

Parent Education Resource Package for Primary Schools

Teaching children to be active learners: How to support children in acquiring the generic skills for the 21st century?

Strand IV: Fostering Home-school Co-operation and Communication

Programme Plan

1. Programme Name

Teaching children to be active learners: How to support children in acquiring the generic skills for the 21st century?

2. Target

Parents of children studying at primary level

3. Duration

This activity will last for about 90 minutes

4. Mode of Activities

Explanations, discussions, experiential learning, worksheets

5. Programme Objectives

Through the activity, parents will be able to:

- Understand what counts as the generic skills for the 21st century
- Understand how to cultivate critical thinking skills in children
- Understand how to cultivate creativity in children
- Understand how to cultivate problem-solving skills in children

6. Programme Procedure

Section	Time (minutes)	Topic	Content	Mode	Resources / Teaching aids
1	5	Arousing motivation	<ul style="list-style-type: none">Introduce the topic and content: Generic skills for the 21st century are the skills needed to adapt to changes and face challenges. These skills help children keep learning, improve themselves and solve problems through exploration, thinking, communication, co-operation, innovation and adaptability.There are many types of generic skills, and various skills can be	<ul style="list-style-type: none">Explanations	<ul style="list-style-type: none">PowerPoint slides (Slides 2-3)

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			<p>interrelated and share things in common. Three important generic skills are introduced in this activity:</p> <ul style="list-style-type: none"> ○ Critical thinking ○ Creativity ○ Problem solving 		
2	20	How to cultivate critical thinking skills in children	<ul style="list-style-type: none"> ● Introduce critical thinking which is the ability to process and analyse information to reach a conclusion and make decisions. Critical thinking can include: <ul style="list-style-type: none"> ○ Interpretation ○ Analysis ○ Inference ○ Evaluation ○ Explanation ○ Self-regulation ● Point out that it is necessary to ask children more questions and give them opportunities to think, in order to help them learn to think critically. ● Show parents two types of questions and ask them to analyse the characteristics of these two types of questions (Slide 5). ● Explain that we can classify questions according to their nature. One way of classification is to divide questions into information questions and reflective questions: <ul style="list-style-type: none"> ○ Information questions have a clear right or wrong/specific answers, such as: <ul style="list-style-type: none"> ▪ What day of the week is it today? ▪ How do plants obtain nutrients? ▪ What are the characteristics of mammals? 	<ul style="list-style-type: none"> ● Explanations ● Discussions 	<ul style="list-style-type: none"> ● PowerPoint slides (Slides 4-9)

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			<ul style="list-style-type: none"> ▪ Why is the sky blue? ▪ In which period were dinosaurs active? ○ Reflective questions have no clear right or wrong answers, such as: <ul style="list-style-type: none"> ▪ What means of transportation do you think is better to take to the park? ▪ If we were to go on a family trip, which place would be better? ▪ You save up your pocket money, how do you plan to use it in the future? ▪ (Your child is unhappy with the ending of a cartoon) If you were the author, how would you change the ending? ▪ Do you think an e-book or a physical book is better? • Help parents understand that artificial intelligence will be widely used to solve data-related problems. With the rapid development of artificial intelligence, it may also be applied to some basic analytical problems, such as comparison and classification. • Point out that parents can first ask reflective questions in daily life and then ask deeper/further questions to improve children's thinking ability (Slides 6-7): <ul style="list-style-type: none"> ○ "What are your thoughts on this issue?" ○ "Why do you think this way?" ○ "What do your thoughts reflect about what you value?" ○ "Where did you get this 		

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			<p>information? Is the source reliable?”</p> <ul style="list-style-type: none"> ○ “Do you have any other thoughts?” ● Parents can also ask different types of questions while children are doing homework and studying to help them learn and develop their abilities in interpretation, analysis, inference, evaluation, explanation and self-regulation. For example, if parents want to guide children to analyse information on the advantages and disadvantages of electronic products, they can ask different types of questions to stimulate their thinking (Slides 8-9). 		
3	35	How to cultivate creativity in children	<ul style="list-style-type: none"> ● Use the Worksheet on Creative Thinking Exercise and Slides 10-15 to help parents understand that they must help their children overcome conventional thinking to develop their creativity. Parents may think that instructor is being deceitful, whereas the rules only state that the tip of the pen/pencil cannot leave the paper during the process, but do not state that you cannot draw beyond the dots or tear the paper. Drawing the lines within the boundaries of the dots and not tearing the piece of paper are the restrictions of our conventional thinking. ● Explain that creativity is about breaking through old patterns and thinking outside the box to solve problems (Slide 16). ● To cultivate creativity in children, parents can: <ul style="list-style-type: none"> ○ Let children do it: Parents 	<ul style="list-style-type: none"> ● Explanations ● Discussions ● Experiential learning ● Worksheets 	<ul style="list-style-type: none"> ● PowerPoint slides (Slides 10-26) ● Worksheet on Creative Thinking Exercise ● Worksheet on Brainstorming Exercise

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			<p>often rush to help children when they encounter difficulties. Parents can express empathy first and let children try to solve difficulties themselves (Slide 17).</p> <ul style="list-style-type: none"> ○ Let children express their thoughts: Parents immediately provide lots of explanations when children ask questions. Instead, parents should encourage children to express their own thoughts first and encourage them to find their own answers (Slide 18). ○ Let children dream: When their children share their dreams, parents can listen to them first and encourage them to learn new knowledge and practise new skills to fulfil their dreams. For example, if a child wants to become a YouTuber, parents can encourage the child to improve his/her writing and video-editing skills. If the child wants to become a meteorologist, parents can encourage the child to acquire knowledge about astronomy and climate (Slide 19). ○ Let children brainstorm (Slides 20-21): While brainstorming, parents and children can come up with various solutions regardless of their feasibility. For example, parents and children can brainstorm about what a city in the sky would look like. Children 		

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			<p>may say that there will be birds, fish and robots in this city. Parents do not need to immediately ask children why there would be fish or robots in the sky. Instead, parents can follow children's thinking and let them express their imagination.</p> <ul style="list-style-type: none"> • Invite parents to complete the Worksheet on Brainstorming Exercise and use brainstorming and mind maps to help them conceive the content of the essay. <ul style="list-style-type: none"> ○ Instructor reminds parents: not to evaluate whether their ideas are reasonable at this moment and ask them to describe the characteristics of the environments and residents' activities in their imagination first. They can then use mind maps to express their ideas based on what they see, hear and feel (Slides 22-23). ○ Instructor can invite 1-2 parents to share their ideas or mind maps and can praise their originality and uniqueness. ○ Instructor can use Slide 24 as an example to show parents how to use a mind map to express their ideas. Instructor should let parents try drawing the mind map first before showing them the example to not limit their creativity. ○ Instructor reminds parents that they might need to see if their ideas can respond to the requirements of the task 		

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			<p>after brainstorming.</p> <ul style="list-style-type: none"> • Point out that children do not always come up with novel ideas. To help children brainstorm new ideas, parents can use the SCAMPER method. The SCAMPER method uses seven dimensions to help children come up with novel ideas (Slide 25): <ul style="list-style-type: none"> ○ <u>S</u>ubstitute ○ <u>C</u>ombine ○ <u>A</u>dapt ○ <u>M</u>odify ○ <u>P</u>ut to other uses ○ <u>E</u>liminate ○ <u>R</u>earrange • For example, if parents want to guide children to analyse information on the advantages and disadvantages of electronic products, they can ask questions from different dimensions to stimulate children’s thinking (Slide 26). 		
4	25	How to cultivate problem-solving skills in children	<ul style="list-style-type: none"> • Point out that problems arise when there is a gap between the objective situation in front of us and what we expect. Problem solving is the ability to close the gap between the objective situation and our expectation. Being able to achieve our expectation is to achieve the goal, that is to solve the problem (Slide 27). • Introduce the four steps to problem solving (Slide 28): <ul style="list-style-type: none"> ○ Define the problem: What is the current problem? ○ Seek solutions: How can this problem be solved? Are there any other ways? ○ Envision the consequences: What are the 	<ul style="list-style-type: none"> • Explanations • Discussions • Worksheets 	<ul style="list-style-type: none"> • PowerPoint slides (Slides 27-33) • Worksheet on Problem Solving Exercise • Kanban

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			<p>advantages and disadvantages of the first solution? What will happen if this solution is applied? What are the advantages and disadvantages of the second solution? What will happen if this solution is applied? What are the advantages and disadvantages of the third solution...</p> <ul style="list-style-type: none"> ○ Make a decision: Choose the solution with the most advantages and least disadvantages and try to implement it. ● Use the Worksheet on Problem Solving Exercise and ask parents to use the four steps to problem solving to help children solve the following problems: <ul style="list-style-type: none"> ○ Your child needs to give a group presentation, but the other group members all seem too “lazy” and reluctant to do it. Your child feels very annoyed because he doesn’t want to do everything alone but is worried that the whole group will receive zero marks if he doesn’t do it. ● Instructor asks parents to provide different solutions. If the child decides to work together with the group members, the child must know how to solve the problem through collaboration: <ul style="list-style-type: none"> ○ Collaboration is the ability to work effectively in groups and achieve common goals in collaborative relationships (Slide 29). ○ In the collaboration process, children may play the 		

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			<p>following roles (Slide 30):</p> <ul style="list-style-type: none"> ▪ Supervisor ▪ Encourager ▪ Recorder ▪ Spokesperson ▪ Secretary ▪ Evaluator <p>○ These roles are not necessarily fixed. The same team member may need to play different roles at different points in the collaboration, so children must master the skills required for all roles.</p> <ul style="list-style-type: none"> • Using Slide 31, instructor helps parents learn what different characters/roles will say to other group members. Instructor can let parents read the conversation before revealing the answers. • Instructor introduces the Kanban (Slides 32-33) to make the division of labour more transparent and specific. The Kanban also helps with the division of labour, recording and evaluation, and facilitates the supervisor, recorder and evaluator to complete their work. • A Kanban includes: <ul style="list-style-type: none"> ○ Task ○ Responsible team member ○ Estimated completion date ○ Progress ○ Actual completion date ○ Problems encountered? ○ Solution to problem? 		
5	5	Conclusion	<ul style="list-style-type: none"> • Summarise the content of the lecture • Complete the evaluation questionnaire 	<ul style="list-style-type: none"> • Explanations 	<ul style="list-style-type: none"> • PowerPoint slide (Slide 34)