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## How Does CEA Work? Mediated Learning Experience (MLE)

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Mediated Learning Experience (MLE) occurs when children are guided to 'learn how to learn' (metacognition), by someone who is more knowledgeable. MLE is very similar to 'differentiated instruction'. It is based on Vygotsky's theory of the 'Zone of Proximal Development'. **MLE is the key ingredient in making CEA work.**

### **Constructing your own learning, Consider these questions:**

Think about what you already know about learning.  
Think of something that you learned successfully.

*How did you go about learning this task or information?  
Who supported your learning? What did they do?  
Why do you feel that you were able to learn this task?  
How do you feel about this task now?  
Did you use what you learned in other ways? How?*

Check back to your answers once you have worked through this module.

### Module 2 Activities:

1. Read the Mediated Learning Experience documents.
  - a. What is Mediated Learning Experience?
  - b. How does MLE work?
  - c. What are the benefits of 'deep level' questioning?
2. Watch the video vignettes about Mediated Learning Experience (Videos 2 & 3).
3. Try out the practice activity.
4. Check, are you ready to go onto Module Three?
  - a. What are the four criteria for a 'mediated learning experience'?
  - b. What defines the boundaries of a child's learning zone?
  - c. What are three ways that you can mediate a child's learning?

**Tip:** Begin Module 3 by looking at Video 4 first.

# What is Mediated Learning Experience?

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- Mediated Learning Experience (MLE) is similar to coaching.
- The goal of MLE is to assist someone to be a more skilled and independent learner.
- MLE occurs when a more skilled person (teacher, peer, parent, grandparent) assists a child to grasp something that they could not do independently.
- A mediator guides the child to discover their own strategy for learning.
- A mediator does not tell the child what strategy to use.
- MLE is what occurs in a child's learning zone. This is based on Vygotsky's notion of the 'Zone of Proximal Development'.

## Zone of Proximal Development (Vygotsky)

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Independent  
Level



Potential  
Level



Mediated Learning Experience

The key features of Mediated Learning Experience are:

- 1) Reciprocity:** This is the establishment of a **responsive connection** between the child and the mediator (more skilled person). This requires that the child and the mediator share their cultures by integrating their values, ideas, feelings and expectations. It includes the mutual setting of expectations (rules and routines). Reciprocity is necessary before the remaining three aspects of MLE can occur. Essentially reciprocity allows the mediator and the child to form a **working relationship** based on trust, acceptance and understanding. The forming of this attachment creates an **'openness' to learning**, and the child is more likely to turn his/her internal compass point to the mediator. (Culture in this context is the unique blend of values, beliefs, ideas, traditions, and routines that we all form with the significant people in our lives.)

### Examples of developing Reciprocity:

- Emphasizing order and patterns to assist children to discover relationships between events and tasks.
- Establishing routines to set a safe and predictable learning environment.
- Sharing an understanding of the purpose of school.
- Modeling acceptance, trust and empathy.
- Attending to the changing needs of students.

- 2) Intent:** This is the **explicit direction/goal** that evolves between the mediator and the child. The mediator prepares intent ahead of time and

determines how to catch and hold the learner's attention. The intent may change according to the needs of the child. The child needs to share in the definition and ownership of the intent.

**Examples of developing Intent:**

- Catching and sharing focused attention.
- Clearly describing what is going to happen.
- Considering the child's needs and views to negotiate an activity goal.
- Modeling commitment to the intent through body language, tone and attitude.
- Creating excitement about the learning task.

**3) Meaning:** This is the *personal relevance* of the learning experience. The mediator ensures that the children share in developing meaning (interest, importance and usefulness) about the activities.

**Examples of developing Meaning:**

- Sharing personal interest, importance and joy in learning activities.
- Sharing your beliefs, values, likes, dislikes and your view of the world and ensuring that you listen to the child's views.
- Exploring the children's perceptions and assumptions about learning activities.
- Adjusting the difficulty of activities to match the children's needs and interests.
- Ensuring that a new learning activity is connected to some aspect of the child's worldview and experience.
- Encouraging children to continue and complete activities.
- Noticing or looking for the children's accomplishments; specifically praising and explaining why they deserve this praise.

**4) Transcendence:** This is the *expansion of understanding* beyond what children are learning in a specific activity. Through transcendence children become active in making their own learning strategies. The emphasis is on the process of 'how to learn' and less on the product of learning. Transcendence is a form of 'bridging' or transferring knowledge and strategies from one situation to another.

**Examples of developing Transcendence:**

- **Questioning** children about how and why they will do things (focus on the process of learning). *Don't tell them!*
- **Expecting children to explain** their reasons for choices and plans.
- Helping children to go beyond what they are doing now by comparing, relating and expanding to other times and events (bridging). This *helps children to anticipate and search for rules* that they can use in many different ways.
- **Modeling problem solving.** Talking out loud as you problem solve helps children to see the steps that are needed.

**Reference:** Greenberg, K. (2000) The Cognitive Enrichment Advantage Teacher Handbook, Arlington Heights, IL: Skylight Professional Development, p. 28-41.

# How Does Mediated Learning Experience (MLE) Work?

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This is the most important type of MLE.

## 1. Help the learner discover and understand; don't tell!

Help someone discover how and why they will start, do or are doing things. Help them to make and use their own plan. Self-explanations lead to a deeper understanding.

See page 6: Deep Level Questioning

This is mostly accomplished by questioning. Question chains start with more factual, describing questions and move on to deeper level questions that prompt analyzing, planning and checking.

### I. Describe:

#### **(Exploration)**

- What do you see on this page.. in this picture?
- What do you know about...? What does..... mean?
- Tell me one thing.....?
- What is...? (sounds like, looks like, feels like)

### II. Analyse:

#### **(Making Comparisons, Problem Identification, Connecting Events)**

- How is that the same as...? .. different?
- What might get in the way..?
- What might happen if...? if not...?
- What are your feelings about?
- How have you done this before?

### III. Plan:

#### **(Planning)**

- What would you like to have happen?
- How might you start? What will you do first?
- What are you ready and willing to do today?
- How might this work?

### IV: Check:

#### **(Self-Regulation)**

- How will you know you are ...? are not...?
- How will that help you?
- When or where else might you .....?
- Why will your plan work?
- What will you do if your plan works?.. does not work?

## **2. Sharing focused attention.**

Help the learner to stay focused on the task. You could help them to notice important parts of the task. Help them to consider the task from several points of view. You might share how you have approached a similar task. Summarize what the learner has already discovered.

- What about this?
- What is this for?
- You have already noticed or figured out that .....

## **3. Adjusting difficulty.**

Adjusting the difficulty of activities to match the learner's needs and interests. (i.e. not too hard and not too easy). This requires a balance of not providing more assistance than the person needs. Consider the best way to present information to the person (visual, auditory, modeling/ doing etc.) and the best way for the person to present their answer (verbal, writing, drawing, acting etc). If you have given too much assistance the child is more likely to wait for help and less likely to problem-solve independently or generalize the use of strategies that they learn.

## **4. Developing a Plan/Strategy.**

Help them to predict the best plan. What will be their first step? What are they willing to do? How will they know that their plan has worked or not worked? What do they want to have happen?

## **5. Expecting explanations of choices.**

Encouraging the person to explain their reasons for choices and plans. This helps the person to understand all the parts of their plan or choice. This also helps with generalization because the person begins to see the connection between what they do and what will happen, as well as connections between what they already know and new information that they are learning.

- How do you think this will work?

## **6. Noticing accomplishments.**

Notice or look for the person's accomplishments; praising and explaining specifically why they deserve this praise. This helps the person to gain a picture of themselves and how they can be successful.

- You really looked carefully at ....

## **7. Expanding to other times and events.**

Helping the person to go beyond what they are doing now by comparing, relating and expanding to other times and events. This helps the person to anticipate and search for rules that help them in many different ways.

- When or where else might you use this plan?

This can also assist the person to apply their plans and strategies in many different situations.

# Deep Level Questioning and Self Explanations

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When students are more actively involved they learn more. Deep level questioning prompts students to explain and justify their thinking and their responses. Asking better questions prompts more detailed explanations and leads to greater understanding and learning.

## Levels of Questions

Questions that prompt deeper thinking lead to more in-depth learning.

- **Level 1** questions are factual (What is? How many?) and answers tend to be more concrete.
- **Level 2** questions tap into comprehension or inferences. These questions lead students to compare and contrast, infer cause/effect and notice strengths and weaknesses. (What do you notice? How is this like? Different? What will happen if? How will this work?)
- **Level 3** questions inspire generation of knowledge. Students are more likely to combine previous knowledge with new knowledge – (What do you already know? How have you done this before? How will you start?)
- **Level 4** questions motivate the understanding of implications. Students will be encouraged to evaluate ideas, justify positions or opinions (Why? Why not? What if? What if not? How will you know..?)

## Connections between Questions and Explanations

- The more students explain the more they understand.
- Receiving explanations **does not** have a powerful learning effect.
- It is possible to train students to ask better questions for peer-to-peer learning. Without guidance they tend to ask factual questions.
- When students explain they are integrating factual and procedural knowledge with their prior knowledge to get to general rules. This increases their understanding and then they make fewer errors.
- When students integrate new knowledge with their previous knowledge – even if they have made errors – it will lead to greater understanding – as long as they continue to self explain. They are more likely to notice the conflicts in their explanation as they explore the next new knowledge. They will then construct new knowledge.

## References:

Chi, M. T., De Leeuw, N., Chiu, M., & Lavancher, C. (1994). Eliciting self-explanations improves understanding. *Cognitive Science*, 18, 439- 477.

King, A. (1994). Guiding knowledge construction in the classroom: Effects of teaching children how to question and how to explain. *American Educational Research Journal*, 31, 338-368.

King, A., Staffieri, A., & Adelgais, A. (1998). Mutual peer tutoring: Effects of structuring tutorial interaction to scaffold peer learning. *Journal of Educational Psychology*, 90, 134-152.

McCombs, B. L. (2001). What do we know about learners and learning? The learner-centered framework: Bringing the educational system into balance. *Educational Horizons*, Spring, 182-193.

## Module 2:

# Mediated Learning Experience (MLE): Practice Activity

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- ❑ Select a specific lesson. A lesson you are going to do as part of your regular day.
- ❑ Use the MLE steps to frame questions you ask your students:
  - **Start with questions that encourage them to explore the parts of the activity or lesson**
    - What do you notice?
    - Tell me what you see?
    - What do you already know about..?)
  - **Move to questions that encourage more analysis.**
    - How is this the same as..?
    - How do you feel about..?
    - How have you done this before?
  - **Now select questions that encourage students to set a goal and a plan to reach that goal.**
    - Which goal will you set for yourself?
    - How might you start? What will you do first?
  - **Finally use questions that prompt evaluation of their plan.**
    - How will you know that your plan has worked?
    - When or where else might you use this plan?

Congratulate yourself for being a great learning coach!

**Learning to Think and Thinking to Learn!**

**Tip:**

Have fun exploring the CEA thinking skills in Module 3.

**Tip:**

Did you check out Video 2 and 3?  
Lots of hints about the 'what' and 'how' of MLE.