B. Ed (4Years) Distance and Non-formal Education

MANUAL
CAPSTONE PROJECT

COURSE CODE: 6311

Department of Distance, Non-formal and Continuing Education
Faculty of Education
ALLAMA IQBAL OPEN UNIVERSITY

MANUAL

CAPSTONE PROJECT

Specialization in

B.Ed (4 Years) Distance and Non-Formal Education

Course Code: 6311

DEPARTMENT OF DISTANCE, NON-FORMAL AND CONTINUING EDUCATION

FACULTY OF EDUCATION

ALLAMA IQBAL OPEN UNIVERSITY ISLAMABAD

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Manual

CAPSTONE PROJECT

B.Ed 4 Years

Specialization in

DISTANCE AND NON-FORMAL EDUCATION

Code No: 6311

Name: _____

Roll No: _____

Registration No: _____

Semester: _____

Region: _____

Theme: _____

Sub-theme: _____

Topic: _____

_____

Department of Distance, Non-formal and Continuing Education

FACULTY OF EDUCATION

ALLAMA IQBAL OPEN UNIVERSITY ISLAMABAD

DECLARATION

(To be filled and signed by the student)

I _____ Daughter/Son of: .....

Roll Number/Id: ..... Registration No: .....

is a student of the B.Ed Program (4 Year) Specialization in Distance and Non-formal Education, do hereby declare that the Capstone Project titled .....

Submitted by me in partial fulfillment of the B.Ed 4 Year program, is my original work and has not been submitted or published earlier. I solemnly declare that it shall not, in future, be submitted for obtaining any other degree from this or any other University or Institution.

I also understand the plagiarism policy of AIOU and HEC and if any work is found to beplagiarized or copied from someone other(s) work at any stage, even after award of the degree, the work may be cancelled, and the degree may be confiscated.

Signature of the Student

Date: .....

Name of the Student

COURSE TEAM

Chairman: Dr. Muhammad Athar Hussain
Distance, Non-formal and Continuing Education Department, AIOU, Islamabad

Course Development Coordinator: Dr. Naila Naseer
Distance, Non-formal and Continuing Education Department, AIOU, Islamabad

Members:

1. Dr. Sidra Rizwan
2. Dr. Hamid Ali Nadeem

Course Coordinator: Dr. Naila Naseer
Editor: Fazal Karim

Capstone Project Evaluation Performa

Sr.No.	Sections	Marks	Obtained
A	**Background of the study**		
-	Why did you select this topic? Describe the variables in your topic.	5+5=10	
-	Review the literature and identify the gap regarding the problem under your consideration	10	
-	What were the objectives/ purpose of the study according to the nature of your research problem?	05	
-	What research questions/ hypotheses did you formulate to achieve the above stated objectives/purpose of the study?	05	
B	**Methodology**		
-	Describe the research approach and design of the study.	05	
-	What is the population of your study? OR Who were the participants in your study?	05	
-	Discuss the sample and sampling technique/ selection criteria according to the nature of the study.	05	
-	Describe the details of tool selection/development. Further report the validity and reliability of the tool.	5+5+5=15	
-	Describe the stepwise procedure of treatment/intervention and data collection.	10	
C	**Analyses and Interpretation/Findings**		
-	Give analyses according to the stated objectives, research questions/hypotheses. (In the form of tables, numeric data/thematic analysis/ descriptions)	15	
D	**Conclusions & Recommendations**		
-	What were the conclusions of your study?	05	
-	Give recommendations on their basis?	05	
E	**References**		
-	Write a reference for all the citations mentioned in different sections of the project. (Follow APA Manual-7th Edition)	05	
	Total	**100**	

CONTENT LIST

1. Need for and Importance of the Course .....
2. Course Description .....
3. Purpose of the Capstone Project .....
4. Course Learning Outcomes .....
5. Course Structure .....
6. Teaching Learning Methodology .....
7. Evaluation of the Capstone Project Report .....

1. Need for and Importance of this Course

Educational research is a systematic attempt to get a better understanding of the educational process, with a view to improving its efficiency and quality. Educational research is an application of the scientific method, which involves the study of educational problems. The spread of educational research is quite broad - philosophy of teaching, educational psychology, pedagogy, policy, assessment, teaching strategies, classroom management and organization, and development are some of the important areas of research in Distance, Non-formal and Continuing Education.

In the present scenario, the role of a secondary school teacher as a researcher has been accredited. Education is considered a science with a distinct body of knowledge. Educational development is dependent upon the creation of new knowledge, so there is a need to explore new dimensions of knowledge to bring about improvement in the field of education. The acquisition of scientific knowledge requires innovative ways of teaching, learning, assessment, evaluation and others. In the field of education, with every passing day, new problems, issues and trends are emerging. Now is the time to resolve these issues and solve the problems of education through empirical research. This is the era of knowledge explosion and with it, the concepts of education are changing that demands scientific research. The past two decades have experienced great changes as a result of rapid scientific and technological development. Education has to play a pivotal role in the smooth acceptance of change by the masses. The process of rapid change is accompanied by problems that are evident in the area of teacher education. This capstone project is a hands-on practice for students to apply the scientific method and solve educational problems.

2. Course Description

The purpose of the capstone project Code (6311) is to engage prospective teachers who are enrolled in the B.Ed. 4-year program in the research process. A capstone project helps them to understand a particular problem or phenomenon, along with strengthening their comprehension of the research process. They get first-hand knowledge about:

(a) how the steps of the research process are interlinked,

(b) developing an understanding and appreciation of how knowledge evolves, and

(c) contributing to the existing body of knowledge.

(d) applying research knowledge in problem solving and real-life situations.

It is common perception that the teacher education in Pakistan lacks practical research work, and more

focus is on theoretical knowledge. No doubt, theoretical knowledge should be linked with classroom practices to make the teacher education programs more effective. The role of the teacher as a researcher is being accentuated to find the solution to daily problems. The Higher Education Commission of Pakistan suggested some radical changes in the teacher education programs. To incorporate the suggestions of the HEC, Allama Iqbal Open University has decided to equip its prospective teachers with skills-based practical work under the supervision of experienced and highly qualified teachers. A research project is one of such offerings to the students, which will provide them with some basic skills for being an effective teacher. It is designed to provide them with a critical approach, scientific attitude and reflective thinking. In the previous semesters, the students were offered 'Educational Research & Statistics', and 'Teaching Practice'. The experiences from these courses will help the students to build the narrative and complete the research project. Keeping in view the importance of research in the professional life of teachers, universities of developed countries have made research an imperative part of teacher education programs. To set a higher quality of pre-service teacher education in Pakistan, Allama Iqbal Open University has also made it mandatory for B.Ed students to conduct a research and write a report.

We have already learnt that research is a way of solving educational problems by adopting scientific methods. It provides prompt solutions that are valid and reliable. Basically, research is conducted to identify the problems related to the field of secondary education. Nowadays, adolescents are mostly enrolled in secondary classes; the nature of problems is diverse at this stage. So, being skilled in conducting research is important for becoming an effective teacher.

3. Purpose of the Capstone Project

A capstone project is a culminating assignment that students typically complete at the end of an academic program, such as in high school, college, or graduate school. It is designed to encourage students to use the knowledge and skills they've gained throughout their studies to solve a real-world problem or complete a comprehensive research or practical project. A capstone project is a multifaceted, final assignment that serves as a student's academic and intellectual experience "capstone" or crowning achievement. It often involves research, problem-solving, critical thinking, and communication skills.

The purposes of the capstone project are as follows:

- to engage prospective teachers in research by following all steps of scientific research and making them able to develop a research report.
- To synthesize learning from multiple courses or subjects.

- To demonstrate mastery of key concepts and skills.
- To apply knowledge to a real-world issue or project.
- To prepare for professional work or further academic study.

4. Course Learning Outcomes

Prospective teachers will be able to:

- identify the importance of scientific research.
- identify educational problems related to the teaching and learning process at the secondary level.
- describe the variables involved in the research.
- develop a scientific plan to solve the problem.
- review the related literature to know how others solved similar problems.
- review the literature to find the gap for the problem under study.
- identify the research methodology according to the nature of the study.
- develop research instrument(s) i.e. questionnaire, observation, interview etc.
- administer the research instruments to gather data.
- analyze the obtained data qualitatively or quantitatively.
- draw conclusions based on the analysis of data.
- write a summary of the research procedure.
- develop a research report according to APA style.
- format the research report according to the guidelines of the APA manual.
- format the research report according to the guidelines of the APA manual.

5. Course Structure

This course is a compulsory component of B.Ed. 4-year Specialization in Distance and Non-formal Education. This course comprises three credit hours. It is of a practical nature based on field work. The following components will determine the structure of the capstone project code 6311 B.Ed 4Years.

1. The Capstone Project shall carry three credits.
2. Six days workshop shall be arranged by the University to understand the procedure of the capstone project.
3. Four out of six days of attendance in the workshop are mandatory for all the students.
4. The resource person for the workshop will be the supervisor of that research group. The student shall work under the guidance of the supervisor from the workshop till the submission of the capstone project.
5. The student shall finalize the topic and submit it to the supervisor, preferably within 15 days after the workshop, for approval.

   The proposal must comprise of:

   - Student's details (Name, Father's name, ID, Email, Phone number, Semester, Program, Supervisor)
   - Topic/ Title of the Capstone Project
   - Objectives
   - Research Questions/Hypotheses
   - Brief description about population, sample and research tool/s.

6. The format for the capstone project will be according to the approved guidelines by the university.
7. The Supervisor will be expected to:
   - Guide in designing and co-coordinating the project.
   - Approval of the topic submitted by the student.
   - Monitor students' progress throughout the stipulated research period by the university.
   - Check and provide feedback for improvement in drafts of the project.
   - The supervisor will maintain the progress report according to the documents received, reviewed and sign off on each student.
8. The maximum period for completing the capstone project shall be three months.
9. The student will be required to maintain progress under the guidance of the supervisor throughout the period of research work, beginning with the workshop, approval of the topic, till the final submission.
10. On completion of the research, the student will submit/upload a typed/ composed copy of the project on the LMS portal.
11. The LMS portal will be active for the capstone project submission only for those students who have qualified the attendance criteria given in Sr No 3.
12. The student will be required to abide by the format and style as specified below:

    - Titles of the research, font style Times New Roman, Size 14 and Bold
    - Section headings, font style Times New Roman, Size 12 and Bold
    - Questions under each section, font style Times New Roman, Size 12 and Bold
    - Any other subheadings should be presented in order according to the related question. Example: For answering question 1 the subheadings may proceed as 1.1, 1.2, 1.3 and so on.
    - Page size A-4 with 1-inch margins on all 4 sides.
    - Page numbers should be inserted at the bottom in the middle of the page.
    - Tables and figures should have proper titles and numbers as per APA format.
    - The research manual will be evaluated based on the quality of work and marks will be awarded according to the marking scheme/ marks mentioned in each section of the manual.
    - The research report will be written only in the English language. Languages other than English will not be accepted.
    - Capstone Projects will not be evaluated by the same supervisors.
    - Resource persons or Coordinators may supervise the students. The coordinators'/ resource persons' qualifications should be the same as those of the supervisor.
    - Workshop or project work may be monitored by the Department of Distance, Non-formal and Continuing Education, Allama Iqbal Open University.

Who can supervise, coordinate, or teach?

The prospective teachers will complete the Capstone Project under the guidance of a supervisor. Supervisors may be people who are coordinating the workshop or acting as a resource person. It will be mandatory that the supervisor has at least an MS/M.Phil's degree in Education.

6. Teaching –Learning Methodology

The Capstone project is different from the development of a lesson plan and teaching practice. The Capstone Project is an activity-based course with a focus on the development of research skills. Mostly scientific research develops skills like identification of problems, posing questions, gathering data, interpretation of data, reflecting on the data, interpretation and decision making for suggesting the solution of the problem. Teaching –learning methodology includes workshops, field work, meetings with supervisors and an evaluation process.

Selection of the Topic

The students will be given the liberty to choose any area of interest from the field of education, especially focusing on Distance, Non-formal and Continuing Education. The topics will be decided in consultation with the resource persons/supervisors during the workshop.

SCHEDULE OF WORKSHOP 6311

	Topics	Title	Timing
Day 1	Topic 1	Introduction to Capstone Project	02 hours
	Topic 2	Types of Capstone Projects in Education	
	Topic 3	Identifying the Research Problem	
	Topic 4	Description of Variables and Operationalizing the Terms	
	Topic 5	Background and Rationale of the Study	
Day 2	Topic 1	Objectives/ ResearchQuestions	02 hours
	Topic 2	Review of Related Literature	
	Topic 3	Sources of Locating Related Literature, Citing It and Using the APA Manual	
	Topic 4	Research Methodology Qualitative & Quantitative	
	Topic 5	Discussion on Individual Work	
Day 3	Topic 1	Population & Sample Selection Techniques	02 hours
	Topic 2	Instruments of Data Collection	
	Topic 3	Procedure of Intervention and Data Collection Tools and Techniques.	
	Topic 4	Data Analysis (Statistical Data Analysis)	
	Topic 5	Group Activities	
Day 4	Topic 1	Introduction on Writing Summary, Results, Discussions and Recommendations	02 hours
	Topic 2	Research Proposal/Synopsis &its Components	
	Topic 3	Finalization of Topics	
	Topic 4	Finalization of Topics	
	Topic 5	Finalization of Topics	
Day 5	Topic 1	Presentations of the Students/Corrections	02 hours
	Topic 2	Presentations of the Students/Corrections	
	Topic 3	Presentations of the Students/Corrections	

	Topic 4	Presentations of the Students/Corrections	
	Topic 5	Presentations of the Students/Corrections	
Day 6	Topic 1	Presentations of the Students/Corrections	02 hours
	Topic 2	Presentations of the Students/Corrections	
	Topic 3	Presentations of the Students/Corrections	
	Topic 4	Presentations of the Students/Corrections	
	Topic 5	Presentations of the Students/Corrections	

Evaluation of the Project Report

Sr.No	**Components**	**Total Marks**	
2	Complete Capstone project	100	Graded by an external evaluator
		100	

Note: Passing 50% aggregate

Capstone Project External Evaluation Performa

Sr.No.	Sections	Marks	Obtained
A	**Background of the study**		
-	Why did you select this topic? Describe the variables in your topic.	5+5=10	
-	Review the literature and identify the gap regarding the problem under your consideration	05	
-	What were the objectives/ purpose of the study according to the nature of your research problem?	05	
-	What research questions/ hypotheses did you formulate to achieve the above-stated objectives/purpose of the study?	05	
B	**Methodology**		
-	Describe the research approach and design of the study.	5+5=10	
-	What is the population of your study? OR Who were the participants in your study?	05	
-	Discuss the sample and sampling technique/ selection criteria according to the nature of the study.	05	
-	Describe the details of tool selection/development.	5+5+5=15	

	Further report the validity and reliability of the tool.		
-	Describe the stepwise procedure of treatment/intervention and data collection.	10	
C	**Analyses and Interpretation/Findings**		
-	Give analyses according to the stated objectives, research questions/hypotheses. (In the form of tables, numeric data/thematic analysis/ descriptions)	15	
D	**Conclusions & Recommendations**		
-	What were the conclusions of your study?	5	
-	Give recommendations on their basis?	5	
E	**References**		
-	Write a reference for all the citations mentioned in different sections of the project. (Follow APA Manual-7th Edition)	5	
	Total	**100**	

The students are expected to prepare a project report answering the following questions section-wise. The grading mentioned above contains the weightage of every section/question.

Semester: .....

Topic: .....

.....

.....

SECTION A- BACKGROUND OF THE STUDY

Q 1. Why did you select this topic? Describe the variables in your topic. (5+5=10)

Ans:

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Q 2. Review the literature and identify the gap regarding the problem under your consideration (consult books, articles or websites) (05)
(Explore books and online resources to find what and how much work has already been done regarding this problem. Use APA style for citation and referencing.

Ans:

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Q 3. What were the objectives/ purpose of the study according to the nature of your research problem? (05)

Ans:

Q 4. What research questions/ hypotheses did you formulate to achieve the above-stated objectives/purpose of the study? (05)

Ans:

SECTION-B METHODOLOGY

Q 5. Describe the research approach and design of the study? (10)

Ans:

Q 6. What is the population of your study? OR Who were the participants in your study? (05)

Ans:

Q 7. Discuss the sample and sampling technique/ selection criteria according to the nature of the study. (05)

Ans:

Q 8. Describe the details of tool selection/development. Further report the validity and reliability of the tool. (5+5+5=15)

Ans:

Q 9. Describe the stepwise procedure of treatment/intervention and data collection. (10)

Ans:

SECTION C - ANALYSES AND INTERPRETATION/FINDINGS

Q 10. Give analyses according to the stated objectives, research questions/hypotheses. (In the form of tables, numeric data/thematic analysis/ descriptions) (15)

Ans:

SECTION D- CONCLUSIONS & RECOMMENDATIONS

Q 11. What were the conclusions of your study? (05)

Ans:

Q 12. Give recommendations based on your conclusions? (05)

Ans:

SECTION E - REFERENCES

Q 13. Write a reference to all the citations mentioned in different sections of the project. (Follow APA Manual-7th Edition) (05)

Ans: