# RESEARCH Scientific research work and students' research activity



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### NOTION OF "RESEARCH ACTIVITY"



Research activity is one of the forms of human activity based on interest, cognitive factor, active attitude to the world, desire to alter and improve surrounding environment.

Research activity is a type of work aimed at solving of a creative or scientific problem. The research conclusions are usually formed as a system of notions, laws, theories etc.



#### **Study Research Activity**

Students' research activity is a specially organized study creative activity which has a similar structure as formal scientific activity and is characterized by precise goal setting, cognitive bias, and consciousness. The outcome of students' research activity is forming of cognitive motives, research skills, and new effective work practices.

- The purposes of a study research activity are
- using of a research skill as a common way of understanding,
  - developing of research mentality,
- forming of an active life position based on new knowledge acquired.

The new knowledge is supposed to have personal value for a student and be obtained independently.



### Definition of Research Work

Research work is a scientific work characterized by special scientific search and conducting of experiments in order to extend and obtain new knowledge, verify hypothesis, discover regularities both natural and social as well as to set scientific generalizations and give scientific base to certain projects.

(Economic Dictionary, 2010)



### Definition of Research Work

Research paper is a scientific work connected with conducting experiments in the purpose of extending existing and receiving new knowledge, verifying scientific hypothesis, discovering regularities both natural and social, scientific generalizations and giving scholar base to projects.

(Economics and Law: reference dictionary L.P. Kurakov, V.L. Kurakov, A. L. Kurakov. 2004)



### Definition of Research Work

Scientific works connected with search, conducting experiments and researches in the purpose of obtaining new knowledge, verifying hypothesis, setting patterns and scientific base of projects.

(Business Terms Dictionary, 2001).

#### **TYPES OF RESEARCH:**



#### FUNDAMENTAL RESEARCH WORK



SEARCH RESEARCH WORK



**APPLIED RESEARCH WORK** 

### Fundamental research

- Extension of theoretical knowledge
- Obtaining new scientific data about processes, phenomena, regularities in specific sphere
  - Using scientific base, methods and principles.

### Search Research

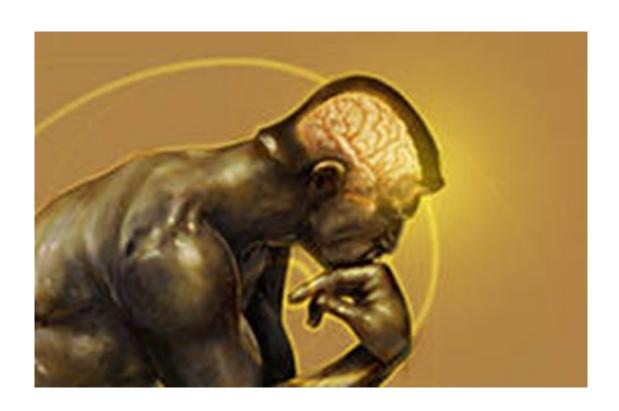
- EXTENSION OF KNOWLEDGE FOR DIPPER COMPREHENSION OF SPECIFIC PHENOMENON - WORKING OUT OF PROGNOSIS FOR SCIENCE AND TECHNOLOGY DEVELOPMENT DISCOVERING WAYS FOR NEW PHENOMENA AND REGULARITIES APPLICATION

### **Applied Research**

- SOLVING OF SPECIFIC SCIENTIFIC PROBLEMS FOR CREATION OF NEW ITEMS

- OBTAINING RECOMMENDATIONS, INSTRUCTIONS, CALCULATIONS AND METHODOLOGY FOR SPECIFIC TECHNICAL TASK.

### Methodological recommendations for writing a research paper



### **Selection of Topic**

When selecting a topic for your research paper it is necessary to consider its urgency as well as a number of reference and literary sources.

A formulation of a title should be precise and concrete. The title should reflect the content of the work logically connected with a purpose of the research.



### Types of research papers

Research papers are divided into two major types depending on their form and volume

#### 1. Report

#### 2. Research thesis

#### Report

It is a research dedicated to certain narrow topic which includes a few published scientific sources. A report is supposed to contain analyses of different viewpoints on a subject in question, and eventually it should present an author's opinion about the problem. A report usually contains 20-30 pages.

A research thesis is a research dedicated to certain narrow topic which includes along with scientific sources some documentaries both published and not published. It is supposed to contain certain theory or hypothesis which should be proved by mean of practical experiments conducted by the author. Depending on its purpose a thesis might contain from 40 up to 300 pages.

Both types of research papers are valuable, however research thesis has more significance.

### Structure of research paper:

Research paper has a precise structure including:

- → plan
- introduction
- text of the research devided into parts, chapters, paragraphs
  - → Conclusion
  - List of references
  - List of literature
  - Appendixes

### **Introduction**

The introduction includes a statement of purpose of the research which describes goals, objectives and problems to be solved. An author should prove the urgency of the research, set its time frame, give a brief overview of scientific and literary sources underlying the most valuable for the given research.



### Text of the Research

The text of the research should correspond to the topic stated by the author and not exceed the time frame stated in the introduction.

One should not include the well-known facts into the work. For example, describing the medical activity of doctors during the Stalingrad battle you should not describe a history of the whole World War II. A number of well-known facts included in the research might shade some novelties which you discovered during your work. The author should highlight some new interesting and unusual things. The text itself should be logically structured within the whole work.

### **Conclusion**

The conclusion contains outcomes made by the author

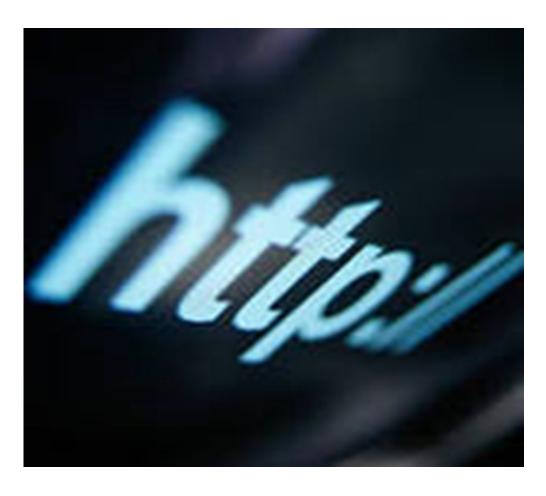
The outcomes should be logically connected with the goals and purpose of the research stated in the introduction.

You should define whether you have reached the stated objective or not.



### Lists of References and Literature

The lists of references and literature should contain all sources and books which you used for the research in the alphabetic order. All sources should necessarely include a publisher's imprint.



### **Appendixes**

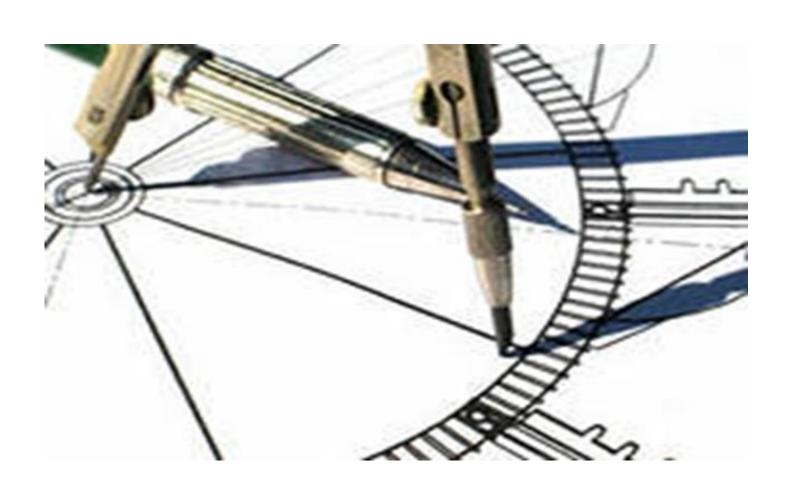
The appendixes should be carefully selected and demonstrate the most outstanding points of your work.

The appendixes might include the copies of some rare photos, documentaries, different tables, charts, drawings logically connected to the research.

The text of the work should give a reference to a certain appendix.



# Stages of Writing a Research Paper



### Stage 1.

## A topic of the research is defined

### Stage 2.

You should define to what extent your selected topic is supplied by scientific and literary sources and which aspects of the topic have not been researched yet.

### Stage 3.

## A goal and objectives of the research are stated.

### Stage 4.

A working plan of the research is drown up.

#### Please note:

When making a plan an author defines a list of questions to be answered during a research. The plan usually contains not more than 3 chapters. Each chapter is usually divided into paragraphs (not more than 3-4).

The titles of chapters and paragraphs should be clearly formulated.

### Stage 5.

# Analytical work with literature and scientific sources is being undertaken.

#### Please note:

While analyzing scientific literature you might use the following scheme:

- an author, a brief reference about him;
- a problem which the author states in his work;
- sources which support the given research;
- main ideas and concepts suggested by the author;
- conclusions made by the author;
- your opinion on the given work.

### Stage 6.

## A draft text of the research is written.

### Stage 7.

# A final forming of the work structure is made.

### Stage 8.

A topic of the research is finally stated according to the result of the work.

### Stage 9.

## A final variant of the research text is written down.

# «What to start a research paper from?»

This topic will be revealed at our next class.

# Thank you for your attention!

