Workshop series on Academic Writing & Logical Thinking at the library 2017 3<sup>rd</sup> & 4<sup>th</sup> Workshops – How to use logic practically

# <u>1. What is a convincing support?</u>

Oxford Dictionary of English defines the adjective, "convincing", as "capable of causing someone to believe that something is true". Accordingly, a convincing support for a thesis statement is the one by which someone can come to believe that the thesis statement is true.

## 2. Convincing support and logical argument

Logical argumentation is the necessary means to building a convincing support. In order to know how to build a convincing support, it is necessary to know how to build a logical argument.

## 3. What is a logical argument?

A logical argument is basically a combinatorial product of premise and conclusion, connected in way that exhibits *an inferential relation*. Consider the following example:

- (1) Peter is either at his office or at his apartment.
- (2) Peter is not at his office.
- (3) Peter is at his apartment.

Premise serves as a supporting ground or reason for inferring a conclusion. Conclusion, accordingly, is affirmed or proven by its supporting premise or premises. Inferential relation between a premise and conclusion is the heart of a logical argument as well as convincing support.

## 4. Two main kinds of logical argument

## (1) Deductive argument

In a deductive argument, the inferential relation between the argument's conclusion and its premise(s) exhibits an absolute necessity. In other words, the conclusion is claimed to follow from its premises with 100% certainty.

## (2) Inductive argument

In an inductive argument, the inferential relation between the argument's conclusion and its premise(s) exhibits only a probability. In other words, the conclusion is claimed to follow from its premise(s) with less than 100% certainty.

## 5. The importance of logical reasoning

Apart from being convincing, there are other reasons to study logical reasoning. One important reason is to make a better sense of the information perceived through our five senses. We cannot get all the information about the world through our senses, therefore we need to think, and think logically.

## 6. Exercises on logical inference

There are two parts of the exercises on making logical inference, part A and B. Part A is designed to train you how to make a proper inference based on a premise. Part B is designed to train you how to find the proper premise for a conclusion.