

O diagram

Name: _____

Class: _____

Theory and practice are closely related, just like what we know about one thing and how we deal with it are closely related. This integration of theory and practice is particularly important in professional setting. This exercise helps you to avoid the trap of following procedures without understanding them.

Important messages of the O diagram:

1. Doing evolves around thinking.
2. Conclusion of an experiment should be a response to the hypothesis or question set at the beginning.
3. The conclusion of one investigation can become the hypothesis of the next. Thus, the pursuit of knowledge never ends.

How to use?

1. Before the laboratory class, write inside the circle all theories and key concepts that you can think of that are relevant to the experiment going to be carried out during the class.
2. Work anti-clockwise through the circle, from hypothesis to conclusion.
3. As you carry out the experiment, record on the outside of the circle the steps you've taken, and write the reason for each step inside the circle, adjacent to the steps. If a reason is already in the circle (e.g. a theory you've written down before the experiment), draw a line to link the step to it.

