

## Article Info

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## A Spotlight on Physiology Teaching: Crossing the Bridges and Building the Channels in Teacher-Student Communication

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**EDITORIAL ARTICLE**

Physiology is a life science and is the core to understand many other sciences that deal with the living body. Effective medical physiology teaching is essential for all the medical and the para-medical candidates. A basic, as well as, main part of teaching is to cross the bridges and create good interaction channels with the students. This teacher-student communication is not based only on the communicable skills of the teacher or her/his knowledge and experience. Yet, there are other integral factors that could maximize the outcome of the learning process if applied in the correct way.

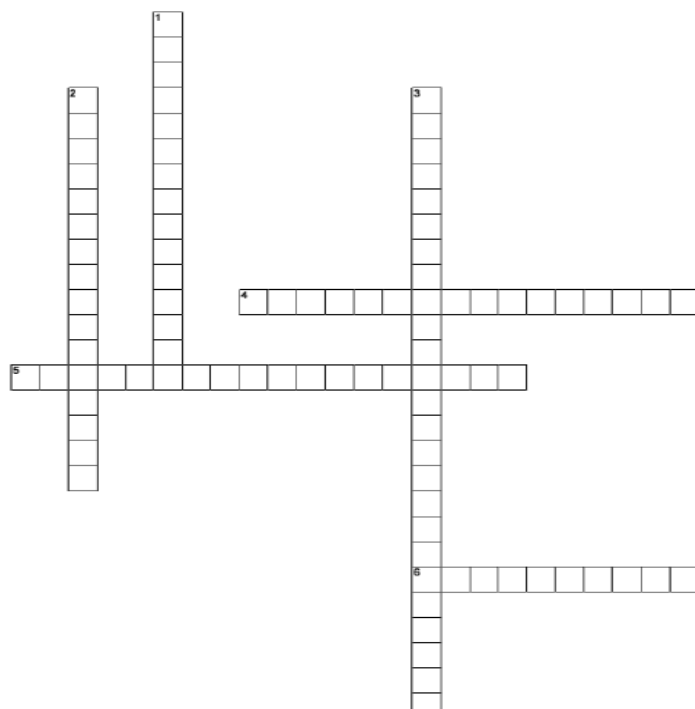
Improvement and promotion of the teaching process doesn't necessarily require high level of facilities or expensive instruments. It may just need a passion, insistence and patience to promote and upgrade the teaching process by the simple, free or of low cost available facilities. One example is transforming the usual lecture into an interactive one by involving a story or a miniature role playing acted by the students themselves, especially when there is a sophisticated or a confusing part in the lesson. Another example is the recent incentive approach that involves games such as puzzles in learning. Exploiting the students' talents by asking them to create projects related to physiology is of great importance and is a simple feasible method in stimulating and enhancing the higher thinking abilities and creativity. This approach could include building demonstrating models by simple environmental materials, drawing illustrative diagrams, writing stories related to a specific topic or making illustrative videos by simple programs.

New technologies play a crucial role in physiology learning and greatly in accord with the needs of the students. When complemented with some sort of enthusiasm, these methods may give excellent results. The modern technology-based education may be student-centered, teacher-centered, or a mixture of both. Example of teacher-centered technology is the

interactive and creative utilization of the Microsoft Power Point presentations, rather than being just a slide show, and using creative illustrating videos and animations. The student-based technology may involve the utilization of the virtual labs and asking the students to build electronic infographic summaries or visual abstracts, and mind or concept maps for a chosen topic. These methods motivate the students and stimulate higher levels of thinking and integration of the learned information which is greatly needed in understanding physiology.

Mixing the previously mentioned approaches could give better outcomes due to the resultant interaction. These interactive methods include flipped classrooms, online applications for recruiting the students to specific events such as scientific competitions, the teacher-student contact via social media platforms and by online interactive games such as puzzles and cross-words by the teacher to test the student's understanding.

The technology era and the availability of the online sources of knowledge represent a challenge as it may lead to deceiving thoughts regarding the importance of the face-to-face communication between teacher and the students. The integration and productive communication between the teacher and the students enforce the important role of the teacher in the learning process and force the students to communicate and interact pleasantly. A hidden and paramount outcome of such interaction is that it builds up the students' ability to think, analyze, integrate, summarize, display and co-operate. Furthermore, this interactive approach adds to the students' skills as they will learn inevitably how to communicate, interact and form a team work. Additionally, and importantly these methods enhance the creative abilities of the students even with the limited facilities. The Aforementioned ideas are in consistence with the known quote of Benjamin Franklin "Tell me and I forget. Teach me and I remember. Involve me and I learn".



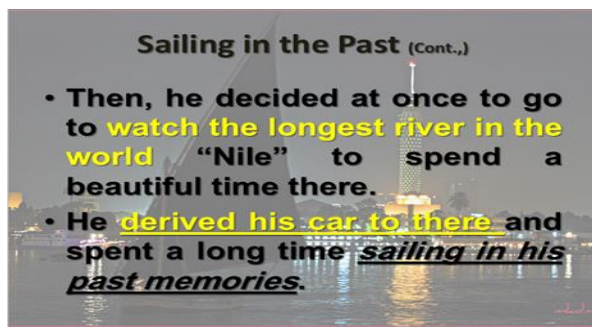
**Across:**

4. Activates cyclic AMP and protein kinase A (PK-A)
5. Lead to rapid enzymatic activation using G-protein family
6. Slow enzymatic synthesis via Genomic mechanisms

**Down:**

1. Activates cyclic GMP and Protein kinase G (PK-G)
2. cAMP, cGMP, Phospholipase C
3. Stimulated by inositol triphosphate (IP3)

An example of a cross word puzzle created to test the students' understanding and knowledge regarding the mechanism of action of hormones



A part of a story regarding the different types of memory. This part is concerned with the semantic, episodic, and procedural memories. The story is associated by a background related to this part of the story.

## CONFLICT OF INTEREST

There is no conflict of interest.

## REFERENCES

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