

DEVELOPING AND TESTING RESEARCH INSTRUMENTS

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Abstract: *In the field of education and research, the development and testing of research instruments are critical to gathering accurate, reliable, and meaningful data. Research instruments such as surveys, questionnaires, interviews, and observation tools form the foundation for data collection, enabling researchers to explore various phenomena systematically. In the context of language didactics, the effective design and testing of these instruments are particularly important as they provide insights into teaching methodologies, learner outcomes, and language acquisition processes.*

The development and testing of research instruments is a crucial step in conducting research in language didactics. This process ensures that the tools used for collecting data are effective, reliable, and suitable for answering the research questions.

Keywords: *research instruments, language didactics, teaching methods, learning processes, learning techniques*

Research instruments are tools used to collect data in language didactics, enabling researchers to study teaching methods, learning processes, and the overall effectiveness of language education. Proper selection and use of these instruments ensure the validity and reliability of research findings, ultimately contributing to better educational practices. Below is an overview of the most commonly used instruments in language didactics, along with their characteristics and applications.

Questionnaires are one of the most widely used instruments to collect data on participants' attitudes, opinions, and behaviors. They can be open-ended, closed-ended, or a combination of both. Questionnaires are cost-effective, easy to distribute, and suitable for collecting data from large groups. For example, they can be used to survey students' preferences for specific teaching methods, such as grammar-focused instruction.

Interviews provide in-depth insights into participants' experiences and perspectives. They can be structured, semi-structured, or unstructured, depending on the level of flexibility required. Interviews are particularly useful for exploring complex issues or obtaining detailed feedback from participants. For instance, researchers may interview teachers to understand their strategies for teaching vocabulary or managing multilingual classrooms.

Observation allows researchers to directly study classroom interactions and teaching practices in real-time. It can be structured, using checklists to record specific behaviors, or unstructured, relying on field notes for a more holistic view.

Observations are often used to study group dynamics or how students interact during language learning activities, such as collaborative writing or role-playing tasks.

Tests and assessments are used to evaluate learners' language proficiency or measure the effectiveness of a teaching intervention. These include pre-tests, post-tests, and diagnostic assessments that provide measurable outcomes. For instance, pre- and post-tests can determine whether a new approach to teaching pronunciation improves students' skills over time.

Focus groups involve discussions among a small group of participants to gather insights on shared experiences or perceptions. This instrument encourages diverse perspectives and often reveals issues that might not emerge in individual interviews. For example, focus groups can be used to explore students' opinions on a newly implemented speaking activity or digital learning platform.

Document analysis involves examining written materials such as textbooks, lesson plans, or student work. It is a non-intrusive method that provides valuable insights into the content and context of language instruction. For example, researchers might analyze textbooks to assess how cultural diversity is represented in the materials used for language learning.

Case studies offer a detailed examination of a single individual, group, or context over an extended period. This approach is particularly useful for exploring unique cases, such as the learning journey of a student with specific needs in a bilingual education setting. Case studies provide a comprehensive understanding of specific challenges and successes in language learning or teaching.

Audio and video recordings are used to capture classroom interactions or other language-related activities for detailed analysis. These recordings allow researchers to review and analyze verbal and non-verbal communication patterns. For example, they can be used to study the interaction between teachers and students during a lesson or to analyze students' pronunciation during a speaking task.

Think-aloud protocols require participants to verbalize their thought processes while completing a language-related task. This method reveals learners' cognitive strategies and problem-solving approaches. For instance, think-aloud protocols can be used to study how students approach reading comprehension tasks or solve vocabulary-related exercises.

Experiments are controlled studies designed to test specific hypotheses about teaching or learning methods. By manipulating one variable and observing its effect on another, researchers can establish cause-and-effect relationships. For example, an experiment might compare the effectiveness of explicit grammar instruction versus inductive learning techniques in improving students' language accuracy.

When choosing a research instrument, it is crucial to consider factors such as the objectives of the study, the validity and reliability of the instrument, and its practicality

in terms of time, cost, and accessibility. Ethical considerations, such as obtaining informed consent and ensuring participants' privacy, must also be addressed.

Research instruments are essential for addressing key questions in language didactics, such as the effectiveness of teaching methods, learners' attitudes and preferences, and the role of culture in language education. For example, pre- and post-tests can measure the impact of using gamification in language learning, while observations and interviews can provide insights into the challenges faced by teachers in multilingual classrooms.

In conclusion, research instruments are indispensable tools for advancing knowledge in language didactics. Their appropriate selection and application enable researchers to conduct rigorous investigations, improve teaching practices, and enhance learning outcomes. By understanding the strengths and limitations of each instrument, researchers can ensure that their studies contribute meaningfully to the field of language education.

LIST OF USED LITERATURE:

1. Decree of the President of the Republic of Uzbekistan "On Uzbekistan' development strategy" №4947 from February 7, 2017.

2. Babbie, E., 2020. *The Practice of Social Research*. 15th ed. Boston: Cengage Learning, p. 576.

3. Brace, I., 2018. *Questionnaire Design: How to Plan, Structure, and Write Survey Material for Effective Market Research*. 4th ed. London: Kogan Page, p. 312.

4. Bryman, A., Becker, S. & Sempik, J., 2018. Quality Criteria for Quantitative, Qualitative and Mixed Methods Research: *International Journal of Social Research Methodology*, 21(1), pp.125-138.

5. Creswell, J.W. & Creswell, J.D., 2018. *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. 5th ed. Thousand Oaks, CA: Sage Publications, p. 275