

Letters of Interest Submission



Contribution ID: 38

Type: **not specified**

Learn to make mistakes

Enhance creativity and problem solving by learning to make mistakes

Risk taking and creative expressions without boundaries are a part of essential youth development. Who has not fallen from a tree or burnt their hands on a stove. Africa the youngest continent in the world (almost 60% are under the age of 25). Advancement of science largely relies on youth (enthusiasm, intrinsic curiosity playful creativity are youthful properties). The real advancement of science is done by its workhorses: the PhD students. If Africa can embrace this and recognize it as its most valuable resource, science can soar. In a continent where many cultures often teach that old is better than young, a lack of confidence and a lack of error tolerance however often stifles cooperation, creativity and persistence.

One probably has heard of the expression: "Most winners have probably failed more often than losers ever tried". We should start teaching Africans on how to make mistakes. Creativity, problem solving and persistence are all best learnt that way.

I would like to propose a "trying and failing day", once per month at primary and junior high schools of Africa. Maybe also do something similar in college, adapted to the target audience. On these days, no matter the task (whether it be homework, experiments or field trips), the number of times a child tries and not the number of times he/she succeeds is celebrated or rewarded. There is no competition, but cooperation. Teachers are not supposed to intervene even when asked, unless for class order issues or real safety situations.

Examples of activities children/students could do:

- Recreate a recipe from the finished (food) product. (bread, lemonade, stew)
- Make a technical drawing of an everyday object (door lock, television, bicycle) with as much details as possible of its operation.
- Lego without instructions
- Puzzles
- Competitive geography guessing games (where does this food come from, and why)
- Building a (mini) house using real bricks and cement without instructions
- Honest evaluation exercises where a child is stimulated to share how making mistakes has led to solutions.
- Talk by the teacher (or another adult) who tells and illustrates a couple of mistakes he/she has made in life.

I am convinced that learning how to make mistakes, how to deal with them and how to problem solve will advance science and scientific thinking on the continent in the long term. It will also build character, and enhance cooperation, creativity and persistence.

My Tunisian startup laboratoirelaser.com gives courses for young and old on how to use mistakes to become better researchers.

Primary Category

Physics Education

Secondary Category

Community Engagement

Subgroup categories

NONE

Did you / will you submit this LOI to another category?

NO

Additional Information

This LoI is about general scientific methods principles.

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