LEARNING AS INVESTIGATION AND DISCOVERY

LYASHENKO T.V.
Odessa State Academy of Civil Engineering and Architecture, Odessa, Ukraine

There is no doubt that the more interested the students are in the subject they are teached, the better. This is especially important under conditions of weak or blurred motivation. So, the teachers constantly look for and use a variety of techniques that could increase the interest.

There are the games for this or that disciplines, even with money participating (as when one should guess the value of correlation coefficient looking at the points on the generated scatterplot). The great variety of videos that help in teaching are now available. "Dancing statistics" is such an example (https://youtu.be/dr1DynUzjq0?list=PLCkLQOAPOtT2H1hJRUxUYOxThRwfVI9jI).

Among the techniques that could increase the interest of students, there may probably be the one indicated in the title of this note.

Acquiring knowledge requires work and efforts, of course. But if this work brings pleasure the process would be more efficient.

One's own discovery should be placed at the higher part of the pleasures scale. Could it be possible, feasible, realistic, useful, rational to configure the students to perceive their study as a research process?

Each educational work, from the current local task to the coursework and the graduate thesis, can be considered as research, starting from the formulation of the problem, the choice of solution methods (basics, rules, and formulas of the corresponding discipline), to the analysis of the results. And the solution found will become a discovery and will bring true satisfaction.

It could even be a detective story. The initial data serve as evidences. The "detective" has at his disposal a set of discipline’s tools, which make it possible to identify the "criminal", that is, to find the solution of the task.

The proposed universal approach to the process of acquiring knowledge essentially presupposes its high quality. It can contribute to expanding the students worldview and to strengthening the faith in their own capabilities and prospects.

The following quote from the great Indian-American scientist C. Radhakrishna Rao is appropriate as a conclusion.

"Knowledge is what we know, also, what we know we do not know.

We discover what we do not know essentially by what we know.

Thus knowledge expands.

With more knowledge we come to know more of what we do not know.

Thus knowledge expands endlessly."