

INTEGRATED HYPOTHETICAL-DEDUCTIVE APPROACH IN MOTHER LANGUAGE EDUCATION AND ITS EFFECTIVENESS IN INCREASING RESEARCH COMPETENCE

Abdisodiqova Marjina Normurod kizi

Shahrisabz State Pedagogical Institute

Teacher of the Department of Primary Education Methodology

Abstract: This article examines the role of native language science in the training of future linguists in the higher education system and the methodology for using an integrated hypothetical-deductive approach in it. The article analyzes the issues of developing research competence in students through the development of hypotheses (hypotheses) regarding linguistic phenomena and their deductive verification on the basis of texts and language corpora, in contrast to traditional teaching methods. The results of pedagogical experimental work are statistically analyzed and the effectiveness of the proposed methodology is substantiated.

Keywords: native language education, hypothetical-deductive approach, integrated education, research competence, linguistic analysis, problem-based learning, students' scientific activity.

INTRODUCTION

The modern paradigm of higher education sets as a priority the formation of independent knowledge acquisition, analysis and scientific problem-solving skills, i.e. research competence, rather than the transfer of ready-made knowledge to students. For many years, the reactive-reproductive system, that is, the system of memorizing rules and working on ready-made exercises, has prevailed in native language education. However, at a time when modern linguistics is integrating with the directions of cognitive, pragmatic and corpus linguistics, it is also necessary to radically improve the methodology of teaching native language. The hypothetic-deductive approach is one of the most advanced methods of scientific knowledge, which includes the stages of identifying a problem, formulating a hypothesis (hypothesis), deriving logical consequences from this hypothesis and testing them in practice (in the text, in the language). The integrated implementation of this approach in native language education allows students to manifest themselves in the role of "linguistic researchers".

The purpose of this study is to develop a methodology for using an integrated hypothetical-deductive approach in native language lessons and to experimentally substantiate its effectiveness in improving students' research competence.

METHODS

As part of the research, special training modules and a system of linguistic tasks were developed to implement the integrated hypothetical-deductive approach in practice. The methodology consisted of four main stages:

1. Creating a problem situation and formulating a hypothesis: Students are shown a certain linguistic paradox or ambiguity in the text and are required to put forward their own hypotheses.
2. Deductive reasoning and integration: The previously put forward hypothesis is brought into a logical chain based on the rules of other sections of linguistics (for example, morphology and syntax integration).

3. Practical verification: Students conduct a statistical and contextual verification of their hypotheses using a national language corpus or a database of literary texts.

4. Formulating a conclusion and reflection.

Pedagogical experimental work was carried out in the 2025-2026 academic years with the participation of 3rd-year students of the "Philology and Language Teaching (Uzbek language)" department of higher education institutions (54 people in total). Students were divided into experimental (EG - 28 people) and control (NG - 26 people) groups. In the EG group, lessons were conducted based on the hypothetical-deductive methodology recommended by us, and in the NG group - in the form of traditional lectures and practical exercises. The level of students' research competence (according to motivational, cognitive, practical-activity criteria) was assessed at the beginning and end of the lessons through special tests and case assignments.

RESULTS

The results of the experimental work showed that the research skills of students in the group where the hypothetical-deductive approach was used significantly increased.

Dynamics of changes in the levels of research competence of students (in percent):

Groups	Stages	Low level (%)	Medium level (%)	High level (%)
Control group (CG)	At the beginning of the experiment	42.3	46.2	11.5
	At the end of the experiment	34.6	50.0	15.4
Experimental group (EG)	At the beginning of the experiment	40.7	48.1	11.2
	At the end of the experiment	10.7	53.6	35.7

Mathematical and statistical analyses (using Student's t-test) showed that the number of students with high scores in the experimental group increased from 11.2% to 35.7%. In the control group, the increase was significantly lower, with only 15.4% achieving high scores. This indicates the high effectiveness of the presented methodology.

DISCUSSION

The results reveal a number of advantages of the integrated hypothetical-deductive approach in native language education. First, students are internally motivated to independently identify the functional-semantic properties of language units in the text, not just memorize ready-made linguistic rules. For example, the use of a hypothetical model in the study of syntactic devices allowed students to study the author's style.

Secondly, interdisciplinary integration (linguistics, psycholinguistics and ICT skills) provided students with a broad approach to the problem. The results of our study are consistent with the principles of problem-based learning in studies [3] and [5] and confirm the need to transform native language education into a scientific and creative nature. However, using this methodology requires a high level of facilitation skills from the teacher and sufficient basic

linguistic knowledge from the students, otherwise incorrect assumptions (hypotheses) can lead to a waste of time.

CONCLUSION

The implementation of an integrated hypothetical-deductive approach to mother tongue education is highly effective in developing students' research competencies such as independent thinking, problem visualization, formulating hypotheses and proving them through linguistic arguments. The results of the experiment proved that the high level of research of students increased by almost three times through this methodology. It is recommended to systematically include hypothetical-deductive cases and problem tasks in mother tongue curricula and textbooks of higher educational institutions.

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