The Four Stages of Competence and the Role of Applied Learning Activities Welcome.

Understanding the stages of competence is important for educators because teaching and learning is about moving a learner from one stage to the next.

Evaluating competence always begs the question, "Competent for what?"

A physician's assistant may be competent for diagnosing some conditions, but may be incompetent when it comes to more complex problems.

For this reason, novice learners and even experts who take on the challenge of an unfamiliar area of study will pass through four stages of competence, which I have heard many speakers present.

The Four Stages of Competence are:

- Unconscious incompetence
- Conscious incompetence
- Conscious competence
- Unconscious competence

Unconscious incompetence is when learners have no idea of just how incompetent they are.

My experience with this was on a family trip when I drove past a factory with what appeared to be condensing water vapor billowing from several stacks.

My wife asked me, "What do you think is made in that factory?"

Before I could offer a guess, our four year-old said with absolute confidence, <PAUSE with IMAGE> "Clouds."

I looked at our nine-year-old daughter and we both shook our head slowly.

We knew the effort to convince her otherwise would have been in vain, especially since all of the visual evidence was in her favor.

Our four-year-old daughter was unconscious of her incompetence.

Conscious incompetence is when learners have learned enough to realize there is much that they do not know.

In this phase, learners are faced with the choice of either working hard to develop competence, or working even harder to conceal their incompetence.

In the *Cloud Factory* above, our consciously incompetent *nine year-old* daughter did not know what the factory produced, though she was absolutely certain it was not clouds.

Conscious competence is the **reward of hard work and successful practice**, and is not based on pride and arrogance.

This competence is based on personal ability with an appreciation of one's current limitations.

Finally, unconscious competence is the result of hard work and successful practice to the point that **performance has become automated** below awareness.

Someone with this level of competence does not have to consciously think about a cognitive task when it is performed.

This does not mean, however, that their brain is not working, it just means it does not have to consult the much slower language and awareness sections.

Problems arise, however, when an expert with *unconscious competence* is asked **to explain to a novice how a particular cognitive task was accomplished**.

This is a daily event for educators who are routinely confronted with the **challenge of transferring their expertise to learners**.

Moving a learner from *conscious incompetence* to *conscious competence* is a gradual process that requires a series of incremental steps.

Applied learning activities can be used to advance this process.

Early activities should focus on remembering and understanding facts and concepts, while subsequent activities build upon this competence, and focus on **applying that understanding to real-world cases and scenarios**.

As such, each learning activity should take into account its targeted learner's current level of competence with regard to knowledge and thinking skills.

And from this beginning point of understanding, each applied learning activity can be designed to move learners to the next incremental step of competence.

As I will discuss later in the video on Cognitive Load Theory, each activity should impose a manageable amount of mental work

because cognitive load demands that are unmanageable by learners, bring about frustration,

detract from learning,

and transform a Learn, Think, and Do environment into one of Memorize, Recall, and Spew.

In the next video I will discuss Mental Schemas.

A mental schema is a network of related facts, concepts, relationships, and cognitive processes that an individual has built over time for understanding and solving problems.

A significant component of the difference in competence among individuals is the depth, breadth, and ability to appropriately activate relevant sections of their mental schemas when confronted with a problem.

The Applied Learning Platform is used by educators to construct a set of exercises, cases, and scenarios that learners can work through in order to build, exercise, and reinforce their mental schemas.