



Learning vs Developing

By Ed Meyer

Students are supposed to learn in school. A popular question that is asked of school children is, “what did you learn in school today?”

Learning certainly is good. I love to learn new interesting things - about evolution, about history, about physics.

In school, the focus is on learning because it is easy to measure whether a student knows something. For example, the names of the three branches of government, the names of the seven phases of cell division, and the rule for multiplying fractions.

There are many ways to learn, you can learn by listening to a teacher, you can learn by reading a book, and you can learn by searching the internet. Of course, all these sources of information must be legitimate if true learning is to occur.

This type of education leaves out the ability to struggle for a long time with a difficult problem that requires creativity, logical reasoning, and the generation of new ideas. I call this part developing. Developing the mental stamina to struggle mightily with new, challenging, complex problems and the creativity and critical thinking skills to come up with new ideas that solve them.

The brain can't develop mental strength, and mental stamina and the ability to generate creative ideas that solve challenging problems by searching the internet, by listening to a teacher, or by reading a book. The only way to develop the ability to generate creative ideas that solve challenging problems is to struggle to generate creative ideas that solve challenging problems. That is, you must practice.

Learning and developing are very different processes and they occur in different parts of the brain.

It is important that both of these parts of the brain are developed because real world problem-solving requires two things. Knowledge about the problem

and the mental strength, mental stamina, and critical thinking skills needed to solve it.

According to the website HHS.gov (health and human services of the United States Government),

As adolescents go to school, live, and work, the brain trims down the extra growth based on the parts of the brain the adolescent actively uses.

The brain strengthens the connections that are used by wrapping a special fatty tissue around the cells to protect and insulate them.

So, the parts of the brain that are used will develop and the parts of the brain that are not used will atrophy.

As a recruiter at Imperial Chemical Industries (ICI) I interviewed many fresh college graduates whose frontal lobe had atrophied. This affliction is easy to spot, as they respond to a challenging problem with phrases like, “I have never seen a problem like this before,” “I don't know what I'm supposed to do,” “Can you give me a hint?”

They have lost the ability think hard to figure things out for themselves because that part of their brain was pruned. Whenever they didn't know what to do, a teacher or a parent was there to tell them. As a result, they became very good at doing what they were told, but they did not develop the ability to figure things out for themselves because they were never required to sit and struggle to figure things out for themselves.

A complete education should involve both learning and development. If students never have to struggle with challenging problems, they will not develop the ability to struggle with challenging problems. If students never have to discover things for themselves, they will lose the ability to have the AHA! moment that comes with independently reaching a new level of understanding.





Knight – Joker – Spy Mental Development Opportunities

By Ed Meyer

There is one Knight, one Joker and one Spy among Mr. Blue, Mr. Red, and Mr. Green. The Knight can't lie, the Joker can't tell the truth and the Spy can say anything. Identify all three. The solution is unique.

The problems require some thought, but as Voltaire says, "No problem can withstand the assault of sustained thinking."


For more problems, follow Ed on X.

https://twitter.com/Gedanken_Inst/


Mr. Red is the Knight.



Mr. Green is the Joker.




Exactly one of those statements is true.




The logical IF-THEN Statement

The logical IF-THEN statement is true only if the IF part is true and the THEN part is false. If the THEN part is true, the entire statement is true irrespective of the veracity of the IF part. If the IF part is false, the entire statement is logically true irrespective of the veracity of the THEN part. For example, "if the Earth were flat, ships could sail off the edge," is a logically true statement.

If you asked Mr Green if I were the Knight, he would say no.



If you asked Mr Green if I were the Knight, he would say yes.



The Spy is telling the truth.






Quoteacrostic of the Month

By Ed Meyer

Instructions: Fill in the words at the bottom from the clues. Then write those letters in the grid at the top to reveal an appropriate quote. Black squares indicate the end of a word, and punctuation has been removed. When you're done, the first letters of the answers to the clues, from top to bottom, will be the author of the quote.

QUOTE

1L	2F		3K	4I	5L		6M	7F	8B	9A	10C		11I	12G	13M
	14E	15I	16F	17B		18A	19L	20J	21C		22H	23I	24E		
25I	26K	27D	28L		29E	30A	31H	32J							
33C	34I	35D	36B	37A	38I	39G	40M		41D	42A	43G	44F			
45A	46E	47J		48D	49M	50G	51H		52I	53C					
54F	55B	56L	57E	58B		59E	60M	61K		62D	63F	64K	65G	66M	

CLUES

A. Rich and minerally

9 30 37 18 42 45

B. Word after gas, night, and high

8 55 36 17 58

C. Chooses

53 33 21 10

D. Santa's pole

27 35 62 41 48

E. Forms words without speaking

29 46 24 59 57 14

F. Remove shackles

7 44 16 63 2 54

G. Start the volleyball match

39 43 12 50 65

H. Anthem lyricist

31 51 22

I. Ask for assistance

34 38 11 25 4 23 15 52

J. Dubai location

47 20 32

K. Delayed

64 26 3 61

L. The black one of fifteen

5 1 56 19 28

M. Large-bladed scissors

40 60 13 49 6 66

