

## The Science of Successful Learning

**Embrace difficulties**

The more effort required to retrieve, the more learning takes place.

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**To learn, retrieve**

Periodic practice and testing strengthens retrieval routes. Test yourself rather than constantly re-reading notes.

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**STEP 01**



**Avoid illusions of knowing**

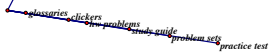
Familiarity is not mastery. We are drawn to immediate, short-term gains, not slower, effortful, long-term retention.

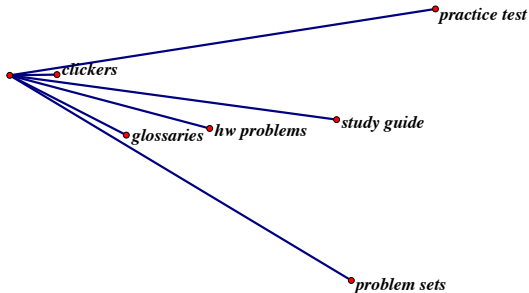
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**STEP 02**



**Space it out, mix it up**





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**STEP 02**



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**STEP 03**



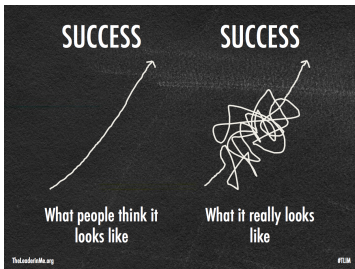
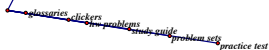


Image 2 Credit: Phil B <https://educationcogitation.com/tag/science/>  
*Make It Stick: The Science of Successful Learning* by Brown and McDaniel

Image 3 <https://mathequalslove.blogspot.com/p/free-classroom-posters.html>

Image 4 <https://www.leaderinme.org/blog/the-power-of-a-growth-mindset/>