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**A MIXED-METHODS APPROACH IN EDUCATIONAL RESEARCH:
QUESTIONNAIRE, DAIRY, CASE STUDIES AND FIELD NOTES IN
EDUCATIONAL RESEARCH**

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Annotation: This paper focuses on the use of four important research methods in educational studies: questionnaires, diaries, case studies, and field notes. It explains how each method contributes to understanding the teaching and learning process from different perspectives. Questionnaires are used to collect structured data from students and teachers, while diaries provide reflective and personal insights into learning experiences. Case studies allow for an in-depth examination of a specific classroom or group, and field notes help researchers observe real-time classroom interactions. The study highlights that combining these methods improves the reliability and validity of research through methodological triangulation. Overall, the paper shows that a mixed-methods approach provides a more complete and detailed understanding of educational environments.

Key words: Questionnaire, Diary, Case Study, Field Notes, Educational Research, Mixed Methods, Triangulation, Classroom Observation, Student Perception, Teacher Reflection.

Аннотация: Данная работа рассматривает четыре метода исследования в образовании: анкетирование, дневники, кейс-стади и полевые заметки. В ней объясняется, как анкетирование используется для сбора структурированных данных, дневники отражают личный опыт участников, кейс-стади позволяет провести глубокий анализ конкретного случая, а полевые заметки фиксируют наблюдения в реальной учебной среде. Показано, что сочетание этих методов повышает надежность и полноту исследования за счет триангуляции.

Ключевые слова: Анкетирование, дневник, кейс-стади, полевые заметки, образовательные исследования, смешанные методы, триангуляция, наблюдение в классе, восприятие студентов, рефлексия учителей.

Educational research is a complex field that requires the use of different methods in order to fully understand teaching and learning processes. According to Cohen, Manion, and Morrison (2018), no single method is sufficient on its own; therefore, combining different tools such as questionnaires, diaries, case studies, and field notes increases the quality and reliability of research findings. Questionnaires are one of the most commonly used instruments in educational studies.



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They allow researchers to collect structured data from a large number of participants in a short time. As Dörnyei (2007) explains, questionnaires are especially effective in language learning research because they can measure students' attitudes, motivation, and perceptions in a systematic way. However, while questionnaires provide useful quantitative data, they often fail to explain deeper reasons behind participants' responses. Diary studies offer a more reflective and qualitative perspective. In diary research, participants regularly record their thoughts, feelings, and learning experiences over time. Flick (2018) emphasizes that diaries are valuable because they capture personal and emotional aspects of learning that are usually not visible in structured instruments like questionnaires. In educational settings, diaries help researchers understand how students experience learning on a daily basis, although the data may sometimes be subjective and inconsistent.

Case study research focuses on a specific unit such as a classroom, group of students, or individual teacher. Yin (2018) explains that case studies are particularly useful for exploring real-life educational contexts in depth. This method allows researchers to combine multiple data sources, including questionnaires, diaries, and observations, to build a comprehensive understanding of the case. However, one limitation is that case study findings are often not generalizable to a larger population.

Field notes are an important part of qualitative classroom research. They are written observations collected during lessons, describing interactions between teachers and students, classroom behavior, and learning environments. According to Flick (2018), field notes are essential for capturing natural classroom dynamics that cannot be fully understood through self-reported data. They provide real-time evidence of teaching and learning processes, although they may be influenced by the researcher's interpretation. When these four methods are combined, they create a strong mixed-methods approach. Creswell and Creswell (2018) describe this as methodological triangulation, where different types of data are used to confirm and support each other. For example, questionnaire results can be compared with diary reflections, while field notes provide observational evidence, and case studies integrate all findings into one detailed analysis. This combination increases validity, reduces bias, and provides a more complete understanding of educational processes.

Overall, integrating questionnaires, diaries, case studies, and field notes creates a comprehensive framework for educational research. It allows researchers to analyze both quantitative and qualitative data, leading to more balanced and reliable conclusions.

Conclusion. In conclusion, the combination of questionnaires, diaries, case studies, and field notes provides a strong and effective approach to educational research. Each method contributes different types of data, from structured and measurable information to personal reflections and real-time classroom observations. When used together, they improve the validity and reliability of research through triangulation. This mixed-methods



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approach allows researchers to gain a more complete and balanced understanding of teaching and learning processes.

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