

Action Research Project Plan

In addition to the course requirements of the Group B courses, one credit worth of time (15 hours) will be spent working on the completion of the Action Research Project. Time will be spent locating and reading research- or practitioner-based journal articles in mathematics education. Additionally, a written paper will be required at the conclusion of the course that is designed to apply directly to the Action Research Project.

Group B Course 1 Requirements:

Locate and read at least 4 research- or practitioner-based journal articles related to an aspect of mathematics education that you are interested in examining or improving in your own situation.

Write a beginning draft of the Introduction of the Action Research Project, including

Purpose of action research

- Describe the motivation for improving your own situation.

Description of the innovation

- Describe the planned innovation to improve your own situation.

Goals of the innovation

- Describe the potential objectives and goals of the innovation.
- Describe how these goals are aligned with state/national mathematics standards.

Description of the setting

- Describe the setting in which the innovation will be applied, including the following:
 - demographics of students (e.g., ages, ability challenges);
 - classroom environment (e.g., resources, materials, limitations, subject);
 - other relevant contextual information (e.g., political or community influences).

Group B Course 2 Requirements:

Locate and read at least 4 research- or practitioner-based journal articles related to an aspect of mathematics education that you are interested in examining or improving in your own situation.

Write a beginning draft of the Review of Literature of the Action Research Project, including

Educational significance of the action research

- Describe the need in your situation for the innovation.
- Describe how your need relates to the educational needs of your colleagues as presented in the journal articles you have read.

Definition of variables

- Describe all of the variables or factors involved in the implementation of the innovation

Research questions

- Describe the questions you hope to answer in the Action Research Project.
- Describe how these questions related to the information you have read in the journal articles.

Group B Course 3 Requirements:

Write a beginning draft of the Plan of Action of the Action Research Project, including

Summary of the plan of action

- Describe the innovation you want to implement as a plan of action.

Alignment of materials with the plan of action

- Describe the materials that you will need to implement your plan of action, including the materials you will need to create and the materials that are available.

Reliability and Validity of Instruments

- Describe how you plan to assess the innovation you plan to implement.
- Describe how you know that the assessment is reliable.
- Describe how you know that the assessment is valid.

Self Assessment

- Describe how you plan to assess yourself during the plan of action.

MED 600 Course Requirements:

Collect data from at least one source (such as a survey or observation) related to an aspect of mathematics education that you are interested in examining or improving in your own situation.

Write a beginning draft of the Data Analysis of the Action Research Project, including

Credibility of evidence

- Present data and data analysis that is compelling enough to draw appropriate conclusions.

Objectivity of evidence

- Present data and data analyses that provide an adequate basis for conclusions that reflect unbiased findings rather than an invention of the teacher researcher's preconceptions.

Transferability of evidence

- Present data and data analyses that provide enough description to determine whether the conclusions might be found for the teacher researcher in a similar context in the future.