



# Concept- based Learning

21ST CENTURY LEARNING

*What are we teaching?  
Are we teaching textbooks and facts ?*

*If yes, then we have to acknowledge that our teaching does not match the needs of our new generation.*

*Our approach in teaching has a serious impact on learning.*

*When we see ourselves or adults struggling later in the workplace, we have to admit that what we/they were taught during those long class sessions over multiple years, was not only forgotten, but also failed to support them with the skills needed in the workplace.*

# Workplace needs CBL

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This is what children and teens need to learn in schools and at home before they head towards their universities. These early years set foundation for understanding, which is the first major component needed for a person to learn about something.

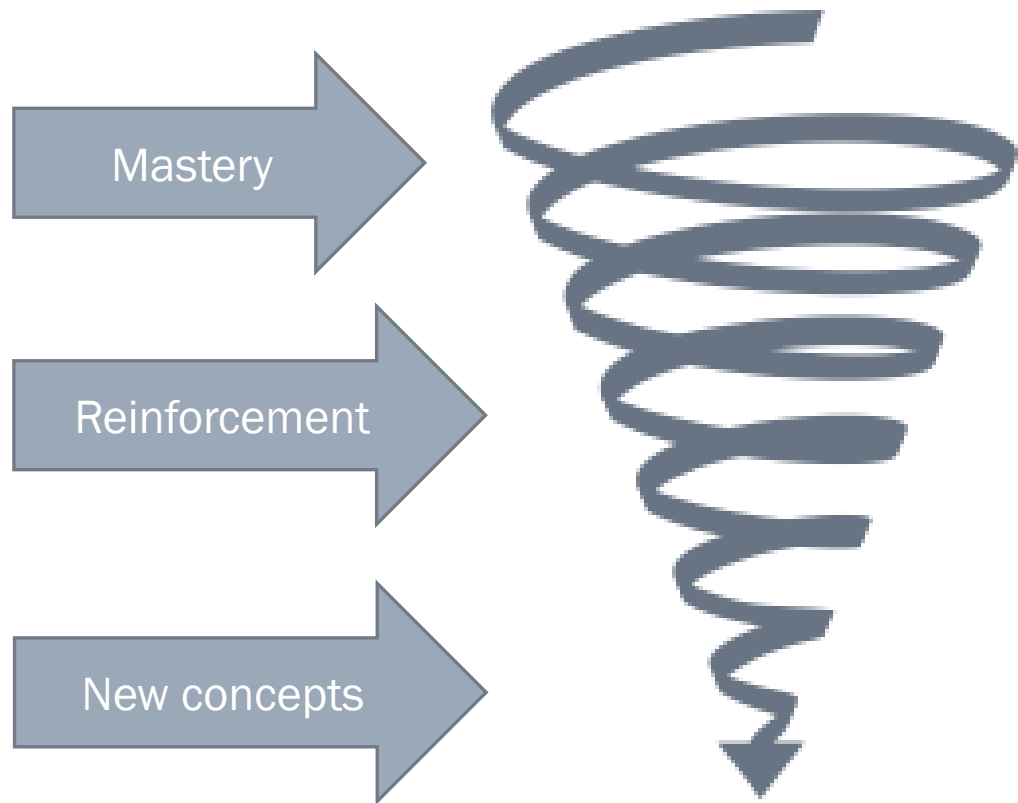
Considering the heterogeneous canvas of subject matters, language arts, mathematics, sciences, and that of the workplace with all its diversities, the level of understanding will need to be deeper and more complex. That is why application is the second major component.

In this context learning is not that of a unit/chapter title, a lesson, or a topic. It is the understanding of a concept. H. Lynn Erickson, Ed.D., defines concept as “mental construct that frames a set of examples sharing common attributes; timeless, universal, and abstract to varying degrees, Ex. Cycles, diversity, and interdependence.”

She also defines conceptual lens, what we also refer to as conceptual understanding, as “a concept serving as a conceptual focus, for a topic-based study. Pulls thinking to a conceptual level and integrates thinking between the factual and conceptual levels.”

# Concept-based Understanding

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Also referred to as “spiral” understanding, a feature of “spiral” curriculum. As shown in the figure, learners start their journey in simple understanding, that proceeds and grows, proceeds and grows, until the learner achieves mastery.

This growth is mainly evolving from the knowledge level to the conceptual level. This is where thinking becomes deeper and more integrated. This is the level, which prepares learners to be future innovators and inventors. It is the level when learners can understand the abstract world around us.

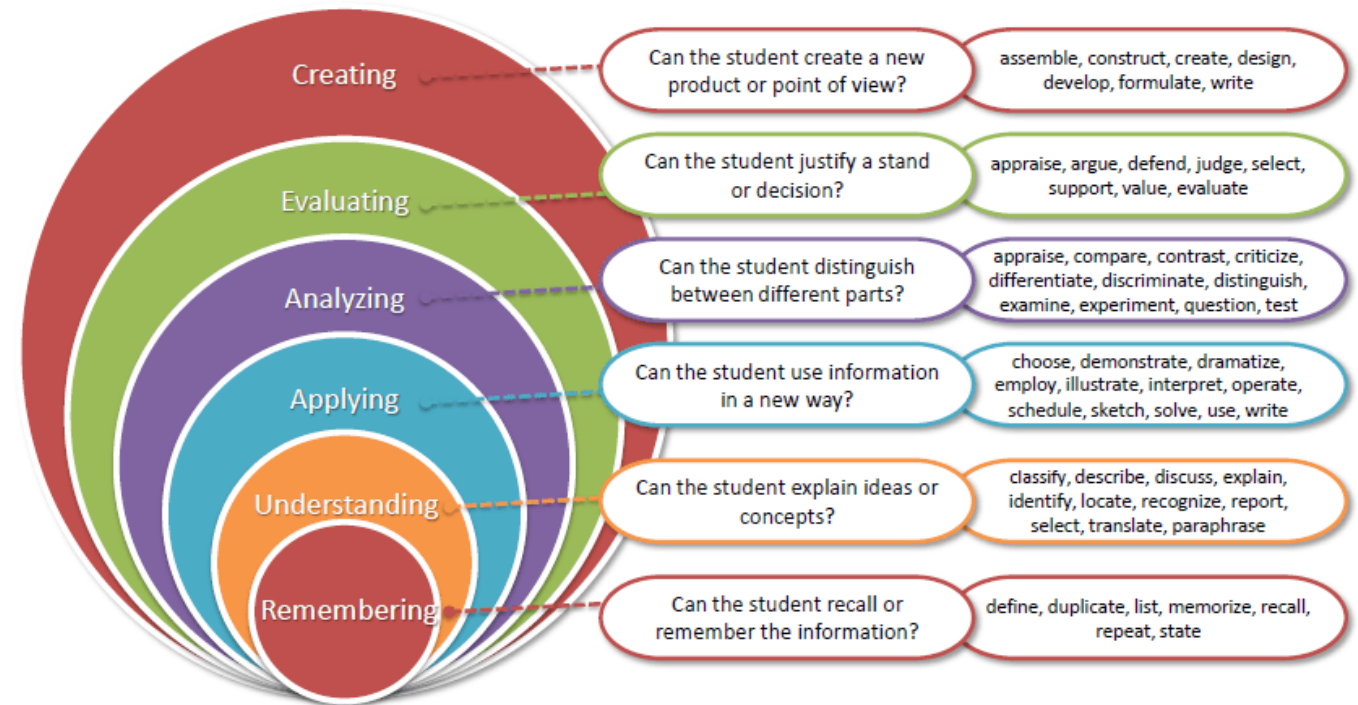
It is important to note that few areas still include fact-based knowledge, such as names of people, history related information, etc..

Deeper means relating the facts learned to the world around us, with all its conditions, phenomena, and capacity to expand.

This means learning is not limited to subject matters, such as language arts, mathematics, science, and other subjects, including art, music, and PE. Being limited to subjects forces learners to see the themes within identified dimensions, set by the curriculum standards of that same subject.

Bloom's Taxonomy verbs set the first steps for raising the level of learning away from mere understanding of facts. It set the stage for a deeper level. However, it does not always guarantee the full expected deep understanding.

## Bloom's Taxonomy (Revised)



# Concept-based Lesson Planning

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Based on what was mentioned, it is easier to conclude that lesson planning is not the regular planning of facts that will be spoken to learners in the class, when they are the passive listeners and the teachers the passive speakers.

It is the role of the teachers first to understand that approach is not the traditional approach and that they must be open to new methods and strategies to reach full potential of every opportunity. There is a wealth of resources that teachers can deploy and a wealth of knowledge, which they can learn themselves to deeply practice something different and deeper with their learners. They must be ready to push boundaries and explore new horizons in their planning.

As they plan, teachers do not resort to textbooks and practice books in their lesson plans. As they plan, they are not looking through fixed sources. They expand to bring forth opportunities that transcend what they know.

Subjects, such as mathematics and sciences, are usually complicated since they are abstract and handle hard formulas. Teachers can deploy a pedagogical method, contextual knowledge, which is based on contexts. These are the real-life simple experiences, that learners see around them. These experiences are tangible perceptions. Therefore, learners can easily relate to them.

One condition is that teachers should prepare experiences that the learners are aware of. In other words, those that match their age level of understanding and surrounding. Since the teacher wants to connect the concept to a context, it is not wise to connect to something that they have never heard of, seen, or experienced.

Lesson plans should avoid long time and hard effort wasted on collecting and jamming information, facts, definitions, and Q/A respectively, especially teacher talk. Effective lesson planning can be vastly inclusive of strategies and designs that foster conceptual understanding.

Teachers know that the goal is the learning outcome – learners' engagement, proactiveness, and the long-term goal, potential development.







# Concept-based Instruction

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Instruction is not the mundane, traditional way of teaching. Instruction should not be by rote. On the contrary, it should involve productive approaches to understanding and learning.

Biology, physics, and chemistry classes become interactive and infusive of excitement as teachers incorporate such strategies in their lessons:

- Role-playing
- Visual imagery
- Peer discussions
- Experimentation
- Illustrations
- Presentations including, for example, the simple show and tell

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When concept-based learning is targeted at transferring knowledge through concepts, instruction underpins more student engagement. Instruction does not depend on the teacher, but rather on the methodologies and approaches taken by the teachers.

The teachers provide opportunities for the learners to collaborate and exchange their ideas as they explore the contexts and the concepts. They learn to listen and to speak, to pay attention to peers and patterns.

Teachers channel the learners' scheme of work.



# IS

# &

# IS NOT

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<b>Concept-based learning is...</b>	<b>Concept-based learning is NOT...</b>
understanding of concepts	understanding of topics
about transferring knowledge	about fixed facts
about making connections	about isolating themes and ideas
experimenting and practicing	theoretical
unlimited questioning	passive listening
multisensory	limited to paper and pencil

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