprite library, allowing for additional sprites to be added to the project.
15. New Backdrop Button: Clicking this button will open the backdrop library, allowing for additional sprites to be added to the project.

APPENDIX B: KPLAY CHATGPT

We are excited to introduce the Custom Creative Learning GPT, a tool designed to help teachers create engaging lesson plans. This AI-powered resource provides personalized guidance and materials tailored to your needs. Whether you need help brainstorming project ideas, integrating technology, or enhancing student engagement, the Custom Creative Learning GPT is here to support you every step of the way.

Here is the link for you to try out:

And here are some ideas for the kinds of prompts to use:

Help me create a lesson plan for teaching fractions to Grade 4 students.

What are some engaging activities for a science lesson on plant life cycles?

Suggest a creative project for students to demonstrate their understanding of local history.

How can I incorporate Scratch into a group project on environmental conservation?

Provide a fun classroom activity to teach teamwork and collaboration skills.

What are some interactive games to help students practice their spelling words?

How can I modify my lesson plan to support students with different learning needs?

What are some effective strategies for teaching math to students with learning disabilities?

What are some creative ways to assess student understanding of the water cycle?

How can I use formative assessments to gauge student progress in reading comprehension?