



教育局
Education Bureau



香港教育大學
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Promoting young children's learning through **sensory stimulation** and **play**: A parent-child sensory game workshop

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Children like **stimulation**

- ☺ Children are full of curiosity and active in learning
- ☺ Children enjoy exploring with their senses to learn new things
- ☺ Children acquire new knowledge building on their prior experiences and skills
- ☺ Children love to learn in an accepting, encouraging and supportive environment
- 👍 Encourage children to **learn via their 5 senses**
- 👍 Choose real life themes and provide children with **interesting learning experiences**
- 👍 Provide children with opportunities to **explore freely** and **discover knowledge**
- 👍 **Show respect** and **care** when engaging with children in learning

► Curriculum Development Council (2017). [Kindergarten Education Curriculum Guide](#). Hong Kong: Education Bureau.

Using multisensory stimulation to support children's learning: **Sound bottles**

👂 Materials

- A clean and clear bottle; fillings (e.g., buttons, beads, small bells, beans, sand, small stones, and anything that produce sounds when moved)

👂 Procedures

- Use a funnel to move different fillings into the bottle; put the cap on.



Using multisensory stimulation to support children's learning: **Glitter bottles**

👁 Materials

- A clean and clear bottle, super glue^{*}, glitter[^], sprinkles[^], glue[^], edible colorings[^] (water soluble)

👁 Procedures:

- Colored water: Use a container to hold the water. Add edible colorings to it and stir.
- Add the colored water to fill the bottle to its half. Add glitter and sprinkles, and add additional colored water so that the bottle becomes almost full. Shake the bottle to move the glitter and sprinkles around. If children want to make the glitter and sprinkles move more slowly, add glue until they are happy with the effect. Wipe clean the opening and seal the bottle with super glue.



* Super glue is used to seal the bottle, so that the liquid would not leak out. Tapes can also be used to seal the bottle.

^ Super glue, glitter, sprinkles, and glue can be bought in stationery stores. Edible colorings can be bought in baking stores.

Using multisensory stimulation to support children's learning: **Scent bottles**

❁ Materials

- A clean and clear bottle, natural scented materials (e.g., coffee beans, cinnamon, lavender)

❁ Procedures

- Use a funnel to move different fillings into the bottle; put the cap on.



Using multisensory stimulation to support children's learning: **Water and oil bottles**

✧ Materials

- A clean and clear bottle, super glue*^, glitter^, edible colorings (water soluble)^, edible colorings (oil soluble)^, oil*^ (e.g., baby oil)

✧ Procedures:

- Colored water: Use a container to hold the water. Add edible colorings (water soluble) to it and stir.
- Colored oil: Use a container to hold the water. Add edible colorings (oil soluble) to it and stir.
- Use a funnel to add the colored water to fill the bottle to its half, then add the colored oil to the bottle. Add glitter for decoration. Wipe clean the opening and seal the bottle with super glue.

* Super glue is used to seal the bottle, so that the liquid would not leak out. Tapes can also be used to seal the bottle. Oil can be baby oil or massage oil. Edible oil is not suitable, as it will clot at room temperatures.
^ Super glue and glitter can be bought in stationery stores. Edible colorings can be bought in baking stores. Baby oil or massage oil can be bought in dispensaries.



Providing children with interesting learning experiences: **Theme bottles**

Materials

- A clean and clear bottle, super glue*^, fillings (e.g., sand, shells, edible colorings (water soluble)^, marine organism or dragon figures)

Procedures

- Colored water: Use a container to hold the water. Add edible colorings to it and stir.
- Place the fillings into the bottle; add colored water. Wipe clean the opening and seal the bottle with super glue.



* Super glue is used to seal the bottle, so that the liquid would not leak out. Tapes can also be used to seal the bottle.

^ Super glue can be bought in stationery stores. Edible colorings can be bought in baking stores.

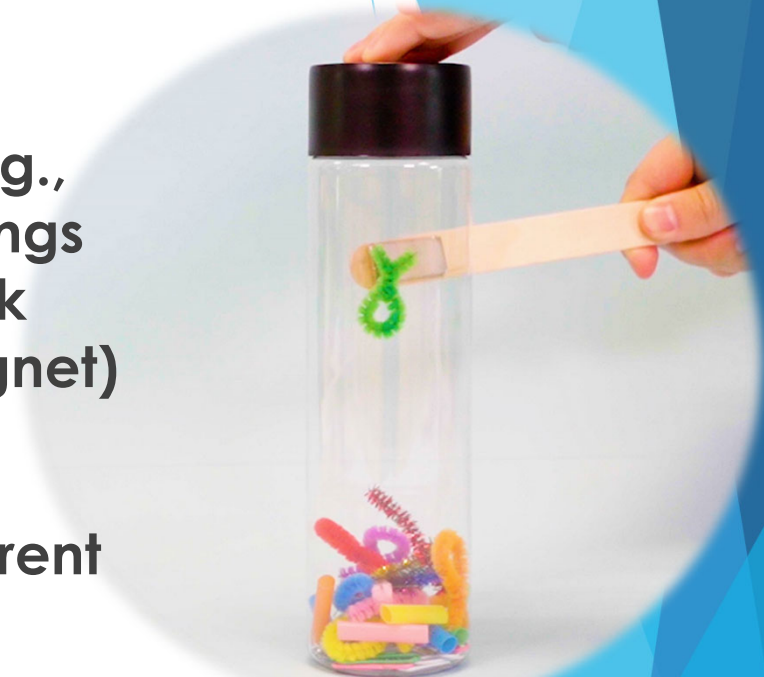
Providing children with opportunities to discover knowledge: **Magnet bottles**

✦ Materials

- A clean and clear bottle, metal fillings (e.g., colorful wires, paper clips), non-metal fillings (e.g., plastic straw pieces), a magnet stick (composed of a wooden stick and a magnet)

✦ Procedures:

- Magnet bottle: Use a funnel to move different fillings into the bottle; put the cap on.
- Magnet stick: Stick the magnet to the wooden stick



When we interact with children...

- 👍 **Encourage children to look, to listen, to smell, to touch**
- 👍 **Use a wide range of words to describe different multisensory experiences**
- 👍 **Link the learning experiences to the everyday lives of children**

- ▶ Feuerstein, R., Klein, P. S., & Tannenbaum, A. J. (Eds.). (1991). *Mediated learning experience (MLE): Theoretical, psychosocial and learning implications*. Freund Publishing House.
- ▶ Hembree-Kigin, T. L., & McNeil, C. B. (2013). *Parent-child interaction therapy*. Springer Science & Business Media.

When we interact with children...

- 👍 Invite children to predict and explain
- 👍 Avoid providing answers right the way
- 👍 Expand what children have said
- 👍 Review children's prediction and beliefs

- ▶ Feuerstein, R., Klein, P. S., & Tannenbaum, A. J. (Eds.). (1991). *Mediated learning experience (MLE): Theoretical, psychosocial and learning implications*. Freund Publishing House.
- ▶ Hembree-Kigin, T. L., & McNeil, C. B. (2013). *Parent-child interaction therapy*. Springer Science & Business Media.

When we interact with children...

- 👍 **Praise children for their active exploration and diverging thinking**
- 👍 **Use body language to express love and affection (e.g., smile, nod, clap hands, thumb ups, a pat on the shoulder, a stroke on the back, hold hands, hug)**
- 👍 **Put away the cell phone and pay full attention**

- ▶ Feuerstein, R., Klein, P. S., & Tannenbaum, A. J. (Eds.). (1991). *Mediated learning experience (MLE): Theoretical, psychosocial and learning implications*. Freund Publishing House.
- ▶ Hembree-Kigin, T. L., & McNeil, C. B. (2013). *Parent-child interaction therapy*. Springer Science & Business Media.

Sound bottle games

- 👂 Ask children to shake the sound bottle when they hear the suffix “ful,” which means “full of”
- 👂 It was a **beautiful** day! Kitty broke her fast with a **bowful** of cereal and a **spoonful** of honey. She was always **grateful** for having **plentiful** food to eat, as she knows many people in the rest of the world do not have this luxury! She picked up her backpack and an **armful** of books, books that she is about to donate to a charity. She loves her books—she really does. But, what she loves even more is that other children can read and reread her books! She decided to become a **useful** and **helpful** person to the community. She does not have to do great things—she does not have to be a superwoman. She just wanted to do small things, small things that are good to others.

Scent bottle games

- 🌸 **Level 1: The parent asks the child to close the eyes and take a deep breath, experiencing the scent of one bottle. The parent helps the child to link the experience to everyday life:**
 - “What does this smell like? How does it make you feel?”
 - “When was the last time you smelled this scent? What were you doing? Who was there? What happened? Why did that happen? What was the outcome?”

Scent bottle games

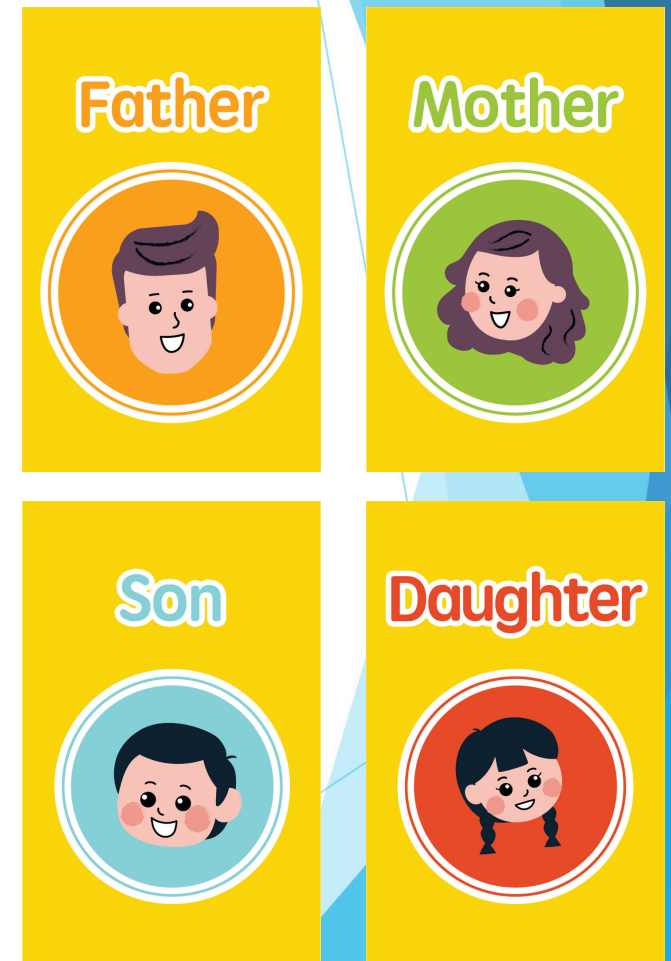
- 🌸 **Level 2:** Using the following questions, the parent co-creates a story with the child:
 - **Who:** Who is the main character?
 - **What:** What happened? (have to be related to the scent)
 - **Whom:** Who else was there?
 - **Why:** Why did that happen?
 - **How:** How did it go? What was the final outcome?

Glitter bottle games

- 👁 Glitter bottles can be used to calm children's emotions.
- 👁 Parents can tell their children: "We are now looking at this glitter bottle, looking at how the glitter and sprinkles move. Sometimes, when we feel sad, angry, or worried, our mind is like this shaken glitter bottle, clouded by all the intense emotions. But, we can say STOP and CALM DOWN to ourselves, and look at how the glitter and sprinkles move, sinking into the bottom, sinking into the bottom, just like our mind can calm down if we slow down and focus on our inner self. Yes, look at how the glitter and sprinkles sink into the bottom, just like our mind can become peaceful again if we focus."
- 👁 Parents can calm their children's emotions every day using the glitter bottle. Moreover, when children are upset, parents can also try to calm children down by asking them to look at the glitter bottle.

Water and oil bottle games

💡 **Level 1:** Put aside the grey cards. The parent shuffles the colored cards and place them face down. The parent draws one card at a time and says **TURN**. If the card matches the corresponding role (i.e., the father draws a father card; the mother draws a mother card), the child needs to turn the bottle upside down. If the card does not match the corresponding role (i.e., the father draws a mother card; the mother draws a son card), the child does nothing.



Water and oil bottle games

- Level 2: Mix both the grey and the colored cards. The parent shuffles all cards and place them face down. The rules for the colored cards remain the same. But, the rules for the grey cards are the opposite of those for the colored cards: If the grey card matches the corresponding role (i.e., the father draws a father card; the mother draws a mother card), the child does nothing. If the grey card does not match the corresponding role (i.e., the father draws a mother card; the mother draws a son card), the child needs to turn the bottle upside down.

Father



Mother





Son



Daughter



Theme bottles and magnet bottles

-  **Theme bottles:** Parents invite their children to find a specific animal (e.g., a marine life or a dragon) as quickly as possible.
-  **Magnet bottles:** Parents invite their children to pick up a specific colour of metal fillings (e.g., a green fish) using the magnetic stick as quickly as possible.

Conclusion and Questions