

Educational Support Cell (ESC)

TLDE

Tips & Strategies

Making Learning Visible: How Do We Know They Are Learning?

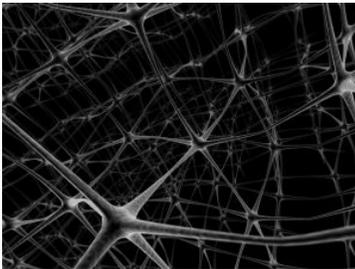
Not a bad question to ask oneself as a person involved with the SWCS. We **<insert one>** [teach, instruct, coach, mentor], but ultimately, we desire to have our students leave us, somehow changed (for the better). How do we know that has occurred?

Well, if students have learned something new, they go away somehow changed. So how do we determine that learning has occurred? The intuitive answer is: **by an assessment**. Make it formal or informal. Have it count for a grade or not. Make it individual feedback or group competition. Assess what students understand; assess what they know. Give them a test to take, a problem to solve, or a person to influence. If they are successful, then they have learned. *[refer back to Tips 10 to remind yourself that if you did not give a pre-assessment prior to instruction, then you really cannot determine if what you taught made this difference.]*

This may be the case, but the secret to being an effective Instructor is to determine whether your students are learning on a consistent and regular basis.

What Does Learning Look Like?

Let's back up a step. We have been mulling over "are students learning", but what



does learning really look like? Most learning remains relatively invisible and happens in the confines of one's brain. Typically, we cannot see it. Scientifically, learning demonstrates the brain's functioning by growing or adding to neural networks. Think of your mind as a large network. Brain cells grow dendrites, and the more dendrites

you grow, the more knowledge or memory you have. Dendrites network with other brain cells (neurons) through synapses to form neural networks. As you receive information, you make connections between what you know already and what you experience currently. Physically, this process means that your brain will grow dendrites or maybe make connections. The more you use and revisit these networks, the stronger they become—like super highways. The less you use or visit the learning, or the less you learned actually from the start, the weaker you are in that content. Your network will resemble a deer path in a grassy field. Finally, if you do not have any prior knowledge or experiences for a new piece of information, then your brain may fail to register it at all.

The ESC provides support for the uniform application of SWCS educational processes across the Institution to include:

-Support to Curriculum & Instruction [Courses and Instructors];

-Support to Leadership & Professional Development Initiatives;

-Support to the development and implementation of program evaluation and assessment systems; and

-Support to the design and implementation of SOF Career Pathways.

For more information, contact Mr. Geoff Jones at geojones@soc.mil, (910) 396-2518.

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In considering my own brain structure, I like to believe I have a strong, active neural network regarding the topic of education. Also, I would like to think I am developing more dendrites or strengthening the neural pathways I have already as I attend conferences, read, observe others, and practice the art of teaching. But if handed a firearm, my brain would scramble to determine how to use it. My neural files regarding knowledge and skills in that area function on a very thin scope, relegated to what I have seen in movies and what I have observed others do in marksmanship drills...My neural pathway to access information regarding how to zero—or even fire that gun—would resemble a neural deer path (or worse).

Making Learning Visible

As learners ourselves, we need to use or consider actively the new information and experiences that we experience in order to grow dendrites and strengthen neural networks.

As Instructors, we need to give our learners the opportunity to do this on a regular basis. To make the learning visible, we need to determine if our learners absorb the information we present. This means that we need to have our learners **Do Something**. Of course, the obvious manifestation of *Do Something* consists of having learners perform the task at hand. When learners *Do Something*, the Instructor maintains a good check on if the

Don't just give students information to use, make them use the information you give.

skill has seeded and informs what additional information to address. Other less obvious strategies include discussions and writing. Giving learners time to talk about what they learn serves a good method for growing dendrites. This discussion could involve a person nearby, not necessarily a whole class discussion. Having a quick discussion with a buddy on a topic

means that everyone in the class either talks or listens—much more effective than a typical class exchange when one student responds to the Instructor and half the class tunes out. Also, having learners write something prior to discussing strengthens this learning method. The writing process forces a person to consider and then formulate a response to the issue at hand, and these actions stimulate more brain activity than just speaking.

To summarize, encouraging learners to speak or write during class exercises allows what they have learned to become visible and permits the Instructor to determine how to adjust the next step of the lesson to grow strong neural networks more effectively. Additionally, coming back to that learning at different junctures in time remains critical for creating the Neural Super Highways we want our Soldiers to possess.

7 Strategies for Making Learning Visible

Have your students write down and/or discuss:

1. The most important concept they have heard in the last 10 minutes.
2. The top 3 most critical ideas to remember from the previous discussion.
3. Something they would like to know more about.
4. A connection they can make between what they have learned and what they know already.
5. A way to use this skill that was not covered in the class.
6. The similarities between the new information and something they know already.
7. How they plan to apply the new skill or concept in the future.