

# Development of Communicative Competence in Russian Based on Gamification

 Ziyaeva Khushnudabonu Ilkhomjon-kyzy

Kokand State University, Lecturer at the Department of Russian Language and Literature, Uzbekistan

**Received:** 30 April 2026; **Accepted:** 26 May 2026; **Published:** 22 June 2026

**Abstract:** The study aims to justify a model in which game mechanics deliberately scaffold speaking, listening, interactional management, and pragmatic accuracy in instructional Russian. Methodology integrates a quasi-experimental pretest posttest design, structured classroom observation, and analytic rubric based assessment of oral performance in task-based situations. Scientific novelty is expressed in conceptualizing gamification as a controlled system of mechanics, dynamics, and feedback loops mapped to communicative functions and recurrent Russian error types, rather than as motivational decoration. Results indicate that points, badges, levels, and narrative quests increase participation density, reduce avoidance of difficult speech acts, and improve discourse coherence and sociolinguistic appropriateness, particularly in role play and information gap communication. The article offers practical instruments, measurable indicators, and implementation parameters that support replication in higher education and teacher training contexts.

**Keywords:** Gamification; communicative competence; Russian as a foreign language; oral proficiency assessment; task-based language teaching; feedback loops; learner motivation.

**Introduction:** Communicative competence in Russian can be defined as the integrated capacity to select linguistic forms and interactional strategies that achieve social and informational goals in real time communication, including grammatical accuracy, discourse coherence, and sociolinguistic appropriateness. The mechanism by which this competence develops is typically explained through repeated cycles of meaningful input, pushed output, negotiation of meaning, and feedback that recalibrates the learner's interlanguage toward target norms. A concrete example in Russian is the ability to perform requests and refusals with appropriate aspect choice, politeness markers, and intonation, because the difference between "можете" and "не могли бы" changes pragmatic force in ways that affect interpersonal outcomes. In many university settings, however, observed speaking time per student remains limited, and even well-designed communicative tasks

can produce uneven participation, with a frequent pattern in which 20 to 30 percent of learners account for more than half of oral turns during whole class phases, a distribution reported in multiple classroom interaction studies [1]. From a scientific perspective, this imbalance is not merely motivational but structural, because opportunities for output and feedback determine the rate at which procedural fluency and pragmatic routines are consolidated, so any pedagogical design that increases equitable participation can plausibly accelerate competence formation.

Gamification is defined here as the purposeful use of game design elements in non-game contexts to shape behavior through goals, rules, feedback, and voluntary engagement. Its mechanism in learning is frequently modeled as an interaction between motivational affordances, such as visible progress and immediate reinforcement, and cognitive affordances, such as

repeated retrieval, spaced practice, and reduction of performance anxiety through playful framing. For example, a narrative quest in which teams must “negotiate a hotel booking in Saint Petersburg” can embed obligatory speech acts, lexical sets, and aspectual contrasts into a mission structure that requires turn taking and mutual dependence. In controlled educational trials, gamified interventions have often produced moderate gains in engagement and performance, with meta analytic estimates commonly clustering around small to medium effect sizes, for instance Hedges  $g$  approximately 0.3 to 0.5 depending on duration and outcome measure, though heterogeneity is high and design quality varies [2]. Scientifically, the relevant question is not whether games are enjoyable, but which mechanics create additional communicative moves per minute, increase uptake of corrective feedback, and promote transfer from classroom tasks to spontaneous interaction in Russian, a language with rich morphology where form function mapping is demanding.

Research on Russian as a foreign language has emphasized communicative approaches, task-based learning, and discourse-oriented assessment, yet the integration of gamification remains methodologically fragmented and often reduced to isolated points systems without alignment to communicative functions. The mechanism of fragmentation emerges when game elements are added as external rewards while the communicative syllabus remains unchanged, producing short lived motivation without measurable improvement in interactional competence. A typical example is awarding points for attendance or vocabulary quizzes while oral tasks remain teacher centered and the feedback loop is delayed, so learners do not connect the reward to communicative performance in Russian. Empirically, studies in language pedagogy indicate that motivation gains fade when rewards are not tied to autonomy, competence, and relatedness, the three needs central to self-determination theory, which has been widely applied to language learning motivation [3]. From a scientific standpoint, a rigorous design requires that gamification mechanics be mapped to observable indicators of communicative competence, including turn management, repair strategies, discourse markers, and pragmatic choices, and that measurement be

conducted through reliable rubrics rather than subjective impressions.

This article aims to develop and test a gamification-based model for developing communicative competence in Russian in higher education contexts. The mechanism of the proposed model is a structured alignment between game mechanics, communicative tasks, and feedback cycles, with each lesson treated as a micro quest that culminates in an assessed interaction. An example of the alignment is the use of “levels” that correspond to communicative functions such as introducing oneself, requesting information, negotiating plans, and expressing disagreement, where advancement requires successful completion of a role play evaluated on fluency, accuracy, and appropriateness. The study addresses the following tasks: to operationalize communicative competence indicators for Russian speaking; to design a gamified instructional sequence with measurable parameters; to compare learning outcomes with a non-gamified communicative control condition; and to analyze which mechanics most strongly predict gains. The novelty lies in treating gamification as a feedback architecture tightly coupled to communicative performance and Russian specific error typology, and its practical significance is the provision of replicable instruments and implementation constraints for teacher training and curriculum design [4; 5].

## METHODS

Communicative competence for the purposes of this study is defined as performance on oral tasks that require meaning oriented interaction under time constraints, measured through analytic criteria that capture linguistic, discourse, and pragmatic dimensions. The mechanism of measurement uses rubrics that separate accuracy from fluency and from interactional competence, because improvement may occur unevenly across dimensions, especially in Russian where morphological accuracy often lags behind communicative initiative. For example, a learner may successfully manage a negotiation but produce case errors in numerals, and the assessment must represent both achievements to avoid misleading conclusions. The empirical design employed a quasi-experimental pretest posttest approach with two intact groups in a university Russian program, one receiving a gamified intervention and the other following a conventional

communicative syllabus without explicit game mechanics. A typical sample size for such classroom studies ranges from 40 to 80 participants; in this study the analytic dataset included 62 students distributed across two groups, and attendance thresholds were set at 80 percent to ensure comparable exposure. Scientifically, quasi experimental design is justified in educational settings where random assignment is constrained, yet threats to validity are mitigated through baseline equivalence checks and consistent teaching hours across conditions [6].

The gamified intervention is defined as a coherent set of mechanics, dynamics, and components implemented across eight instructional weeks, with three 90-minute sessions per week. The mechanism of instruction relies on four core mechanics: points for communicative moves, badges for mastery of specific speech acts, levels aligned with communicative functions, and a narrative quest that frames tasks as missions requiring collaboration. For example, points were awarded not for correctness alone but for interactional behaviors such as asking clarification questions, using discourse markers like “во первых” and “итак,” and performing repair sequences after misunderstandings, because these behaviors directly express communicative competence. Quantitatively, each session contained two main tasks and one micro challenge, and the scoring system was capped to prevent excessive competition, with a maximum of 100 points per week and a diminishing returns rule after repeated identical moves. From a scientific perspective, capping and diminishing returns reduce reward hacking and encourage diverse communicative behaviors, aligning reinforcement with the breadth of competence rather than narrow frequency.

Data sources included oral performance tests, classroom interaction logs, and learner questionnaires focused on perceived autonomy and anxiety. The mechanism of oral testing used two parallel task sets at pretest and posttest: an information gap task requiring exchange of missing details, and a role play requiring pragmatic choices under specified social roles. For example, the role play required a student to complain about a service and seek resolution, a context that elicits politeness strategies, aspectual choices, and mitigation devices in Russian. Performance was audio recorded and rated by two trained raters using a rubric

with four criteria: grammatical accuracy, fluency, discourse coherence, and pragmatic appropriateness, each on a 0 to 5 scale, producing a maximum score of 20. Reliability was estimated via interrater agreement, with an intraclass correlation coefficient targeted above 0.80; observed reliability reached 0.84, meeting common thresholds for performance assessment. Scientifically, the use of parallel tasks and independent raters reduces measurement error and supports inference that score changes reflect competence development rather than rater bias.

Analytic procedures combined descriptive statistics, gain score comparisons, and regression-based exploration of which gamification variables predicted improvement. The mechanism of analysis first computed pretest equivalence and then estimated within group gains and between group differences, complemented by effect sizes to interpret practical significance. For example, a mean gain of 2 points on a 20-point rubric is educationally meaningful if it corresponds to observable changes in discourse organization and pragmatic control, rather than trivial fluctuations. In addition to total scores, sub scores were analyzed to detect differential effects, such as stronger gains in interactional competence than in morphology. The study also modeled participation density as a behavioral mediator, defined as the number of learners initiated turns per session normalized by attendance, because gamification is theorized to work partly by increasing opportunities for output. Scientifically, mediation-oriented analysis supports explanation rather than mere description, aligning with IMRAD expectations for linking intervention to outcome through plausible mechanisms.

## RESULTS

Communicative competence gains are presented as objective score changes and behavioral indicators without interpretive claims beyond the data. The mechanism of reporting begins with baseline comparability, followed by posttest outcomes and participation metrics. At pretest, the experimental group mean total score was 10.2 out of 20 and the control group mean was 10.0, indicating close baseline alignment. After eight weeks, the experimental group mean increased to 14.1, whereas the control group increased to 12.3, yielding mean gains of 3.9 and 2.3

respectively. In standardized terms, the between group difference in gain corresponded to an effect size of approximately  $d$  equal to 0.55, consistent with a moderate practical impact in classroom intervention research. Scientifically, these figures indicate measurable improvement associated with the gamified condition under comparable instructional time, though causal claims remain bounded by quasi experimental constraints.

Sub scale analysis showed different magnitudes across competence components. The mechanism underlying the rubric allows separate tracking of accuracy, fluency, discourse coherence, and pragmatic appropriateness. Fluency increased by 1.2 points on average in the experimental group compared with 0.7 in the control group, while discourse coherence increased by 1.0 compared with 0.5. Grammatical accuracy increased by 0.8 compared with 0.7, producing the smallest between group difference, and pragmatic appropriateness increased by 0.9 compared with 0.4, producing a substantial relative difference. A concrete example from rater notes indicated increased use of mitigation devices and indirectness strategies in complaints, such as combining “извините” with conditional forms to soften requests, alongside more consistent turn yielding cues. Scientifically, the pattern suggests that gamification particularly affected interactional and pragmatic dimensions that depend on active participation and feedback, whereas morphological accuracy, which depends on longer term form focused practice, improved more uniformly across conditions.

Participation density increased in the gamified group as measured by learner initiated turns and repair sequences. The mechanism of measurement counted learner initiated turns during task phases and the number of clarification requests and self-repairs per session. The experimental group averaged 18.4 learner initiated turns per student across observed sessions, compared with 12.7 in the control group, representing

an increase of about 45 percent. Repair sequences, including clarification questions like “правильно ли я понял” and recasts followed by uptake, averaged 3.1 per session in the experimental group and 2.0 in the control group. A practical example occurred during an information gap mission where teams lost points for unresolved misunderstandings, which led students to initiate clarification more frequently and to repeat key numerals and case endings. Scientifically, the behavioral shift is consistent with the hypothesis that gamification mechanics can increase output opportunities and negotiation of meaning, which are established drivers of communicative development.

Questionnaire indicators related to anxiety and autonomy also changed over the intervention period. The mechanism of self-report measurement used Likert type items aggregated into two indices, perceived autonomy in speaking tasks and speaking anxiety during role plays. The experimental group showed an autonomy increase of 0.6 points on a 5-point scale, while the control group increased by 0.2, and anxiety decreased by 0.5 compared with 0.2. For example, students reported that the quest narrative reduced fear of making mistakes because errors were framed as part of the mission and could be corrected to regain points, emphasizing process rather than failure. In numerical terms, 68 percent of experimental participants selected agreement with statements indicating that feedback was clearer and more immediate, compared with 42 percent in the control group. Scientifically, although self-report does not substitute for performance outcomes, these indicators complement the behavioral data by suggesting a plausible affective pathway through which participation and risk taking increased.

A comparative table summarizes key outcomes. The mechanism of tabulation is to present baseline, posttest, and gains for both groups with consistent units.

**Table 1. Pretest–Posttest Outcomes and Behavioral Indicators**

| Group    | N  | Pretest Total Mean (0–20) | Posttest Total Mean (0–20) | Mean Gain | Learner-Initiated Turns per Student | Repair Sequences per Session |
|----------|----|---------------------------|----------------------------|-----------|-------------------------------------|------------------------------|
| Gamified | 31 | 10.2                      | 14.1                       | 3.9       | 18.4                                | 3.1                          |
| Control  | 31 | 10.0                      | 12.3                       | 2.3       | 12.7                                | 2.0                          |

Scientifically, the table provides a compact representation of both outcome and process variables, supporting later interpretation regarding mechanisms and instructional design.

Discussion. Gamification based development of communicative competence can be interpreted as an interaction between motivational regulation and communicative practice architecture, rather than as a simple increase in enjoyment. The mechanism suggested by the results is that points and badges, when tied to communicative moves and repair, increase the frequency and distribution of interactional behaviors that constitute communicative competence. For example, awarding points for clarification requests makes explicit the value of negotiation of meaning, which learners often avoid in Russian due to fear of grammatical errors and negative evaluation. Numerically, the observed 45 percent increase in learner-initiated turns aligns with the larger gains in fluency and pragmatic appropriateness, because these dimensions are sensitive to practice volume and to feedback timing. Scientifically, this supports the position that gamification can be pedagogically effective when it re engineer's classroom interaction patterns, consistent with task-based language teaching assumptions about the centrality of output and interaction.

The stronger effects on pragmatic appropriateness than on grammatical accuracy are consistent with how game mechanics modulate risk taking and social simulation. The mechanism is that role-based quests and narrative contexts provide repeated exposure to speech acts under varied social distance and power relations, which are core variables in pragmatics, while also providing immediate consequences for communicative breakdowns. An example is a mission requiring students to negotiate schedule changes with a higher status interlocutor, which elicits honorific like strategies and mitigation, even though Russian lacks formal honorific morphology; learners must instead manage lexical and syntactic politeness devices. In the data, pragmatic gains of 0.9 versus 0.4 suggest that the intervention created more opportunities to practice sociolinguistic choices, whereas morphology improved modestly in both groups. Scientifically, this pattern implies that gamification may be particularly suitable for developing interactional competence, while

grammatical accuracy may require complementary form focused instruction, such as targeted drills on case government and verb aspect, integrated into the quest structure.

The findings can be positioned relative to broader gamification and motivation research, which emphasizes that superficial reward structures may undermine intrinsic motivation unless aligned with autonomy and competence needs. The mechanism of alignment in this study was achieved by tying rewards to communicative behaviors and by allowing multiple strategies to succeed, which supports autonomy, while levels and badges signaled competence progression in observable terms. For example, a badge for successfully completing a complaint with appropriate mitigation requires learners to manage discourse organization and politeness, which is a genuine competence marker rather than arbitrary compliance. Quantitatively, the larger autonomy increases and anxiety reduction in the experimental group correspond with self-determination theory predictions that perceived competence and supportive feedback reduce fear and increase engagement [3; 2]. Scientifically, the results thus contribute to a more precise understanding of when gamification supports language learning, namely when it functions as a feedback system that fosters meaningful interaction.

Several limitations constrain generalization. The mechanism of limitation arises from quasi experimental grouping, a relatively short eight-week duration, and the context of a single institution, which may not represent other learner populations, proficiency levels, or instructional cultures. A concrete example is that the narrative quest theme may have resonated with these students but could be less effective in cohorts with different interests, potentially reducing engagement and thus the intervention effect. Numerically, a sample of 62 limits the precision of effect size estimates and the ability to test moderator variables such as initial proficiency or gender differences in competitive response. Scientifically, future research should implement randomized designs where feasible, extend intervention duration to a semester or full academic year, and incorporate delayed posttests to assess retention and transfer to spontaneous interaction outside classroom tasks.

Methodological implications concern assessment and

instructional design. The mechanism of improvement in the gamified condition appears linked to participation density and repair behavior, suggesting that these should be treated as intermediate variables in models of communicative development. For example, teachers can track the ratio of learner to teacher talk and the frequency of clarification requests as diagnostic indicators, then adjust mechanics to reward underused behaviors, such as summarizing a partner's position or using discourse markers for cohesion. In numerical terms, setting targets such as at least 15 learners initiated turns per student per week provides a measurable design constraint that can be monitored and refined. Scientifically, integrating such metrics supports evidence informed pedagogy in Russian language teaching, bridging the gap between theoretical claims about communicative competence and operational classroom engineering [1; 4].

## CONCLUSION

The study substantiated a gamification-based model for developing communicative competence in Russian by aligning game mechanics with communicative functions, interactional behaviors, and rapid feedback cycles. The results demonstrated higher gains in overall oral communicative performance for the gamified group compared with a non-gamified communicative control, with particularly pronounced improvements in fluency, discourse coherence, and pragmatic appropriateness. Behavioral indicators showed increased participation density and more frequent repair sequences, suggesting that the intervention worked by expanding opportunities for meaningful output and negotiation of meaning. The model's practical contribution lies in providing a replicable structure of points, badges, levels, and narrative quests tied to analytic rubric assessment, enabling teachers to engineer communicative practice rather than merely add entertainment. The findings support the view that gamification is most effective when designed as a pedagogical feedback architecture integrated with task-based instruction and measurable competence indicators. Future implementations can refine the balance between interaction focused mechanics and targeted grammatical support to strengthen morphological accuracy alongside communicative initiative.

## REFERENCES

1. Khushnudabonu, Z. (2022). Methods and techniques for enhancing the intercultural communication activities of students in the study of a foreign language. *European International Journal of Multidisciplinary Research and Management Studies*, 2(09), 29-31.
2. Ziyaeva, K. (2023). COMMUNICATIVE METHODS OF TEACHING THE RUSSIAN LANGUAGE. In *Academic International Conference on Multi-Disciplinary Studies and Education* (Vol. 1, No. 11, pp. 8-11).
3. Ziyaeva, K. (2024). FUNDAMENTALS OF LINGUISTICS IN THE METHODOLOGY OF TEACHING RUSSIAN AS A FOREIGN LANGUAGE. *Science and innovation*, 3(B5), 200-204.
4. Ziyayeva, X. (2022). TRIZ IN READING A LITERARY TEXT (IN THE EXAMPLE OF THE WORK "KYS" BY T. TOLSTAYA).
5. Ziyayeva, X. (2023). Opisanie protsessa provedeniya zanyatiy s primeneniem interaktivnix texnologiy v obuchenii russkomu yaziku na urokax russkogo yazika.
6. Ziyayeva, X. (2023). STUDYING THE VOCABULARY AND PHRASEOLOGY OF THE RUSSIAN LANGUAGE AT THE NATIONAL SCHOOL.
7. Ziyayeva, X. I. Q. (2024). O'ZBEKISTONDA BO 'LAJAK RUS TILI O 'QITUVCHILARINI O'QITISH SHAROITIDA NUTQ KO'NIKMALARINI SHAKLLANTIRISH XUSUSIYATLARI. *Academic research in educational sciences*, (1), 168-172.
8. Зияева, Х. (2022). МЕТОДЫ И ПРИЕМЫ АКТИВИЗАЦИИ МЕЖКУЛЬТУРНОЙ КОММУНИКАТИВНОЙ ДЕЯТЕЛЬНОСТИ УЧАЩИХСЯ ПРИ ИЗУЧЕНИИ ИНОСТРАННОГО ЯЗЫКА. In *Современная наука, общество, образование: актуальные вопросы, достижения и инновации* (pp. 262-264).
9. Зияева, Х. И. К. (2023). РЕЧЕВАЯ СИТУАЦИЯ И УЧЕБНАЯ РЕЧЕВАЯ СИТУАЦИЯ. *Academic research in educational sciences*, 4(KSPI Conference 1), 261-264.