

Developing Linguocultural Competence Through Contemporary Kazakhstani Literary Fairy Tales: An Experimental Study with University Students

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This article examines whether working with contemporary Kazakhstani original fairy tales helps to develop students' linguistic and cultural competence. The study featured a quasi-experimental design that included pre- and post-tests and a control group. n=120 students from the 'Training Teachers of Russian Language and Literature' program across three years of study took part: n=59 in the experimental group and n=61 in the control group. Researchers measured competence across five components: cultural realities and culturally marked vocabulary, phraseology, cultural occurrences, cultural connotations, and pragmatic and behavioral norms. Using a 40-mark test based on a corpus of fairy tales, the authors developed and carried out the assessment. The experimental group followed a cycle of text-based activities, whilst the control group studied the same topics for the same number of hours using standard teaching materials. Student's t-test for independent and dependent samples, the Mann-Whitney and Wilcoxon tests were applied, and effect sizes were calculated. The improvement in the experimental group significantly exceeded that in the control group ($d = 1.28$; $p < 0.001$); no changes were observed in the control group. This advantage was maintained across all five components and all three courses. However, it was expressed to varying degrees: it was strongest with respect to precedent phenomena and weakest with respect to behavioral norms. The data obtained allow us to consider contemporary national literature as a resource for developing the cultural literacy of future teachers.

Keywords: linguocultural competence, literary fairy tale, Kazakhstani literature, contemporary fairy tale, cultural semantics, university practice

1. Introduction

Language and culture do not exist in isolation. Culture is embedded in the very units of language: in vocabulary, in phraseology, within names and plots that a community takes for granted, and in connotations understood only by those who have grown up within that culture. The Western tradition of linguocultural pedagogy is also based on this premise [1, 2, 3], as well as post-Soviet linguocultural studies [4, 5, 6, 7]. According to this approach, mastering a language also entails mastering the cultural meanings it contains.

Linguocultural competence is understood here as mastery of the cultural knowledge embedded in language, together with the ability to utilize this knowledge in communication [4]. The concept is closely related to M. Byram's concept of intercultural communicative competence [2], but does not coincide with it. For Byram, the focus is on mediation between one's own and another's cultures; linguocultural competence describes something else: the cultural meaning of the linguistic units themselves. In regional studies, these terms are often conflated. We adopt the former and give it a measurable form.

Cultural meaning is most densely packed into literary texts, and amongst literary texts, the author's fairy tale occupies a special place. The folk fairy tale is oral, collective, and traditional. An author's fairy tale is created by a specific writer who preserves the folkloric style whilst injecting it with contemporary content. This is precisely why it is well-suited to encouraging relevant cultural literacy: it is succinct and easy to read, yet brings today's realities, place names, and social themes to the fore. Contemporary Kazakhstani fairy tales provide a striking example: they recode civic, multi-ethnic identity and incorporate recognizable national realities [8].

In the Kazakhstani context, the issue is even more acute. Kazakhstan is multi-ethnic and multilingual; the Russian language is widely used in education here, and for the participants in our study, it is also the subject they will teach in the future. The cultural content of Russian-language

texts produced in Kazakhstan is neither foreign nor exclusively ethnic Kazakh; it is civic and shared across the country [9]. The distinction between 'Kazakh' as an ethnic group and 'Kazakhstani' as a civic community has direct pedagogical implications. Fairy tales deliberately aligned with the latter, an inclusive category, are well suited to encouraging the kind of cultural literacy that a future teacher can pass on to pupils from diverse backgrounds [10].

The theory of linguocultural competence has been developed, and the corpus of contemporary Kazakhstani fairy tales is growing; however, there is almost no experimental evidence that teaching with such texts actually improves students' competence; regional studies remain largely descriptive. Our study fills this gap. Based on a quasi-experimental study involving 120 students – future teachers of the Russian language and literature – we examine whether a series of activities using contemporary Kazakhstani fairy tales fosters linguistic and cultural competence, which we break down into five measurable components. This study provides an operationalization of the construct, a tool with proven reliability based on a real corpus of texts, and experimental data where previously there were only descriptions.

A. Research questions

We address four questions. Are the groups comparable at the baseline stage (RQ1)? Does competence change from the pre-test to the post-test within each group (RQ2)? Do the groups differ in terms of final score and increase in favor of the experimental group (RQ3)? Which components respond more strongly to training, and which less so (RQ4)?

B. Research Objectives

The study aimed to experimentally test whether systematic work with contemporary Kazakh folktales develops the linguistic and cultural competence of students majoring in pedagogy and to determine which aspects of this competence are amenable to such training and which are not.

The practical side of the work relates to teacher training. If contemporary national literature is truly capable of fostering cultural literacy, its place in teacher education programs needs to be reconsidered, and the course itself should be described in a way that another teacher could replicate at another university.

2. Literature review

A. Linguistic and cultural competence: the construct and its components

Linguistic and cultural competence has evolved from linguocultural studies, which examine language and culture in their interplay rather than in isolation [4, 6]. At the heart of V. V. Vorobyov's (2008) concept lies a culturally specific linguistic worldview, and mastery of a community's values forms part of one's competence in its language. V. N. Telia (1996) demonstrated this using phraseology: fixed expressions retain culturally motivated meaning. Y. S. Stepanov (1997) described culture in terms of its constants. From this, we identify five measurable components: culturally marked lexis and realia, phraseology, precedent phenomena, cultural connotations, and pragmatic and behavioral norms. A terminological difficulty remains: linguocultural and intercultural communicative competences overlap [2, 11]. We distinguish between them on the basis that measurement relies on the cultural significance of linguistic units.

B. Linguistic-cultural pedagogy and literary texts

The idea of teaching culture through language has long been proposed from various perspectives. K. Kramsch (1993) demonstrated that culture is present in every act of language use and cannot be reduced to a separate 'fifth skill'. K. Risager (2006) described language and culture as flows that are simultaneously globally interconnected and locally distinctive. An authentic literary text proves important in this context because it conveys cultural meaning concisely and within context; consequently, linguistic and cultural work in higher education proceeds in parallel through it.

V. The literary (authored) fairy tale as a genre-resource

It is important to distinguish between folk and literary fairy tales. Folk tales are oral, collective, and traditional; literary fairy tales belong to a specific writer, who adopts a folkloric style but fills it with their own, most often contemporary content. It is this twofold nature that makes them appropriate for work on contemporary cultural literacy. Kazakh fairy tales have been studied in depth: S. A. Kaskabasov (1972) described the magical fairy tale [12], M. Gabdullin examined their oral-literary foundations [13], whilst later works have appeared on the plot structure of fantasy tales [14] and on the connection between folklore and the literary traditions of Kazakhstan [15]. J. Zipes (2019) adds an important twist to this: the literary fairy tale not only conveys values but also contests authority [16].

G. Contemporary Kazakhstani fairy tales

Our source material was the latest wave of Kazakhstani author-written fairy tales. Y. Serebryansky's bilingual collection "Kazakhstani Fairy Tales" (2021) is illustrative: the action unfolds in real Kazakhstani locations, and recognizable realities are embedded within an inclusive, civic comprehension of identity that is directed towards the whole country, rather than a single ethnic group. The corpus we have compiled (see the 'Methodology' section) includes texts by Yu. Serebryansky, E. Klepikova and K. Zemskova, Z. Naurzbayeva and L. Kalas, and is rich in the five types of units measured by our test. S. Kondybay's Dictionary of Kazakh Mythology (2005) [17] gives a systematic list of archetypal figures that recur in this corpus: Baiterek, Samruk, and others.

D. The Kazakhstani tradition of studying authorial fairy tales

In Kazakhstani literary studies, the authorial fairy tale has only recently become an independent topic of study [18]. K. R. Nurgali and others (2024) identify markers of national style in 21st-century Kazakh literary fairy tales via comparative and linguocultural analysis [19]; among the works known to us, this one is closest to ours in both

method and subject matter. K. R. Nurgali et al. (2024) applied F. Moretti's 'deep reading' methodology to Kazakhstani children's literature [8]. They identified three consistent features: the national landscape and fauna, an orientation towards folklore, and bilingualism. It is precisely these features that impart a national cultural code to our corpus. E. Yu. Lichman (2023) reviews the study of myth and mythopoetic imagery in Kazakhstani literary and art studies, providing a basis for the component phenomenon; these works are descriptive [20].

E. Empirical gap

Thus, the literature provides a theory of linguocultural competence, a rationale for working with literary texts, and a suitable corpus of fairy tales. What it lacks, however, is controlled data demonstrating that learning from these texts yields a measurable increase in competence. We have attempted to bridge this gap.

3. Materials and methods

A. Research design

The study was designed as a quasi-experiment with pre- and post-tests and a control group. Two conditions were compared. In the experimental group, standard teaching was supplemented with a cycle of work on contemporary Kazakhstani fairy tales; in the control group, the same topics were studied for the same number of hours using traditional materials. Both groups underwent the same diagnostic assessment before and after the training. To ensure that any differences could not be attributed to extraneous factors, we standardized the number of contact hours and the subject content, conducted the testing under identical conditions, and marked the detailed answers without knowing which group the students belonged to. As the study groups had already been formed, allocation occurred at the subgroup level within each course, and we verified group comparability statistically before the main analysis.

B. Research questions and hypotheses

The first question concerned the comparability of the groups at the outset; the second recorded

changes within each group; the third compared the groups in terms of final score and improvement; and the fourth sought to identify which components responded most strongly to the training. Alternative hypothesis (H1): the increase in the experimental group is greater than that in the control group. Null hypothesis (H0): there are no between-group differences in the increase.

C. Study participants

The study involved $n=120$ students in the 6B01706 'Training Teachers of the Russian Language and Literature' program at the M.Kh. Dulaty Taraz University: $n=61$ fourth-year students, $N=38$ third-year students, and $n=21$ second-year students. Within each year group, students were assigned to either the experimental subgroup (59 students in total) or the control subgroup (61 students): 30/31 in the fourth year, 19/19 in the third year, and 10/11 in the second year. Ages ranged from 17 to 22 ($M = 20.0$; $SD = 1.0$), comprising 84 female and 36 male students. For future teachers of the Russian language and literature in a multilingual country, linguistic and cultural competence is both an educational outcome and a professional tool, making this sample particularly relevant. All participants provided written informed consent; participation was voluntary and anonymous and did not affect their marks.

D. Operationalization of the construct: five components

Drawing on the work of V. V. Vorobyov (2008), V. N. Telia (1996), and V. A. Maslova (2001), Stepanov (1997), we have broken down linguistic and cultural competence into five components, each of which can be measured. The first covers culturally marked vocabulary and cultural phenomena: students must learn and explain words with no direct equivalents, such as *dastarkhan*, *shanyrak*, and *aport*. The second concerns phraseology and proverbs, that is, an understanding of culturally motivated fixed expressions, for example, the proverb 'When a guest arrives, blessings come into the house'. The third component consists of iconic phenomena:

Aldar Kose, Yer Tostik, the Baiterek World Tree, the Samruk bird, and the Nauryz festival. The fourth component deals with cultural connotations, in which associations such as those between the apple and Almaty, the tulip and the steppe, and the golden bowl and wisdom and justice are important. The fifth component covers pragmatic and behavioral norms, primarily the hospitality script, according to which an unexpected traveler is welcomed, fed, and seated in a place of honor, as well as norms of respect for elders.

D. Tool: the linguocultural competence test

We have developed a criteria-based test worth 40 marks, with 8 marks per component, using text excerpts from the corpus. It includes multiple-choice questions, matching exercises, fill-in-the-blank tasks, short-answer questions, and situational tasks. Closed-ended tasks were scored dichotomously, whilst open-ended tasks were scored on a 0-2 scale: zero for a missing or incorrect answer, one for a partially correct answer lacking cultural content, and two for a complete answer with correct cultural content. The same test was administered before and after the training, with an interval of eight to ten weeks, thereby minimizing the recall effect. We excluded two texts from the training and retained them solely for diagnostic purposes, so that some of the tasks would measure the transfer of competence to unfamiliar material.

Specialists in linguocultural studies and teaching methodology evaluated the relevance of each task to ensure content validity. The instrument underwent pilot testing on a comparable group of students outside the main sample. Detailed answers to sections of the test were graded independently by two experts, with any differences resolved through discussion. In the main study, the test demonstrated high internal consistency on both measures: Cronbach's α of 0.90 before training and 0.88 afterward.

E. Research materials

The corpus consisted of contemporary Kazakhstani original fairy tales in Russian, selected for their richness in Kazakhstani

linguistic and cultural elements. Seven texts were used in the training: the bilingual 'Kazakhstani Fairy Tales' by Y. Serebryansky (2021) [21]; 'Fairy Tales of Semirechye' (2021) [22]; 'The Mystery of the Blue Web' (2017) [23] and 'Pan Tyrts and Murzik' (2024) [24] by E. Klepikova, as well as 'Boursak and Caruzo' (2024) [25] by E. Klepikova and K. Zemskova; 'Batu and the Search for the Golden Cup' (2014) [26] and 'The Adventures of Batu and His Friends in the Land of Barsakelmes' (2019) [27] by Z. Naurzbaeva and L. Kalas. Two further texts, 'Freedom for the Animals!' by L. Kalas (2021) [28] and 'The Traveling Sweet' by K. Zemskova (2019) [29], were not used in teaching and were included only in the assessment as unfamiliar material. Before the lessons began, we analyzed each teaching text using five components and prepared excerpts adapted to the appropriate level. Part of the corpus was published by 'Aruna', KazHeritage and OLsha, whilst another part was released via self-publishing channels (Ridero, Zerde Publishing) and internet platforms, which is characteristic of the circulation of contemporary Kazakhstani fairy tales.

F. Experimental teaching: the text-based cycle

Each text was analyzed in four stages. Before reading, the lecturer activated the relevant cultural models and introduced a small set of cultural references to help students approach the text using a ready-made framework. As they read, students identified and commented on linguistic and cultural elements: cultural references, idioms, allusions to previous works, and symbolically charged imagery. Hidden cultural content became the explicit focus of attention. After the reading, connotations were interpreted, and the fairy tale's behavioral scenarios were reconstructed, followed by a comparison with the students' own cultural framework in a guided contrastive analysis. In the final stage, students retold the text and composed their own short fairy tale using the target elements. One text was covered per week, and the entire course lasted eight to ten weeks. The control group studied the same topics for the same number of hours using traditional materials.

G. Procedure

In week zero, both groups signed a consent form, completed a short questionnaire, and underwent a pre-test under the same supervised conditions. Over the following eight to ten weeks, the experimental group followed the fairy-tale-based cycle, whilst the control group followed the standard program. In the final week, both groups took a final test under the same conditions. The work was coded, so the markers did not know which group each piece of work came from; detailed answers were assessed according to general criteria.

H. Data analysis methods

Data analysis was conducted at $\alpha = 0.05$, using two-tailed tests. We tested the normality of distributions using the Shapiro–Wilk test and the equality of variances using Levene’s test. Parametric and non-parametric tests are presented in parallel to assess whether they yield consistent results. Comparability of groups at baseline (IV1) was tested using the t-test for independent samples and the Mann–Whitney

test; within-group changes (IV2) were tested using the t-test for paired samples and the Wilcoxon test; the between-group effect (IV3) was assessed using the t-test for independent samples and the Mann–Whitney test for both total scores and gains. Effect sizes: Cohen’s d and Hedges’ g for between-group comparisons, d_z for within-group comparisons, and $r = |Z|/\sqrt{N}$ for non-parametric tests. Component-by-component analysis (IV4) was performed for each subscale using the Holm correction; additionally, the effect was assessed within each course.

4. Results

We considered the parametric criteria to be the primary ones, whilst the non-parametric criteria (Mann–Whitney, Wilcoxon) were used to verify the robustness of the conclusions. The results from both sets of criteria were consistent. The internal consistency of the five-component test was high on both measurements: Cronbach’s α was 0.90 before training and 0.88 after, so the total score can be interpreted as a single indicator.

A. Baseline level and overall trends (Table 1)

Table 1. Descriptive Statistics for the LCT Total Score (Max = 40)

Group	Time	n	M	SD	Mdn	95% CI
Experimental	Pre	59	26.83	5.51	27.0	[25.40, 28.27]
Experimental	Post	59	31.32	5.88	32.0	[29.79, 32.85]
Control	Pre	61	26.10	5.78	27.0	[24.62, 27.58]
Control	Post	61	26.46	6.28	27.0	[24.85, 28.07]

At the outset, the groups are almost indistinguishable. The means differ by less than one mark (26.83 versus 26.10), the medians are identical (27.0), and the confidence intervals overlap. The test for differences finds no significant difference: $t(118) = 0.71$; $p = 0.479$; $d = 0.13$; Mann–Whitney $U = 1872$; $z = 0.38$; $p = 0.707$; $r = 0.04$. Any subsequent differences between the groups cannot, therefore, be attributed to an initial advantage held by one of them.

Both groups started at approximately 26 out of 40 marks, that is, 65% of the maximum. The students did not come to the sessions from scratch: they already possessed cultural knowledge; the task was to build on this. By the final assessment, the experimental group had risen to 31.32 marks (78%), whilst the control group remained at 26.46 (66%), that is, at the same level. The average increase was 4.49 marks ($SD = 3.31$) compared with 0.36 ($SD = 3.15$).

What is more interesting is this: the spread did not narrow, but widened. In the experimental group, the standard deviation rose from 5.51 to 5.88, and in the control group, from 5.78 to 6.28. The training did not level the group out. Students made progress at different rates, and the

differences between them have, if anything, become more pronounced. This suggests that the cycle does not function as a leveling tool, and its result depends on the individual student's readiness for interpretative work.

B. Intra-group changes: the outcomes of the training and the standard course (Table 2)

Table 2. Within-Group Change (pre → post)

Group	Paired t (df)	p	d_z	Wilcoxon W	z	p	r
Experimental	10.41 (58)	<.001	1.36	32	-6.11	<.001	.80
Control	0.90 (60)	.374	0.12	716	-0.87	.378	.11

This is where the most striking result was obtained. The experimental group showed a large within-group

shift ($d_z = 1.36$), whilst the control group showed no change at all ($p = 0.374$; $d_z = 0.12$). Conventional teaching of the same topics over the same number of hours did not yield any improvement. The conclusion is unpleasant but useful: the cultural component does not develop of its own accord through traditional work with texts; it must be set as a separate objective.

Individual trajectories mean that the effect cannot be considered universal. In the experimental group, 51 students (86%) improved their results, 5 remained at the same level (8%), and 3 saw their scores fall (5%). The median increase was 5.0 marks, with an interquartile range of 2 to 7 and extreme values ranging from -5 to +11. Roughly one in seven students did not derive any measurable benefit from the training. It is worth stating this clearly: the cycle works for the majority, but not for everyone.

In the control group, the picture is almost symmetrical: 32 students improved (52%), 25 deteriorated (41%), and 4 remained unchanged (7%). These fluctuations are due to measurement error and situational factors rather than to the program's outcome.

C. Inter-group effect

In terms of final scores, the experimental group significantly outperformed the control group: $t(118) = 4.37$, $p < 0.001$, $d = 0.80$; Mann-Whitney $U = 2577$, $z = 4.08$, $p < 0.001$, $r = 0.37$. The gap is even more pronounced in terms of improvement: $t(118) = 7.01$; $p < 0.001$; $d = 1.28$; $U = 2944$; $z = 6.01$; $p < 0.001$; $r = 0.55$. Hypothesis H1 is confirmed. Let us note the difference between these two estimates (1.28 versus 0.80). The individual variation in baseline scores explains this: when comparing final scores, this variation obscures the picture, whereas when analyzing gains, it is eliminated. In designs with pre-formed learning groups, the gain proves to be a more sensitive indicator.

D. What proved to be most and least effective: analysis by component (Table 3)

Table 3. Change by Component (Max = 8): Experimental Change and Between-Group Gain

Component	EG pre→post	d_z	Gain EG	Gain CG	d	p
Realia	5.42→6.37	1.03	0.95	0.13	0.92	<.001

Component	EG pre→post	d _z	Gain EG	Gain CG	d	p
Phraseology	5.42→6.32	0.99	0.90	0.07	0.97	<.001
Precedent phenomena	5.36→6.31	1.16	0.95	0.11	0.99	<.001
Cultural connotations	5.37→6.25	0.93	0.88	-0.13	1.19	<.001
Pragmatic/behav. norms	5.25→6.07	0.87	0.81	0.18	0.69	<.001

An increase was observed across all five components, and after Holm's correction, all differences remain significant. However, the components responded differently, and this unevenness is meaningful.

The precedent-based phenomena performed best: the maximum within-group shift ($d_z = 1.16$) with a between-group effect of $d = 0.99$. In our view, the reason resides in the nature of the component itself. Precedent names and plots (Baiterek, Samruk, Nauryz, Aldar Kose) constitute discrete, well-defined knowledge that is readily assimilated when the references are systematically explained within the text. Similar figures were observed for real-life phenomena ($d_z = 1.03$; $d = 0.92$) and phraseology ($d_z = 0.99$; $d = 0.97$), both of which rely on the recognition of specific units.

Formally, the maximum intergroup effect is observed for cultural connotations ($d = 1.19$), but caution is required here. The within-group increase for connotations is not the highest ($d_z = 0.93$), and the large d-score is also due to the fact that, for this component, a negative change (-0.13 points) was recorded only once in the control group. The gap widened not only due to the experimental group's improvement but also due to a slight decline in the control group. This drop is insignificant in itself ($t = -1.38$; $p = 0.172$) and is most likely random; however, students do not learn to interpret connotations without specific training.

The work on pragmatic and behavioral norms proved to be the least effective: the smallest within-group shift ($d_z = 0.87$), the lowest final score (6.07 out of 8), and the smallest between-group effect ($d = 0.69$). For this procedure, the

most valuable result is this. Behavioral norms are the least easily verbalized: the meaning of the word 'dastarkhan' can be gleaned from the commentary, whilst the hospitality scenario calls for not only knowledge but also the ability to apply it in a given situation. A cycle centered on text analysis is insufficient for this component and should be supplemented with situational role-play tasks. This is a specific modification to the methodology, derived directly from the data.

In the control group, no component showed any significant changes (p ranging from 0.124 to 0.532). None of the aspects of competence were developed through conventional teaching.

E. The ceiling effect and dependence on the baseline level

The upper limit of the measurement deserves separate mention. By the final assessment, 18 students in the experimental group (31%) scored 36 or more out of 40, whilst four completed the test in full. For individual components, between 20% (precedent phenomena) and 29% (realities) of students achieved the maximum score. This represents a noticeable ceiling effect: for the most well-prepared students, the instrument had reached its limit of discriminatory power, and we have probably underestimated their actual improvement. The effect sizes for this part of the sample should be interpreted as lower-bound estimates.

The distribution of gains by baseline level follows the same pattern. By dividing the experimental group into thirds according to their pre-test scores, we found that students with a low starting score ($M = 21.1$) gained 5.24 marks, those with an average score ($M = 26.7$) gained 4.28 marks,

and those with a high score ($M = 32.9$) gained 3.90 marks. The correlation between the initial score and the increase in score is negative but not significant ($r = -0.18$; $p = 0.164$). Nevertheless,

a trend is discernible: the course was most beneficial to students with a low initial level of cultural literacy; in other words, it functions primarily as a compensatory, leveling tool.

F. Stability of the effect across courses (Table 4)

Table 4. Between-Group Gain by Year of Study

Year	n (EG/CG)	Gain EG	Gain CG	d	p
2nd	10 / 11	3.00	-0.36	0.95	.043
3rd	19 / 19	4.26	0.26	1.13	.001
4th	30 / 31	5.13	0.68	1.54	<.001

The experimental group's advantage is replicated across all three courses ($d = 0.95$ – 1.54), so the effect is not limited to a single study group. However, it is uneven and increases with each course: 3.00 marks in the second, 4.26 in the third, and 5.13 in the fourth. The proportion of students who improved their results follows a similar pattern: 70%, 84%, and 93%.

The best result was achieved in the fourth year ($d = 1.54$), and the worst in the second ($d = 0.95$). A substantive explanation suggests itself: the interpretation of connotations, the reconstruction of cultural scenarios, and contrastive analysis require a philological foundation and metalinguistic reflection, which senior-year students possess to a greater extent. Practical conclusion: it is wiser to offer the course in the final years, whilst adapting it for the second year by strengthening the pre-textual stage and reducing the proportion of independent interpretation.

A statistical caveat is also required regarding the results of the second course. With subgroups of 10 and 11 people, the test power is low, and although the difference is significant ($p = 0.043$), the estimate of the effect size is the least reliable here. We consider this conclusion to be preliminary.

G. Additional analysis: gender

We found no gender differences within the experimental group: the average increase was 4.23

marks for girls ($n = 39$) and 5.00 for boys ($n = 20$); the difference was not significant ($t = -0.84$; $p = 0.403$). The effectiveness of the program is not related to students' gender.

H. Summary of results

To summarise, the picture is as follows. Starting from the same baseline and with the same amount of study time, the experimental group improved by almost five marks out of forty, whilst the control group showed no change; the advantage is significant and is confirmed by both parametric and non-parametric tests. The components that responded best to teaching were those requiring the recognition of discrete cultural units: precedent-based phenomena, cultural realities, and phraseology. Pragmatic and behavioral norms fared the worst, indicating that the teaching methodology needs to be adjusted. The effect is consistent across all year groups, but increases from the lower to the upper years and is less pronounced in the second year. Finally, the training was most beneficial for students with a low initial level, whilst for the strongest students, the results have reached the test ceiling, which needs to be raised in further research.

5. Discussion

We investigated whether a course of study focusing on contemporary Kazakhstani fairy tales develops students' linguistic and cultural competence. The experimental group made significant progress from the pre-test to the post-

test; the control group, which studied the same topics for the same number of hours without this course, showed no improvement. The difference in progress is substantial. The groups started on equal footing, and the teaching time was the same; therefore, the discrepancy cannot be explained by students' maturation or additional classes; the only factor left is the teaching itself.

The improvement spanned all five components, but was unevenly distributed. Cultural connotations and precedent-based phenomena benefited the most, whilst pragmatic and behavioral norms benefited the least. This is consistent with the structure of the cycle: it made culturally loaded units explicit through guided commentary and compelled students to interpret connotations and reconstruct behavioral scenarios through contrastive analysis. The richness of the corpus in terms of real-life situations, phraseology, precedent-based phenomena, and symbolic imagery provides the dense context that, without it, such interpretative work cannot proceed.

Our data experimentally confirm the thesis put forward by the linguocultural tradition [4, 5, 6, 7] and the linguocultural pedagogy of K. Kramsch [1] and K. Risager [3] on descriptive grounds: a significant part of language competence consists of mastery of the culture encoded in language, and this can be taught in a targeted manner. This also provides a way into the debate on the relationship between linguocultural and intercultural competences [2]. By breaking the construct down into five measurable components, we were able to identify which particular aspects of cultural knowledge are relevant to working with literary texts and which are not.

Our findings extend the Kazakhstani tradition of studying authorial fairy tales, translating it into an experimental framework. K. R. Nurgali and others (2024) describe markers of national style in 21st-century Kazakh literary fairy tales; we show that these markers, when made the subject of systematic instruction, can be assimilated and measured. The three characteristics of Kazakhstani children's literature identified by K.

R. Nurgali et al. (2024) correspond almost entirely to our components: the national landscape and fauna to realities and connotations; folklore to precedent-based phenomena; and the bilingual civic framework to the pragmatic norms of general Kazakhstani culture. E. Yu. Lichtman's (2023) overview of mythopoetic imagery helps explain why precedent-based phenomena have generated the strongest dynamics.

Much also depends on the materials themselves. Contemporary Kazakhstani fairy tales recode a civic, multi-ethnic identity and incorporate real place-names and realities; texts such as 'Pan Tyrts and Murzik' make the layered, distinctly Kazakhstani feeling of belonging tangible for students. We excluded two texts from the teaching program and retained them solely for diagnostic purposes, so that the improvement would reflect transferable competence rather than recall of what had been read in class.

The research participants will soon become teachers of the Russian language and literature themselves, so the results are of dual significance to them: linguistic and cultural competence functions as both an educational outcome and a practical tool. The cycle is simple and inexpensive and can be integrated into the teacher training program [30]. This leads to a more general conclusion: contemporary national literature should be regarded as a practical resource for cultural literacy, rather than as a pleasant addition to the course.

The study has limitations, and it is best to state them explicitly. We worked with pre-formed study groups, so we allocated participants to subgroups rather than individual students; comparability at the outset was confirmed, but unaccounted-for differences between the groups cannot be ruled out. The study was conducted at a single university, which limits the scope for generalization. The same test form was used for both assessments, meaning that the effect of retesting cannot be ruled out. The second-year subgroups are small, and conclusions regarding them are preliminary. Finally, for the strongest students, the scores reach the test ceiling. It would be worthwhile to include a delayed

assessment, replicate the study at other universities and with students whose native languages differ, compare the fairy-tale-based activity cycle with other genres, and extend the upper end of the instrument's scale.

6. Conclusion

We conducted an experimental study to investigate whether contemporary Kazakhstani original fairy tales can develop the linguistic and cultural competence of university students. The study design included pre- and post-tests, a control group, 120 trainee teachers of the Russian language and literature, and a test comprising five components. Students who took part in the fairy-tale-based program showed a significantly greater improvement than the control group, which remained at the same level. The advantage is substantial in terms of effect size and is consistent across all five components and all three years of study.

This study yields three key outcomes: the operationalization of a construct suitable for measurement; a proprietary tool with proven reliability, based on a real Kazakhstani corpus; and experimental data where previously only descriptions existed. For teacher training programs in Russian language and literature, the cycle described here presents a simple, reproducible approach to cultural literacy.

If we reduce the results to numbers, the picture is as follows. The groups started at the same level (26.83 vs. 26.10 points out of 40; $p = 0.479$). After training, the experimental group scored 31.32 points, while the control group scored 26.46. The average increase was 4.49 points versus 0.36; the between-group effect on the increase was $d = 1.28$ at $p < 0.001$. 86% of students in the experimental group and 52% in the control group improved their scores. The test demonstrated high reliability on both measurements (Cronbach's $\alpha = 0.90$ and 0.88), and the experimental group's advantage persisted across all five components ($d = 0.69$ – 1.19) and all three courses ($d = 0.95$ – 1.54).

These data suggest very specific practical solutions. The approach to pragmatic and behavioral norms needs to be restructured: text analysis alone is insufficient; situational and role-playing tasks are required, in which the cultural scenario is not merely described but acted out. It makes more sense to offer the course cycle in the upper-level years, while adapting it for the second year by strengthening the pre-text phase and reducing the proportion of independent interpretation. When selecting texts, it is important to maintain a balance: part of the corpus should remain outside of class and be used solely for diagnosing transfer. Finally, the assessment tool's scale needs to be expanded upward; otherwise, the progress of high-performing students will continue to hit the test ceiling.

It's worth noting that the training did not benefit everyone. Five students in the experimental group maintained their original scores, while three saw their scores decline. Those who started at a lower level benefited the most: a 5.24-point increase compared to 3.90 for the most prepared students. For the instructor, this means that the cycle works best as a leveling tool but requires separate approaches for the high-performing portion of the group.

The study's limitations are obvious: a single university, pre-formed study groups, the same test format for both assessments, a small second-year cohort, and a ceiling on the scale for high-performing students. The conclusions drawn should therefore be considered a first approximation that needs to be replicated with other samples. At the same time, this study provides something that has been lacking in the Kazakhstani tradition of studying original fairy tales: not a description of the genre, but verifiable data on exactly which aspects of its cultural content are absorbed by students, to what extent, and at what cost. The discussion regarding the role of national literature in teacher education can now be conducted not at the level of general considerations, but at the level of measurable data.

7. References

- Kramsch, C. (1993). *Context and culture in language teaching*. Oxford University Press.
- Byram, M. (1997). *Teaching and assessing intercultural communicative competence*. Multilingual Matters.
- Risager, K. (2006). *Language and culture: Global flows and local complexity*. Multilingual Matters.
- Vorobyov, V. V. (2008). *Linguistic and cultural studies*. RUDN.
- Telia, V. N. (1996). *Russian phraseology: Semantic, pragmatic and linguistic-cultural aspects*. Languages of Russian Culture.
- Maslova, V. A. (2001). *Linguistic and cultural studies*. Academy.
- Stepanov, Y. S. (1997). *Constants: A dictionary of Russian culture*. Languages of Russian Culture.
- Nurgali, K. R., Beisenova, Z. S., & Nurgali, R. R. (2024). Kazakhstani children's literature in the global context: The experience of extended reading. *Bulletin of St. Petersburg University. Language and Literature*, 21(3), 741–762. <https://doi.org/10.21638/spbu09.2024.313>
- Zhuravleva, Y., & Agmanova, A. (2021). Russian language in Kazakhstan: Specific learning and functioning in the context of interlingual interaction. *Polylinguality and Transcultural Practices*, 18(1), 20–28. <https://doi.org/10.22363/2618-897X-2021-18-1-20-28>
- Soltau, N. (2021). Teaching fairy tales: Constructing culture and learning language. *Die Unterrichtspraxis/Teaching German*, 54(1), 38–52. <https://doi.org/10.1111/tger.12153>
- Byram, M. (2008). *From foreign language education to education for intercultural citizenship*. Multilingual Matters.
- Kaskabasov, S. A. (1972). *Kazakh fairy tales*. Nauka.
- Gabdullin, M. (1989). *Kazakh folk tales: Structure and functions*. Nauka.
- Auesbaeva, P. (2021). *The plot structure of fantasy fairy tales*. Kazakh University.
- Ergobek, K. (2019). *Folklore and literary traditions of Kazakhstan*.
- Zipes, J. (2019). Speaking the truth with folk and fairy tales: The power of the powerless. *Journal of American Folklore*, 132(525), 243–260. <https://doi.org/10.5406/jamerfolk.132.525.0243>
- Kondybay, S. (2005). *Kazakh mythology: A concise dictionary*. Nurly Alem.
- Zhanysbekova, E., & Kengeskhan, A. (2024). Mytho-folkloric images and motifs: Their transformation in modern literary fairy tales. *Eurasian Journal of Philology: Science and Education*. <https://doi.org/10.26577/EJPh2011202618>
- Nurgali, K. R., & Baimagambetova, G. M. (2024). Markers of national style in 21st-century Kazakh literary fairy tales. *Keruen*, 84(3), 49–58. <https://doi.org/10.53871/2078-8134.2024.3-04>
- Lichman, E. Y. (2023). Mythological images and motifs as a problem of scholarly research in 21st-century Kazakhstani literary and art studies. *Bulletin of Toraighyrov University. Philological Series*, (3), 222–234. <https://doi.org/10.48081/BGZS9479>
- Serebryansky, Y. (2021). *Kazakhstani fairy tales*. Aruna.
- Klepikova, E. (2021). *Fairy tales of Semirechye*. OLsha.
- Klepikova, E. (2017). *The mystery of the blue web*. Alma-Ata Literary House.
- Klepikova, E. (2024). *Pan Tyrts and Murzik*. Rider.
- Klepikova, E., & Zemskova, K. (2024). *Baurak and Caruzo*. Zerde Publishing.
- Naurzbaeva, Z., & Kalaus, L. (2014). *Batu and the search for the Golden Cup: The adventures of Batu and his friends*. KazHeritage.
- Naurzbaeva, Z., & Kalaus, L. (2019). *The adventures of Batu and his friends in the land of Barsakelmes*. KazHeritage.
- Kalaus, L. (n.d.). *Freedom for animals!*. KazHeritage.

Zemskova, K. (2019). The traveling sweet. Zhurnalny Mir, (5). <https://журнальныймир.рф/content/konfeta-puteshestvennica>

Abdraimova, B., & Dyankova, G. (2024). Empowering preservice teachers in Kazakhstan for linguistic and cultural competence through technology-integrated learning. *International Journal of Cognitive Research in Science*, 12(2), 273–282. <https://doi.org/10.23947/2334-8496-2024-12-2-273-282>

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