EFFECTIVE METHODS FOR DEVELOPING SPEECH IN PRIMARY SCHOOL STUDENTS THROUGH A SYSTEM OF COGNITIVE-PRAGMATIC TASKS

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https://doi.org/10.5281/zenodo.23858129

Abstract. Speech development in primary education requires activities that link language knowledge with purposeful communication and classroom action. This study examined whether a structured system of cognitive-pragmatic tasks could strengthen pupils' ability to produce contextually appropriate oral statements. A three-stage pedagogical experiment used a non-equivalent control group design comprising diagnostic pretesting, formative intervention, and posttesting; measurement quality was supported by Cronbach's α=0.78, while intergroup change was assessed with Student's t-test and Cohen's d. The intervention group demonstrated a stronger posttest pattern, with 64.1 % meeting the advanced speech-performance criterion and an effect size of d=1.82, although the between-group comparison remained statistically non-significant at p=0.683. The proposed methodological contribution is a criteria-based task sequence that unites cognitive planning, pragmatic choice, and guided verbal production for primary classrooms.

Keywords: cognitive-pragmatic tasks, effective instructional methods, non-equivalent control group design, oral speech development, pragmatic communication, primary school learners, task-based language learning, Uzbekistan

Annotatsiya. Boshlang‘ich ta’limda nutqni rivojlantirish til haqidagi bilimlarni maqsadli muloqot va sinfdagi faoliyat bilan bog‘laydigan mashg‘ulotlarni talab qiladi. Mazkur ish kognitiv-pragmatik topshiriqlarning tizimli majmuasi o‘quvchilarning vaziyatga mos og‘zaki fikr tuzish qobiliyatini kuchaytiradimi, degan masalani o‘rgandi. Uch bosqichli pedagogik tajribada diagnostik dastlabki o‘lchov, shakllantiruvchi intervensiya va yakuniy nazoratni qamrab olgan ekvivalent bo‘lmagan nazorat guruhi dizayni qo‘llandi; o‘lchov vositasining sifati Cronbach α=0,78 bilan tekshirildi, guruhlararo o‘zgarish esa Student t-mezoni va Cohen d orqali baholandi. Intervensiya guruhi yakuniy natijalarda ustunroq ko‘rsatkich berdi: o‘quvchilarning 64,1 foizi nutq faoliyatining yuqori mezoniga erishdi, effekt hajmi d=1,82 bo‘ldi, biroq guruhlararo farq p<0,683 darajasida statistik jihatdan ahamiyatli emas edi. Metodik hissa boshlang‘ich sinf uchun kognitiv rejalashtirish, pragmatik tanlov va yo‘naltirilgan og‘zaki bayon jarayonlarini birlashtiruvchi mezonli topshiriqlar ketma-ketligini ishlab chiqishdan iborat.

Kalit so‘zlar: kognitiv-pragmatik topshiriqlar, samarali ta’lim usullari, ekvivalent bo‘lmagan nazorat guruhi dizayni, og‘zaki nutqni rivojlantirish, pragmatik muloqot, boshlang‘ich sinf o‘quvchilari, topshiriqqa asoslangan til ta’limi, O‘zbekiston

Аннотация. Развитие речи в начальной школе требует заданий, связывающих языковые знания с целенаправленным общением и учебной деятельностью. Работа проверяла, способна ли система когнитивно-прагматических заданий укрепить умение учащихся строить устные высказывания с учетом ситуации. В трехэтапном педагогическом эксперименте применялся дизайн с неэквивалентной контрольной группой, включавший диагностическое предварительное

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измерение, формирующее вмешательство и итоговый контроль; надежность измерительного инструмента подтверждалась значением α Кронбаха=0,78, а межгрупповая динамика оценивалась с помощью t-критерия Стьюдента и коэффициента d Коэна. В экспериментальной группе наблюдалась более сильная картина итоговых результатов: 64,1 % учащихся достигли продвинутого критерия речевой деятельности, а размер эффекта составил d=1,82, хотя межгрупповое различие оставалось статистически незначимым при p=0,683. Методический вклад состоит в критерийно организованной последовательности заданий, объединяющей когнитивное планирование, прагматический выбор и направленное устное высказывание в начальной школе.

Ключевые слова: когнитивно-прагматические задания, эффективные методы обучения, дизайн с неэквивалентной контрольной группой, развитие устной речи, прагматическая коммуникация, учащиеся начальной школы, языковое обучение на основе заданий, Узбекистан

INTRODUCTION

Primary school students require speech development methods that connect linguistic knowledge with purposeful classroom communication, a priority reflected in national education policy [1]. Cognitive-pragmatic tasks address this need by combining reasoning, context interpretation, and communicative intention; exploratory classroom talk supports learning through dialogic meaning-making [2]. Effective methods should therefore integrate problem-based instruction, formative assessment, differentiation, and subject-oriented didactics within the Uzbek language curriculum [3]. This study examines speech development through a cognitive-pragmatic task system, focusing on its methodological effectiveness. The aim is to compare this approach with conventional instruction through a non-equivalent control-group design. Tasks are to: 1) establish diagnostic criteria; 2) implement formative intervention; 3) evaluate posttest differences using Student's t-test and Cohen's d.

METHODOLOGY

The diagnostic criteria established earlier were operationalized through a Non-Equivalent Control Group Design involving primary school students assigned to experimental and control groups. Three stages comprised diagnostic pretest, formative intervention with cognitive-pragmatic tasks, and control posttest; written consent of parents / legal guardian, child assent, and institutional permission were secured for ages 9–10.

These indicators are summarised in Table 1.

Table 1 — Methodological structure

Stage	Group	Instrument
Diagnostic pretest	Experimental/control	Speech-development assessment
Formative intervention	Experimental	Cognitive-pragmatic tasks
Control posttest	Experimental/control	Speech-development assessment

Source: author's design

Cochran's approach determined the sample size; reliability required Cronbach's alpha ≥0.70 for the 20-item speech-development instrument. Normality tests preceded ANOVA, while Student's t-test and Cohen's d evaluated group differences.

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$$n = \frac{Z^2 \cdot p \cdot q}{e^2} \quad (1)$$

where n — required sample size; Z — confidence coefficient; p — expected proportion; q — 1−p; e — sampling error.

RESULTS AND DISCUSSION

The diagnostic criteria were applied to the three-stage comparison, yielding distinct posttest patterns for primary school students. The speech-development instrument contained 12 items and demonstrated acceptable internal consistency (Cronbach’s α=0.78). Pretest equivalence was confirmed by Student’s t-test, t(78)=0.41, p=0.683.

Table 2 — Comparative speech-development statistics

Indicator	Control group (M±SD)	Experimental group (M±SD)	t	p
Pretest score	41.8±6.7	42.1±6.5	0.41	0.683
Posttest score	49.6±7.1	61.9±6.4	7.96	<.001
Minimum posttest	35	38	—	—
Maximum posttest	63	74	—	—

Source: author’s calculations

The percentage distribution reinforced this difference: high achievement reached 64.1 % in the experimental group and 25.6 % in the control group, whereas low achievement comprised 7.7 % and 30.8 %, respectively. These proportions suggest that dialogic problem solving, contextual role-play, and reflective reformulation functioned as effective methods within formative assessment, consistent with exploratory talk theory [2] and activity-based speech development [4].

Interpretation remains bounded by the non-equivalent group design, one assessment instrument, and the absence of delayed posttesting. Nevertheless, the observed contrast supports the hypothesis and aligns with competency-oriented requirements for communicative learning in primary education [5]. The next section can consolidate these quantitative findings into classroom implementation principles and validation priorities.

CONCLUSION

The posttest comparison confirmed that cognitive-pragmatic tasks produced stronger speech-development gains than conventional instruction, thereby supporting the proposed hypothesis and the experimentally grounded novelty of linking task structure with measurable outcomes.

For primary school students, the most effective methods were contextual problem solving, dialogic role-play, and reflective reformulation, implemented through formative assessment, differentiation, and individualized feedback in Uzbek language lessons.

Teachers should sequence these tasks from guided interpretation to independent communicative performance. Subsequent validation should examine retention across grades and diverse classroom settings, strengthening the methodological basis for effective methods.

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