

MANUAL RESEARCH PROJECT

B.Ed (1.5 Year/4 Year) Special Education

Course Code: 8452

Name: _____

Roll No: _____

Registration No: _____

Semester: _____

Region: _____

Theme: _____

Sub-theme: _____

Topic: _____



Department of Special Education

FACULTY OF EDUCATION

ALLAMA IQBAL OPEN UNIVERSITY ISLAMABAD

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1. COURSE DESCRIPTION

Teacher education in Pakistan has been criticized for being too content-focused and lacking practical experience. To make teacher education programs more effective, it is important to link theoretical knowledge with classroom practices. The Higher Education Commission of Pakistan has proposed major changes to these programs. In response, Allama Iqbal Open University is helping student teachers acquire practical skills under the guidance of experienced and qualified teachers. One way to do this is through research projects that aim to provide students with the fundamental skills to be effective teachers in the classroom. The research projects encourage critical thinking, scientific attitudes, and reflective reflection. For the students of a special education program, this approach is even more helpful in the development of such essential skills. Special education teachers must be able to accommodate a variety of learning needs and write Individualized Educational Plans (IEPs) for students with disabilities. Integrating practical experience with theoretical knowledge allows future teachers to apply learned strategies and techniques in real-life situations. This hands-on training is essential to understanding and addressing the unique challenges faced by students with special needs. Research projects for special education students are designed using specific effective methodologies and interventions in special education settings. This exploration not only improves their problem-solving skills but also prepares them to create inclusive and supportive classroom environments. They learn to use evidence-based methods to improve learning outcomes for students with disabilities. The emphasis on practical experience combined with rigorous academic training prepares graduates to meet the demands of the special education classroom and make positive contributions to the field.

Action research is a way of solving local problems using scientific methods. Teachers often face various problems during teaching and at work. Action research offers robust solutions to these problems at the classroom and school level. Researching action learning is a key step to becoming a better teacher. Universities in developed countries have recognized the importance of action research and are incorporating it into their teacher training programs. To improve pre-service teacher training in Pakistan, the Allama Iqbal Open University requires its undergraduate students to work on research projects and write reports. This project helps student teachers to understand the use of scientific method to solve classroom problems. Action research is especially valuable for special education students. Special education teachers face unique challenges, including serving a wide range of disabilities and educational needs. Action research allows these teachers to develop, test, and refine instructional strategies and interventions adapted to their specific classroom contexts. This process not only improves students' problem-solving skills but also deepens their understanding of their students' needs.

Integrating action research into the undergraduate curriculum. Special education programs ensure that in-service teachers learn how to systematically explore and solve problems such as improving nonverbal students' communication skills, resolving behavioral problems, and effectively integrating assistive technology. By participating in action research, special education student teachers at Allama Iqbal Open University gain first-hand experience conducting research that leads to practical, evidence-based solutions. These experiences are essential to developing their ability to make informed decisions and adapt their teaching methods to best serve their students. It also promotes a culture of continuous improvement and reflective practice, which are essential qualities for success in special education. Ultimately, the action research component prepares student teachers to become innovative and effective educators. They learn to approach classroom challenges with a scientific mindset, ensuring instructional strategies are research-based and tailored to the individual needs of their students. This rigorous training makes them advocates for best practices in special education and contributes to the overall improvement of educational outcomes for students with disabilities.

Because "context" is important in action research and the results should not be generalized. This study focuses on the researcher's background. Critical questions in action research are often framed using personal pronouns like "I" and "my," such as "How can I improve reading skills at the primary level?" or "How can my teaching develop higher-order thinking among students at the elementary level?" Focusing on one's context provides insights into classroom and institutional practices. Another key aspect of action research is the 'reflection' of the student-teacher. Action research should be meaningful and provide valuable lessons that will be useful in their future teaching careers. It helps student teachers learn the scientific method to solve professional problems instead of relying on trial and error. For B.Ed. Students. The importance of context and reflection in action research becomes even more salient in special education programs. Special education teachers work with students who have diverse and unique needs that require individualized attention tailored to their circumstances. When special education student teachers ask questions like, "How can I use visual aids to help my student with autism?" or, "What are my instructional strategies to help my student with ADHD stay focused?", they address specific challenges within their unique educational environment. This personalized approach ensures that research is directly applicable and beneficial for future research. Reflection in the context of special education is vital. Student teachers must continually evaluate and adapt their teaching methods to meet the changing needs of their students. Questions to consider are: "Which strategies were most effective for students with learning disabilities?" or "How can I improve my classroom management to better support students with emotional and behavioral disorders?" » Practice and Make Data-Informed Decisions: In action research, B.Ed. Special Education students learn to become reflective practitioners. They gain insights into how different strategies impact

their students' learning and behavior, allowing them to refine their approaches continuously. This reflective practice is essential for developing the adaptability and problem-solving skills necessary for effective special education teaching.

Additionally, the emphasis on context and reflection in action research helps special education student teachers build deeper connections with their students. Understanding and responding to the unique needs of each student promotes a supportive and inclusive classroom environment. This approach not only benefits the students but also enhances the professional growth of the teachers, making them more empathetic, responsive, and effective educators. Ultimately, the integration of context and reflection in action research equips B.Ed. Special Education students with the skills and knowledge needed to create positive and impactful learning experiences for their students. They learn with confidence to focus on the difficulties of special education, using real practices based on real data to solve problems and improve the results of all students. This strict and reflexive preparation guarantees that graduates are well-prepared to make a significant contribution to the field of special education.

2. COURSE LEARNING OUTCOMES

At the end of the course, student teachers will be able to:

1. Learn to connect what they have studied in books to real classroom situations, that may help them solve real problems in special education.
2. Use the scientific method to identify and correct problems encountered in the special education classroom.
3. Develop research questions and their solutions that fit their particular educational environment and their unique student needs.
4. Reflect on and evaluate their teaching methods, leading to continuous improvement.
5. Develop skills to question assumptions, evaluate information, and make informed decisions.
6. Work with peers and mentors to get an idea and comments, helping them develop professionally.
7. Conduct research at ethical points and guarantee that the conclusion deserves the confidence and respect of all participants.
8. Report their research in both writing and verbal presentations.
9. Use research to protect and attract special practice and special education policy.

3. INTRODUCTION TO THE RESEARCH PROJECT

The research project aims to involve future teachers in the action research process. Action research helps pre- service teachers begin the cycle of asking questions,

collecting data, reflecting on what they found, and deciding what to do next. A research project helps them understand a specific problem or situation and strengthens their understanding of the research process. Through this project, they learn first-hand how the stages of research are connected, develop an understanding of how knowledge develops, and contribute to the existing body of knowledge. For students in the special education program, this process is especially important. Special education teachers face unique challenges, such as understanding diverse learning needs and creating individualized education plans (IEPs). The research project allows these future teachers to explore and find solutions to specific special education problems, helping them to be more effective in their future classrooms. The goal of a research project is to solve a problem or improve local educational practice. The results of the action research project can provide immediate solutions to class or school problems. For special education, this means a search for methods to better support disabled students, whether it is an improvement in communication methods, behavioral management, or integration of auxiliary technologies.

What is NOT action research?

- Action research is not just a library project in which we study a topic theoretically.
- The goal of action research is not to find out what is wrong; it is about seeking knowledge about how to improve a particular practice or situation.
- Action research is not the study of people or individuals or the collection of all available information on a topic to find the right answers. This means those who work to improve skills, skills, and strategies.
- Action research is not to learn the reason for doing specific things. It's about finding ways to do things better and changing the way you teach to improve student learning.

In the context of special education, action research means finding practical solutions to help students with special needs. This could be about how to better engage students with autism, how to help students with ADHD focus, or how to make the classroom more accessible to students with disabilities. The goal is always to improve teaching practices and have a positive impact on student learning.

4. TEACHING-LEARNING METHODOLOGY

The research project is a course based on activities. Students end the research project under the leader's leadership. The supervisor must have at least an MPhil degree in special education. A person with an MPhil degree without a thesis is not eligible to be a supervisor. Those who have a degree in the field of natural sciences, engineering, agriculture, languages, art, and human sciences are not eligible to supervise this research project. In exceptional cases, a person PhD in the field of education and an M.A. / M.Ed. / B.Ed. in special education may supervise this

research project after the approval of the Chairman of the Department of Special Education. This approach allows future teachers to receive guidance from experts who understand the unique challenges and demands of special education. Leaders with special education expertise can provide better guidance and support to help in-service teachers develop effective strategies to meet the diverse needs of their future students.

Workshop

The workshop is essential for special education student teachers because it provides them with the foundational knowledge and skills they need to conduct practical research. They will learn how to develop research questions, collect and analyze data, and apply the results to improve their teaching practice. The online format of the workshop ensures accessibility to all students, including those with disabilities who may have difficulty attending classes in person.

- A 6-day workshop will be organized to train students on the concept and methodology of action research. During this workshop, a Resource Person will be provided to a group of students who will also work as a Supervisor for this research project.
- To make students engage in projects, the supervisor creates a WhatsApp group for the entire class.
- The students must secure 80% attendance in the workshop for the successful completion of the research project. Workshop classes will be held online through the portal being provided by the university.

Selection of Topic

- The Dean, of the Faculty of Education, will provide a theme and sub-themes for the research projects.
- The selection of a sub-theme (research topic) for each student will be decided by the student and their supervisor.
- Leaders must ensure that all subtopics are equally represented among students. For example, if a program has 25 students and eight subtopics, each subtopic should be selected by at least three students. This ensures that all subtopics are covered in a balanced way.

For special education, the theme and the sub-themes must cover the specialized needs of the students. This diversity guarantees that student teachers can explore the most relevant areas for their interests and future education.

Writing the Project Report

When writing a report on a project in special education, the students must focus on the research process, as a result, and the documentation of reflections. They explain the specific problems, the measures taken to study it, and how they decided on the

decision they developed. This exercise not only improves research and writing skills but also helps a practitioner who reflects the educational method.

- The students will complete their research within the given time and prepare a handwritten report on the manual of the project project (booklet). The report must be uploaded to the online portal for the assessment.
- Write the report easily and clearly. Stick to the given space and do not attach extra sheets.
- The report must be written in English. The report written in other languages receives a zero mark.
- Do not copy the report from another student. If the reports prove similar, all involved will receive a score of zero.

By participating in this research project, special education student teachers will learn valuable skills that will serve them throughout their careers. They use data to inform them of educational practice, effectively cooperate with their colleagues, and become wise to contribute to constant development in the special education field. This complex learning guarantees that they are ready to meet the various needs of future students and have a positive influence on schools and communities.

Roles of the Supervisor and the Student in the Research Project Supervisors:

Supervisors play a key role in guiding and supporting pre-service teachers throughout the research project. A detailed outline of their responsibilities is as follows:

- **Direction and Coaching:** Supervisors guide the action research process and help pre-service teachers understand how to develop research questions, collect and analyze data, and draw meaningful conclusions. They train students to apply their theoretical knowledge to practical classroom situations in the context of special education.
- **Topic Selection and Planning:** During the workshop, the supervisor will help students to select a research topic that matches their particular interests and educational needs. Ensure that each student's chosen topic contributes to the overall goal of improving teaching practice or solving a particular problem in education.
- **Progress monitoring:** Throughout the project, the supervisor will monitor each student's progress. They consider projects, provide constructive feedback, and ensure the maintenance of the research methodology and ethical standards. They help students navigate any problems that may arise in the research process.
- **Resources and Networks:** Supervisors connect student teachers to relevant resources, literature, and expert networks in the field of special education. They encourage students to explore different perspectives and methodologies

to enrich their research and broaden their understanding of effective teaching strategies.

- Final approval: The supervisor will approve the project's final report based on its clarity, depth of analysis, and adherence to research standards. These ensure that the findings and recommendations are practical and relevant to improving educational practice in special education.

Student Teachers:

Student teachers of the B.Ed. Special Education programs play an active role in conducting and reporting on research projects. Their main responsibilities are:

- Active Participation: Students are active participants in the action research process, from identifying the research problem to implementing the intervention and evaluating its effectiveness. They will demonstrate initiative by exploring innovative approaches to address the challenges of special education.
- Data Collection and Analysis: Students will collect relevant data using appropriate action research methods such as observations. They critically analyze data to identify patterns, trends, and insights that will inform their research findings and conclusions.
- Reflection and Learning: Throughout the project, students reflect on their experiences and learning outcomes. They evaluate the impact of interventions on student learning and behavior and promote continuous improvement of educational practices.
- Writing and Presentation: Students prepare a detailed project report that documents their research process, findings, and reflections. They will communicate research findings effectively in writing and orally, demonstrating clarity, consistency, and professionalism.
- Ethical Considerations: Students will adhere to ethical standards throughout their research projects and ensure the confidentiality and dignity of participants. They participate in research protocols and are looking for advice from their supervisors to work on ethical dilemmas, which may occur.
- Professional growth: By engaging in action research, students can develop as a practitioner of special education. They improve their critical thinking, solutions to communication problems, and skills, preparing them for a positive contribution to this field after obtaining the diploma.

Offering their relevant roles, managers and students collaborate to promote knowledge and practice in the field of special education, ultimately improving educational results for students with various training needs.

Role of the Directorate of Regional Services

The Directorate of Regional Services of Allama Iqbal Open University will play a

vital role in supporting research projects and seminars for students across the country. Here is how they contribute:

- **Group Organization:** Grouping students into groups so that each group has a maximum of 150 students. These groups facilitate effective learning and collaboration during the workshop and project phases.
- **Workshop Support:** Providing logistical support during the workshop and ensuring activities run smoothly. They help create a positive learning environment for student teachers so that they can actively participate in the learning process.
- **Estimation Assistance:** They assist in the estimation process by coordinating with supervisors and ensuring that all project reports are submitted according to specified guidelines and deadlines.
- **Supervisor Support:** Assist the assessment/evaluation process by ensuring the evaluation of a group will be done by the other supervisor. This guarantees fairness and consistency in the evaluation of student work in various regions.

By fulfilling these roles, the Directorate of Regional Services helps to ensure that research projects and seminars are well organized, accessible, and beneficial to all education students enrolled in undergraduate programs and special education programs at Allama Iqbal Open University.

5. ASSESSMENT OF PROJECT REPORT

The research project is a hands-on course designed specifically for special education students and does not involve a traditional final written exam. Instead, students will complete and submit a detailed project report on the online portal provided to each student by Allama Iqbal Open University.

Here's a detailed look at the assessment process:

Submission Requirements

Students must submit their project report within the given deadline along with the approval of their supervisor, as outlined in the project manual. The project without the supervisor's approval will not be accepted.

Workshop participation

Participation in the workshop where students discover the methodology of action research is mandatory. At least 80% attendance is required for students to submit a project report. The attendance itself does not contribute to the project note, but students need to acquire the knowledge and skills needed to conduct effective research on special education.

Evaluation process

The evaluation of the project report is led by other qualified supervisors who have been specially appointed for this purpose. These supervisors will evaluate the report based on several criteria, including clarity of the research question, rigor of the research methodology, depth of data analysis, and relevance of the results to improvements in instructional practices in special education.

Special Education Focus

Project reports should focus on solving a specific problem or improving special education practices. Topics may include inclusive education strategies, interventions for students with disabilities, innovations in teaching methods adapted to different learning needs, etc.

Submission Deadline

Students must adhere to the deadline set for the submission of their project reports. Timely submission ensures that the evaluation process can proceed smoothly and that students receive timely feedback on their work.

This assessment framework not only assesses students' understanding of action research principles but also encourages them to apply these principles to real-world challenges in special education. By completing this project, students demonstrate their commitment to contribute effectively to improving educational practice and outcomes for students with diverse learning needs.

TOPIC APPROVAL FORM

(Note: This form must be filled and signed on the last day of the 03-days workshop)

Student Name: _____

Registration Number: _____

Roll Number: _____

Programme: _____

Specialization: _____

Supervisor Name: _____

Theme _____

Sub-theme _____

Topic of Research Project: _____

Workshop Coordinator Signature: _____

(Name)

Supervisor Signature: _____

(Name)

Date of Approval of Topic: _____

DECLARATION

(To be filled and signed by the student and retained by the Controller of Examination)

I _____ Daughter / Son of _____

Roll No. _____ Registration No. _____,

a student of B.Ed Program (1.5 Year / 4 Years) in Special Education at Allama Iqbal Open University do hereby declare that the research project entitled

_____ submitted by me in partial fulfillment of B.Ed (1.5 Year / 4 Year) in the Special Education program is my original work and has not been submitted or published earlier. I also solemnly declare that it shall not, in the future, be submitted for obtaining any other degree from this or any other university or institution.

I also understand the zero-tolerance policy against plagiarism of the university and the HEC and if my work is found to be plagiarized or copied from someone other's work at any stage, even after the award of the degree, the work may be cancelled and the degree confiscated.

(Signature of the Student)

Date: _____

(Day-Month-Year)

(Name of the Student)

Research Project Submission Approval Form

(To be filled by the student; and signed by the supervisor and the RD)

This research project entitled _____

submitted by (student name) _____

Roll No. _____ Registration No. _____

The Program (1.5 Years or 4 Years) _____ was conducted under my supervision. I have read it and found it to be satisfactory regarding its originality, content, language, relevancy, consistency, citation and reference list. It is ready for submission for evaluation to Allama Iqbal Open University as a partial fulfillment of B.Ed (1.5 Year / 4 Year).

(Signature of the Supervisor)

Date: _____

(Day-Month-Year)

(Name of the Supervisor)

Certified that the student has completed at least 80% attendance and all required components of the workshop.

(Signature of the Regional Director)

Name of the School *(where the action research was conducted):*

The overall background of the participants of the project; area / school: *(socio-economic status, occupation / profession – earning trends of majority of the parents, literacy rate, academic quality, and any other special trait of the community where the school is situated)* **(10 Marks)**

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

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[illegible]

2. What was your discussion with your colleague / friend / senior teacher or supervisor regarding the problem? **(05 Marks)**
(Provide your discussion with your colleague or supervisor for a better understanding of the problem and alternate solutions)

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[illegible]

3. What did you find about the problem in the existing literature (books / articles / websites)? **(10 Marks)**
(Explore books and online resources to know what and how has been already done regarding this problem)

[illegible]

[illegible]

[illegible]

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4. What were the major variables / construct of your project? Give definitions / description from the literature. **(05 Marks)**
(What are the key terms in your topic or study? What do you mean by these terms? What particular meaning you will attach to the term when used in this project?)

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5. What did you want to achieve in this research project? **(05 Marks)**
(Objective / purpose of the study; what was the critical question that was tried to be answered in this project)

[illegible]

6. Who were the participants in your project? **(05 Marks)**
(Give details of the individuals or groups who were focused in this project e.g. the early-grade students whose handwriting in Urdu was not good or the students of class VIII who did not have good communication skills)

[illegible]

7. How did you try to solve the problem? **(10 Marks)**
(Narrate the process step-wise. The procedure of intervention and data collection)

[illegible]

[illegible]

[illegible]

8. What kind of instrument was used to collect the data? How was the instrument developed? **(05 Marks)**
(For example: observation, rating scale, interview, student work, portfolio, test, etc.)

39

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9. What were the findings and conclusion? (*Provide instruments and analysis as appendix*) **(10 Marks)**

[illegible]

[illegible]

[illegible]

[illegible]

10. Summary of the Project (05 Marks)
(What and how was the research conducted – main objective, process and findings)

10. Summary of the Project

(05 Marks)

(What and how was the research conducted – main objective, process and findings)

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[illegible]

11. How do you feel about this practice? What have you learnt? (self-reflection) **(10 Marks)**

[illegible]

[illegible]

12. What has it added to your professional skills as a teacher? **(05 Marks)**

[illegible]

[illegible]

13. List the works you cited in your project (follow the APA manual – 6th Edition). **(05 Marks)**
Examples of formats are available on websites.

[illegible]

[illegible]

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