

EXPLORING UKRAINIAN LANGUAGE COMPETENCIES AMONG HUNGARIAN MINORITY STUDENTS: RESULTS FROM THE KOMP PROJECT

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Abstract. The study presents the first large-scale, competence-based assessment of Ukrainian language proficiency among Hungarian minority students in Transcarpathia, Ukraine. Grounded in contemporary models of competence-based education, the research focuses on applied linguistic skills such as grammar in use, vocabulary, reading comprehension, and listening rather than on declarative knowledge alone, thereby emphasizing functional language use in authentic contexts. The assessment was conducted within the KOMP project in 2024 by the Ferenc Rákóczi II Transcarpathian Hungarian University in Ukraine and involved Grade 6 and Grade 8 students attending Hungarian-medium schools. K-means cluster analysis was employed to identify distinct relative profiles of Ukrainian-language performance within the assessment sample. The findings demonstrate statistically significant associations between Ukrainian-language performance-profile membership and several background variables, including grade level, gender, settlement type, parental education, and reported home language use. Urban students were more strongly represented in the Advanced profile, whereas students from predominantly Hungarian-speaking rural communities were more frequently represented in several lower and middle performance profiles, although the pattern was not uniformly linear across all seven profiles. Gender-related patterns indicate greater variability among male students, whereas female students are more evenly represented across the middle and higher performance profiles. Parental educational attainment is significantly associated with students' Ukrainian-language performance profiles. Importantly, the results reveal a sociolinguistic paradox: the use of Ukrainian at home does not automatically correspond to higher performance on the assessed Ukrainian-language tasks. Overall, the study highlights the value of combining competence-based assessment with cluster analysis to examine variation in Ukrainian-language performance in minority education contexts and provides an empirical basis for pedagogical planning, targeted intervention, and further longitudinal research.

Keywords: competence-based assessment, Ukrainian language proficiency, Hungarian minority students, sociolinguistics, social integration, bilingual education, cluster analysis.

1. INTRODUCTION

The aim of competence-based education is to equip learners with knowledge and skills that can be applied in everyday life situations, while ensuring that the acquisition of theoretical knowledge is not neglected. This approach emphasizes the development of abilities closely connected to knowledge, thereby embedding learning into active, practical engagement (Rychen & Salganik, 2003). Accordingly, competence-based assessment does not merely focus on students' declarative knowledge, but also examines whether they are able to transfer and apply acquired knowledge in new contexts and problem-

solving situations (OECD, 2019).

The framework of competence-based education is grounded in practical skills and transferable knowledge, which play a key role in enabling learners to adapt successfully to a rapidly changing and complex social environment. Within this interpretation, schooling is not merely concerned with the transmission of knowledge, but also with the cultivation of competences that are indispensable for participation in the labour market and in society more broadly (OECD, 2005). Education thus emerges as an engaging and motivating process in which the acquisition and application of knowledge function as mutually reinforcing elements.

Research on competence-based assessment has received particular emphasis in the twenty-first century, as international large-scale assessments, such as the PISA surveys, have clearly demonstrated that the possession of key competences is a decisive factor for young people's social mobility and labour market success (OECD, 2020). For this reason, the examination of competence-based approaches is not only pedagogically relevant, but also justified and timely within a broader social and economic context.

The aim of educational measurement is not merely to assign numerical values to a phenomenon, but rather to implement a process that enables an objective and comparable description of the phenomenon under investigation (Ágoston, 1971). Within the interpretation of competence assessment, this implies the use of methods in research and educational practice that allow student performance to be evaluated not only qualitatively, but also quantitatively.

The roots of the competence-based approach can be traced back to the mid-twentieth century. In the 1970s, the psychologist David McClelland (1973) introduced the concept of "competence" as an alternative to IQ and traditional academic indicators, emphasizing that professional success depends primarily on specific competences rather than on the mere quantity of knowledge. In pedagogy, the notion of measurement had already appeared in the 1920s and 1930s, primarily in the form of psychological and educational testing. Competence measurement gained new momentum in international educational research through the work of scholars such as Stecher and Hamilton (2014) at the RAND Corporation, as well as within research on education for sustainable development (Redman et al., 2021). These studies broadened the scope of competences to include communication, social, and problem-solving dimensions.

In the educational reforms of the twenty-first century, the growing prominence of competence-based education has been closely linked to innovative models of instructional design. Sturgis (2015), for example, demonstrated in the context of K-12 online learning how competence-oriented forms of learning can be implemented and continuously improved. Ukrainian pedagogical research has also produced significant contributions: Martynenko and Novyk (2015) developed diagnostic tasks for assessing the key and subject-specific competences of primary school students, while Nychkalo (2017) provided an important theoretical contribution to the development of competence assessment methodologies in vocational education and training.

Assessment of Ukrainian-language competence is particularly important in minority educational contexts. Proficiency in Ukrainian is not only a curricular requirement but also an important condition for social integration and labour market participation (Kulyk, 2013). This issue is especially salient in Transcarpathia, where Ukrainian-language competence can significantly influence the educational progression and social mobility of students attending Hungarian-medium schools.

While international and Ukrainian scholarship has significantly advanced the theoretical foundations of competence-based education, the practical implementation of these principles in minority-language contexts raises additional challenges. In Transcarpathia, where a substantial proportion of the Hungarian minority attends mother-tongue schools, the acquisition of Ukrainian competences is not only a curricular requirement but also a prerequisite for educational progression and social integration. The interplay between policy frameworks, curricular design, and the specific linguistic environment of minority students therefore necessitates closer examination, particularly in light of recent legislative reforms and experimental models of instruction.

Teaching Ukrainian presents a complex challenge for students enrolled in minority-language schools, particularly for those with Hungarian as their mother tongue. Proficiency in the state language is indispensable not only for successful performance in the educational system but also for social mobility and labour market participation. At the same time, the linguistic environment of Hungarian communities in Transcarpathia offers limited opportunities for active use of Ukrainian in everyday life, which places additional demands on the school system.

For many years, the curricula and textbooks used in minority schools were prepared by specialists who lacked knowledge of the learners' bilingual background. As a result, the instructional focus often remained on grammatical structures rather than on functional and communicative use. Grammatical knowledge is undoubtedly essential, particularly for passing central examinations such as the ZNO (now the multi-test). It is insufficient for managing everyday communication in real-life contexts without adequate practice in oral and situational language use.

The launch of the "New Ukrainian School" (NUS) reform in 2018 sought to align general secondary education with international trends and modern pedagogical requirements. At its core lies the development of key competences, including communicative competences as a central dimension. In this context, the Ferenc Rákóczi II Transcarpathian Hungarian University and the Transcarpathian Hungarian Pedagogical Association initiated the elaboration of a model curriculum specifically tailored to Hungarian-language schools. The working group, composed of bilingual experts, placed particular emphasis on communicative Ukrainian language instruction, recognizing the importance of learner needs, authentic contexts, and the integration of cultural knowledge. Although these efforts highlight a shift toward more learner-centred and communicative approaches, it is important to note that the teaching of the state language remains regulated by curricula issued by the Ukrainian Ministry of Education, which sets the overarching framework for instruction.

The legal environment has played a decisive role in shaping the scope of Hungarian-language education in Ukraine. The 2017 Law on Education¹ (notably Article 7) substantially curtailed earlier minority-language practices including Hungarian-medium instruction by limiting full mother-tongue education largely to primary school (grades 1-4) and mandating a gradual expansion of Ukrainian as the language of instruction from grade 5 onwards (Verkhovna Rada of Ukraine, 2017). This approach was further specified by the 2020 Law "On Complete General Secondary Education,"² which introduced explicit minimum thresholds for Ukrainian-medium instruction in minority schools: at least 20% of subjects in grade 5, increasing to at least 40% by grade 9, and reaching at least 60% in grades 10-12 (Verkhovna Rada of Ukraine, 2020).

In December 2023, this regulatory framework was revised through legislative package No. 3504-IX³, which amended several provisions in explicit response to expert assessments and recommendations associated with the Council of Europe (Verkhovna Rada of Ukraine, 2023). The amendments to Article 7 of the Law on Education and to the Law "On Complete General Secondary Education" reaffirmed that, for national minorities whose languages are official languages of the European Union, the minority language may again be used alongside the state language in secondary education. In practical terms, the law requires Ukrainian as the compulsory language of instruction only for a defined set of subjects – Ukrainian language, Ukrainian literature, and the History of Ukraine (with "Defense of Ukraine" additionally mandated at the upper-secondary level) – while allowing the remaining subjects to be taught in Hungarian.

As a result of negotiations, a pilot programme entitled the "European Integrated Hungarian-Language School Model" was launched in 2022. The model sought to maintain Hungarian-medium

¹<https://zakon.rada.gov.ua/laws/show/2145-19#Text>

²<https://zakon.rada.gov.ua/laws/show/463-20/print>

³<https://zakon.rada.gov.ua/laws/show/3504-20#Text>

education while distributing instructional time more evenly across the mother tongue, foreign languages, and the state language and prioritising communicative Ukrainian-language teaching aligned with learners' needs. The amendments adopted in December 2023 subsequently created a renewed legal basis for the continued use of EU minority languages, including Hungarian, in secondary education.

The aim of this study is to examine Ukrainian-language performance among Grade 6 and Grade 8 students attending Hungarian-medium schools in Transcarpathia, identify relative performance profiles through K-means cluster analysis, and analyse their associations with selected student and family background characteristics. Competence assessment is particularly relevant in this context because it provides an empirical basis for identifying differences in students' performance and for informing targeted educational planning (European Commission, 2018).

2. RESEARCH METHODS

The study draws on the 2024 Competence Assessment of Transcarpathian Hungarian Schools, a large-scale regional programme involving 1,082 Grade 6 and Grade 8 students from 39 Hungarian-medium schools. Grade 6 students accounted for 53.1% of the sample and Grade 8 students for 46.9%. Participation was voluntary, required parental or guardian consent, and was open to all students enrolled in Hungarian-medium classes in the two assessed grades at the participating schools. The resulting sample should therefore be considered a broad, territorially distributed voluntary sample rather than a probability sample. The assessment covered Hungarian reading comprehension, mathematical-logical reasoning, English, and Ukrainian. The Hungarian Educational Authority provided the digital assessment framework and test materials for Hungarian reading comprehension, mathematics, and English, whereas the Ukrainian-language test was developed by lecturers and language-teaching methodology experts at the Ferenc Rákóczi II Transcarpathian Hungarian University and administered through a separate online platform. After data cleaning, 969 unique and valid Ukrainian-language test records were retained for psychometric evaluation; 879 of these could be linked to the contextual questionnaire and constituted the analytical sample used in the present study.

Ukrainian-language assessment measured reading and listening comprehension together with the functional application of grammatical and lexical knowledge. Speaking and extended written production were not assessed directly, and vocabulary knowledge was examined primarily through receptive recognition and the selection of contextually appropriate forms.

Competence assessment is particularly important in bilingual or non-native language environments, such as in the case of ethnic Hungarian students in Ukraine. For these learners, language competence development is influenced not only by formal schooling but also by family and societal language practices. The assessment provides insight into students' ability to apply Ukrainian grammatical and lexical knowledge in contextualised reading and listening tasks beyond the reproduction of isolated grammatical rules.

The assessment consisted of three complementary subtests covering the selected linguistic domains:

Part I: Grammar in context and reading comprehension (15 items; 30 points). This section integrated the assessment of morphological competence, including the accurate use of noun, adjective, and verb inflection, with reading-comprehension tasks. Ten items assessed the completion of missing grammatical endings in a continuous text, while five items required students to match information with the relevant sections of the text.

Part II: Grammar and vocabulary test (20 items; 40 points). This multiple-choice section focused on fundamental grammatical and lexical phenomena, including tense use, agreement, pronouns, case marking, and word order. Students were required to select the contextually and grammatically appropriate response from the alternatives provided.

Part III: Listening comprehension (10 items; 30 points). Students listened to the text twice and answered ten multiple-choice questions during or after listening. The items assessed both global and

detailed comprehension, including the identification of personal information, family relationships, occupations, physical characteristics, and personality traits.

Together, the three sections provided a composite measure of morphological, grammatical, lexical, and receptive skills. The results describe students' performance in the assessed grammatical, lexical, reading-comprehension, and listening-comprehension domains.

The complete assessment contained 45 items and was scored on a 100-point scale. Correct responses in Parts I and II were awarded 2 points each, resulting in maximum component scores of 30 and 40 points, respectively, while correct responses in Part III were awarded 3 points each, resulting in a maximum score of 30 points. For the internal-consistency analysis, all items were dichotomously coded as 1 for a correct response and 0 for an incorrect response. Cronbach's alpha, which is equivalent to the Kuder–Richardson 20 coefficient for dichotomously scored items, was calculated using the 969 unique and valid test records. The complete 45-item assessment demonstrated excellent internal consistency ($\alpha = .935$). Reliability was also satisfactory for each component: grammar in context and reading comprehension ($\alpha = .853$, 15 items), grammatical and lexical knowledge ($\alpha = .895$, 20 items), and listening comprehension ($\alpha = .834$, 10 items). Corrected item–total correlations were positive across the assessment. Because removing individual items produced no substantively meaningful improvement in reliability and the items represented predefined content domains, all 45 items were retained.

Tab. 1

Structure of the Ukrainian Language Competence Assessment: Subtests, Task Types, Methods, and Targeted Competences

Test Component	Task Type	Method / Activity	Targeted Competence
I. Grammar and Reading Comprehension	a) Completing missing endings in a text	Deductive reasoning, application of grammatical rules in a new textual context	Morphological competence (inflection of nouns, adjectives, verbs), reading comprehension
	b) Information matching	Keyword searching, text segmentation	Receptive reading strategies, text processing
II. Grammar and Vocabulary Test (Multiple-Choice)	Practice of linguistic phenomena (verb tenses, agreement, pronouns, word order)	Application of rules in new examples	Grammatical and lexical competence, deeper rule internalisation
III. Listening Comprehension	Listening to a text twice and answering multiple-choice questions	Identification of global and detailed information	Auditory memory, recognition of information (e.g., personal data, external characteristics), listening comprehension

3. RESULTS AND DISCUSSION

The Ukrainian-language test scores had a mean of 67.47 (SD = 22.00) on the 100-point scale. The distribution was concentrated toward the upper part of the score range, although substantial variation was evident across students (Fig. 1).

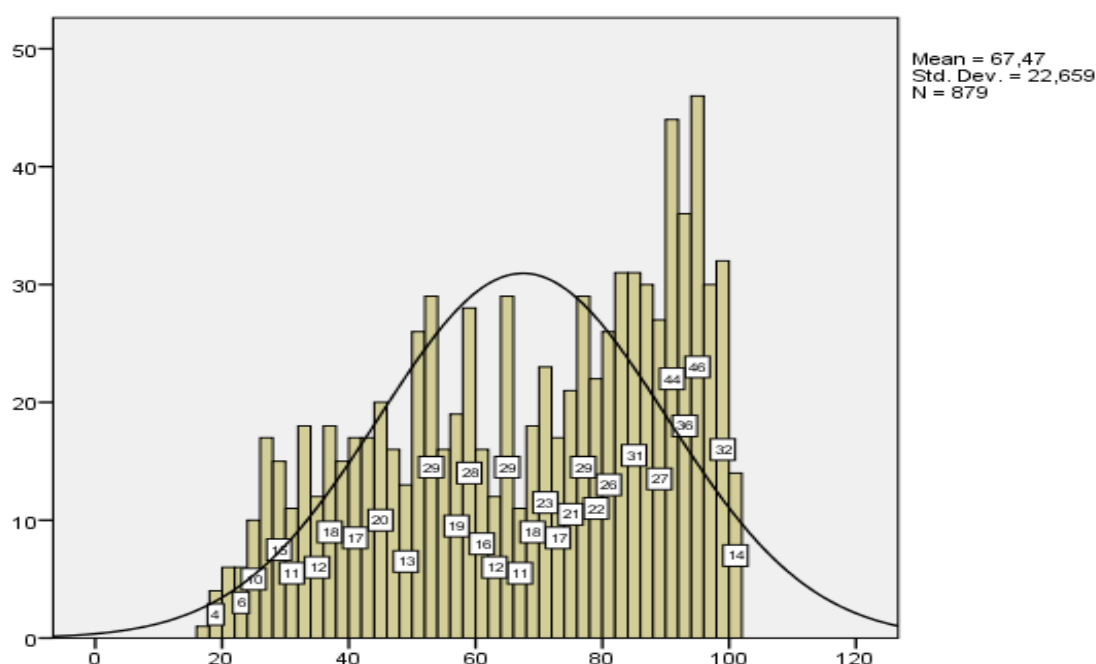


Fig. 1. Distribution of Ukrainian-language test scores ($M = 67.47$, $SD = 22.00$)

Source: developed by the authors based on KOMP 2024 data

To identify relative performance profiles within the sample, K-means cluster analysis was applied to students' total Ukrainian-language test scores. The procedure grouped students with similar test performance while maximising differences between the resulting clusters. In accordance with the common descriptive framework used across the KOMP assessment domains, a seven-cluster solution was applied. The resulting clusters were labelled as follows:

1. **Beginner** – represents the lowest relative range of performance within the assessed sample.
2. **Developing** – represents performance above the lowest range but still below the middle of the sample distribution.
3. **Foundation** – represents an emerging level of performance approaching the middle of the sample distribution.
4. **Intermediate** – represents the middle range of performance within the assessed sample.
5. **Advanced** – represents performance above the middle range of the sample distribution.
6. **Strong** – represents a high relative level of performance within the assessed sample.
7. **Outstanding** – represents the highest relative range of performance within the assessed sample.

These clusters should be interpreted as relative performance profiles within the 2024 Ukrainian-language assessment rather than as externally validated or norm-referenced proficiency levels. The seven-cluster solution followed the common descriptive framework adopted across the KOMP assessment domains to facilitate the interpretation of students' relative positions within each domain. The cluster labels therefore indicate an ordered position within the present score distribution and not an independently certified level of Ukrainian-language proficiency.

The chi-square test indicated a statistically significant association between grade level and cluster membership, $\chi^2(6) = 21.41$, $p = .002$. Grade 8 students were more frequently represented in higher performance profiles, particularly the Advanced profile, whereas Grade 6 students were more strongly represented in the Intermediate and Strong profiles. Although this pattern is consistent with higher performance among older students, the substantial overlap between the two grade levels indicates considerable individual variation in assessed Ukrainian-language performance (Fig. 2).

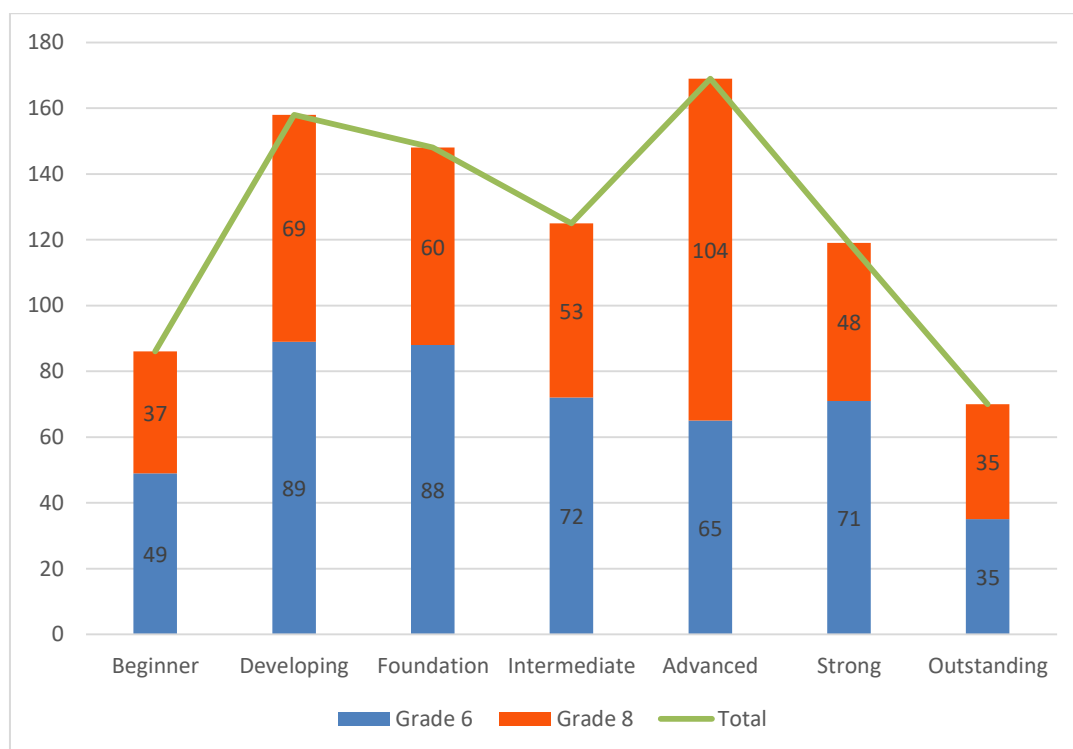


Fig. 2. Ukrainian-language performance profiles by grade level (case numbers, K-means clustering)

Source: developed by the authors based on KOMP 2024 data

Gender has traditionally been a central dimension of educational research, as numerous studies have highlighted systematic performance differences between boys and girls across a variety of subjects (Buchmann et al., 2008). The analysis also identified gender-related differences in the distribution of Ukrainian-language performance profiles within the sample.

The distribution of cluster membership by gender shows that male students are more frequently represented at the extremes of the scale. A higher proportion of boys appeared in the *Outstanding* cluster (12% compared to 4% among girls), while the share of boys in the *Beginner* group was also somewhat higher (13% compared to 7%). This polarisation suggests that boys tend to be overrepresented both among the highest and the lowest performers.

Female students, on the other hand, were more consistently distributed across the middle and upper competence clusters. Girls were more frequently represented than boys in the *Intermediate* (16% vs. 13%), *Strong* (16% vs. 11%), and *Advanced* (21% vs. 17%) profiles. This distribution is consistent with international findings indicating a female advantage in reading and language-related assessment performance (OECD, 2019).

The chi-square test indicated a statistically significant association between gender and cluster membership, $\chi^2(6) = 34.28$, $p < .001$. The association was weak to moderate (Cramer's $V = .198$): girls were more evenly distributed across the middle and higher performance profiles, whereas boys were more frequently represented at both extremes. These results are broadly consistent with educational research suggesting that gender differences in language-related performance may be associated with variation in reading engagement, learning experiences, and educational strategies (Willingham & Cole, 2013). At the same time, boys' overrepresentation in both the *Beginner* and *Outstanding* profiles suggests greater variability in their assessed Ukrainian-language performance (Fig. 3).

The chi-square test indicated a statistically significant, moderate association between settlement type and cluster membership, $\chi^2(6) = 106.25$, $p < .001$, Cramer's $V = .35$, suggesting that the distribution of Ukrainian-language performance profiles differed between rural and urban students.



Fig. 3. Distribution of Ukrainian-language performance profiles by gender

Source: developed by the authors based on KOMP 2024 data

The distribution shows that rural students were more frequently represented in several lower and middle performance profiles, including Beginner (13%), Foundation (19%), and Intermediate (16%). Urban students, by contrast, were substantially more strongly represented in the Advanced profile (36% among urban students compared with 13% among rural students), although they were also more frequently represented in the Developing profile (27% vs. 14%). Settlement type was therefore associated with profile membership, but the pattern was not uniformly linear across all seven profiles. The predominantly Hungarian-speaking environment of many rural communities may offer fewer opportunities for the everyday use of Ukrainian, whereas the more heterogeneous urban environment may provide more varied contexts for contact with the state language (Fig. 4).

Parental educational attainment was significantly associated with students' Ukrainian-language performance profiles. Statistically significant associations were found for both paternal educational attainment, $\chi^2(30, N = 848) = 55.99, p = .003$, Cramer's $V = .115$, and maternal educational attainment, $\chi^2(30, N = 860) = 61.65, p = .001$, Cramer's $V = .120$. Although both associations were weak, the distributions indicate a systematic relationship between parental educational background and students' placement across the performance profiles.

The percentage distributions reveal a clear shift in parental educational composition between the lowest and highest performance profiles. Within the Beginner profile, 8.7% of students had fathers with higher education, whereas this proportion increased to 31.9% in the Outstanding profile. Correspondingly, fathers with primary education or lower accounted for 39.1% of the Beginner profile but only 17.5% of the Outstanding profile. A similar and particularly visible pattern emerged for maternal education: mothers with higher education represented 18.8% of the Beginner profile, 32.9% of the Advanced profile, 35.0% of the Strong profile, and 47.3% of the Outstanding profile. By contrast, mothers with primary education or lower accounted for 30.4% of the Beginner profile and 19.4% of the Outstanding profile (Fig. 5).

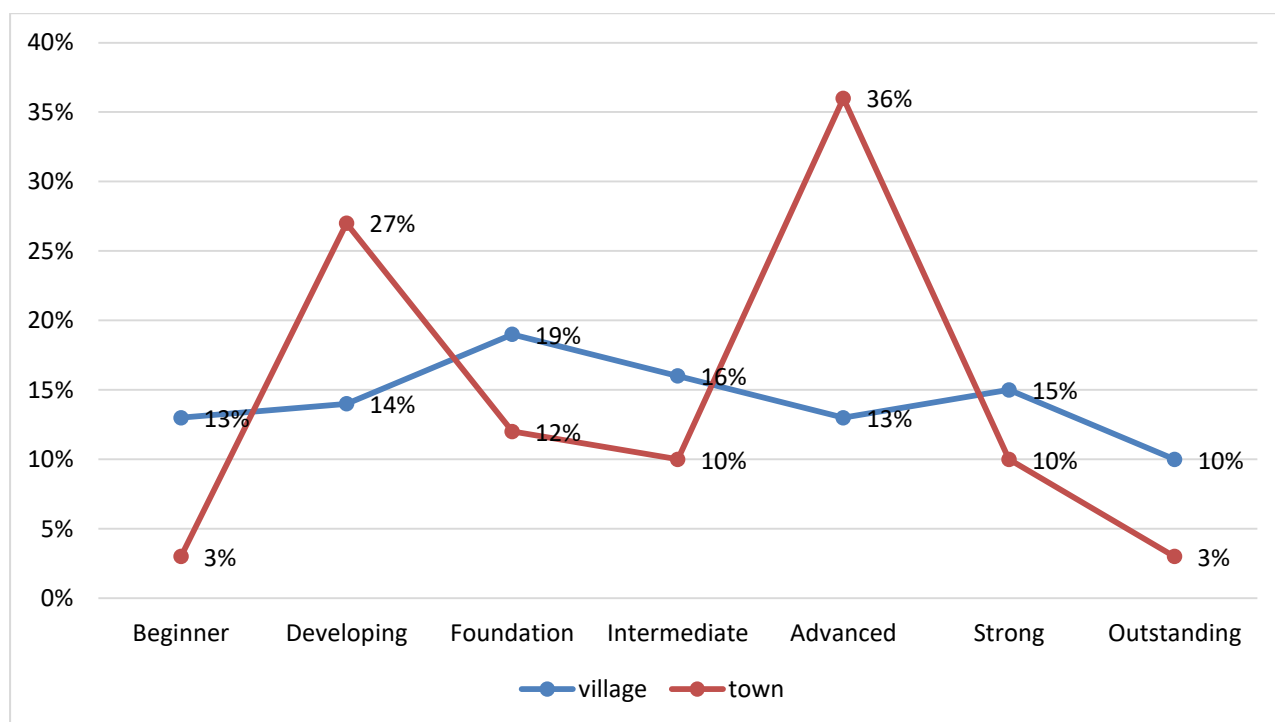


Fig. 4. Ukrainian-language performance profiles by settlement type (percentage distribution)

Source: developed by the authors based on KOMP 2024 data

These findings indicate that both paternal and maternal educational attainment are associated with students' Ukrainian-language performance profiles. The difference between the strength of the maternal association (Cramer's $V = .120$) and the paternal association (Cramer's $V = .115$) was minimal, suggesting broadly similar relationships for the two parental background variables. The descriptive distributions nevertheless show that parents with higher education were more strongly represented in the highest performance profile, while parents with primary education or lower were more strongly represented in the Beginner profile. As the analysis is cross-sectional, these associations should be interpreted as relationships between family educational background and assessed performance rather than as evidence of a direct causal effect (Fig. 5).

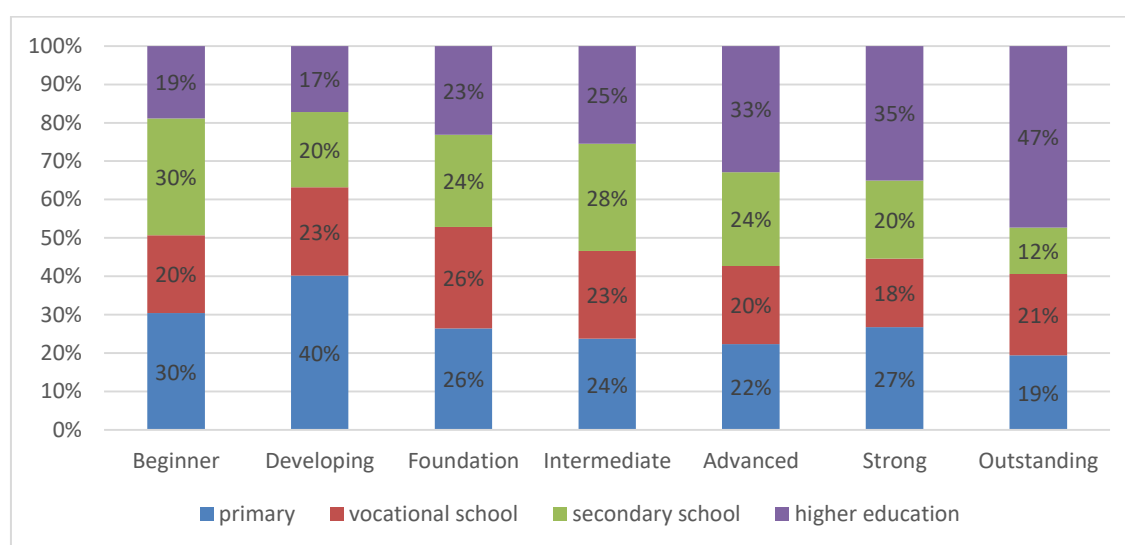


Fig. 5. Distribution of maternal educational levels within Ukrainian-language performance profiles

Source: developed by the authors based on KOMP 2024 data

Note: Percentages were calculated within Ukrainian-language performance profiles. For visual presentation, the six original maternal educational-attainment categories were combined into four broader groups

Reported home language use was also associated with Ukrainian-language performance-profile membership. It is often assumed that students who use the state language at home benefit from more frequent linguistic exposure. However, this relationship may depend on the frequency, quality, and communicative functions of language use, as well as on the interaction between family, school, and wider social environments. Among Transcarpathian Hungarian students, reported home use of Ukrainian did not correspond uniformly to higher performance, producing an apparent sociolinguistic paradox that requires cautious interpretation.

The chi-square test indicated a statistically significant association between reported home use of Ukrainian and cluster membership, $\chi^2(6, N = 879) = 138.37$, $p < .001$, Cramer's $V = .397$. Among students who did not report using Ukrainian at home, 40% were classified in the Advanced profile and 26% in the Developing profile, whereas only 10% of students who reported using Ukrainian at home were classified as Advanced. Students reporting home use of Ukrainian were represented in both lower and higher performance profiles, including Outstanding (12%), Beginner (14%), Intermediate (16%), and Strong (18%). This mixed distribution indicates that reported home use of Ukrainian was associated with cluster membership but did not correspond consistently to a higher position in the assessed performance distribution.

These findings indicate that home use of Ukrainian alone does not necessarily correspond to higher performance on the assessed Ukrainian-language tasks. Its relationship with performance should therefore be interpreted in conjunction with the school environment, peer interactions, the range of language-use situations, and individual language-learning experiences (Fig. 6).

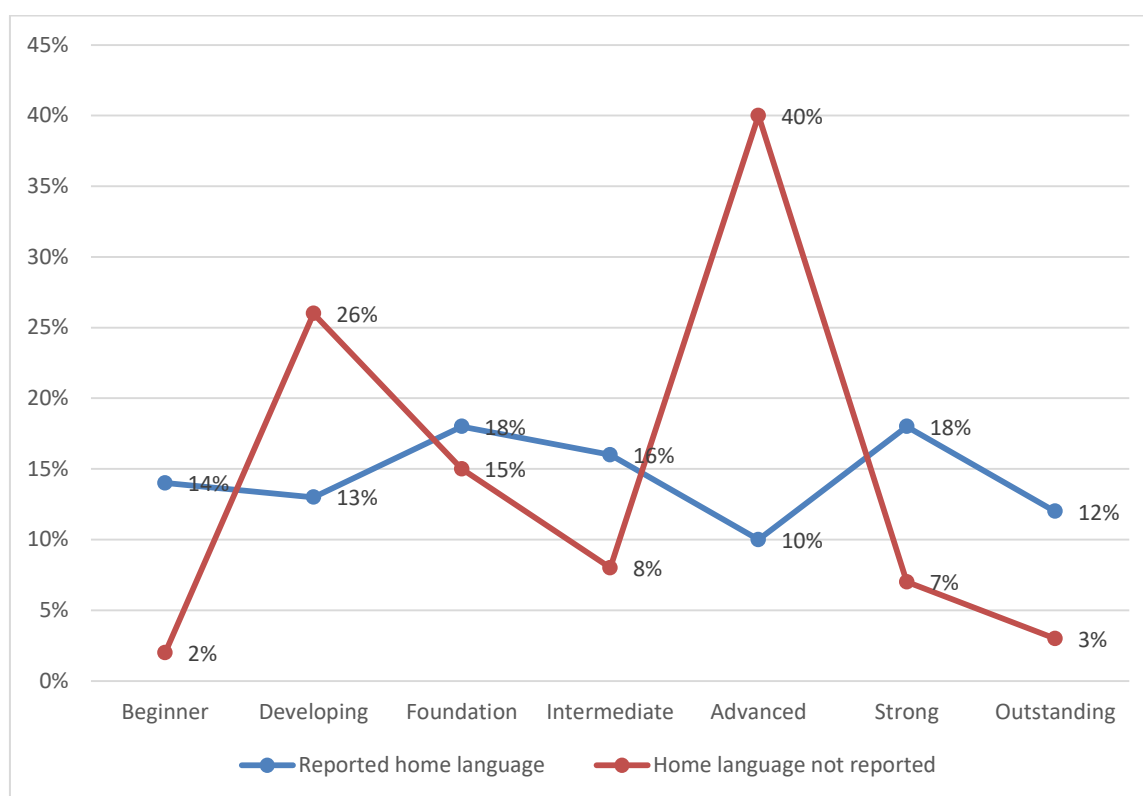


Fig. 6. Distribution of Ukrainian-language performance profiles by reported home use of Ukrainian
Source: developed by the authors based on KOMP 2024 data

4. CONCLUSIONS

The findings of the present study indicate that Ukrainian-language performance among Hungarian minority students in Transcarpathia is associated with multiple student, family, and contextual characteristics. Grade level, settlement type, parental education, gender, and reported home use of

Ukrainian were all significantly associated with performance-profile membership. The K-means cluster analysis identified distinct relative performance profiles within the assessment sample. These profiles should not be interpreted as externally validated proficiency levels or developmental trajectories, but as relative groupings within the performance distribution of the 2024 assessment sample.

The KOMP project is significant in scope and novelty: for the first time, a large-scale competence assessment was implemented in Hungarian-medium schools in Transcarpathia and, more broadly, within Ukraine's minority-school sector. Beyond providing an objective baseline of learner outcomes, the project contributes to understanding the conditions associated with Ukrainian-language performance in minority educational settings and lays the groundwork for comparative and longitudinal monitoring (European Commission, 2018; OECD, 2020).

The results corroborate prior observations about the rural–urban contrast. Compact Hungarian-speaking rural communities afford fewer routine contexts for active Ukrainian use, which is reflected in a higher concentration of students in lower and middle clusters; urban environments, with more diverse interactional domains and more frequent contact with Ukrainian, are associated with higher proficiency (Kulyk, 2013).

Parental educational attainment was also associated with performance-profile membership. Although both associations were weak, parents with higher education were more strongly represented in the Outstanding profile, whereas parents with primary education or lower were more prevalent in the Beginner profile. The nearly identical Cramer's V values indicate that maternal and paternal educational attainment had similarly weak associations with profile membership.

Gender-related patterns are also consistent with international evidence (OECD, 2019; Buchmann et al., 2008): girls were more evenly distributed across the middle and higher performance profiles, whereas boys appeared more frequently at both ends of the distribution, indicating greater variability in their assessed performance.

The relationship between home language use and assessed performance requires careful interpretation. Although the use of Ukrainian at home is commonly expected to facilitate language acquisition, the results show that reported home use alone did not correspond consistently to higher performance profiles. Students reporting Ukrainian use at home were represented in both lower and higher clusters, suggesting that performance is also associated with school-based instruction, family language practices, peer networks, and the broader range of contexts in which Ukrainian is used.

Taken together, these results position competence assessment not merely as a descriptive instrument but as an analytic framework for interpreting how minority-language learners engage with the state language across domains of use. In the Transcarpathian context, strengthening Ukrainian proficiency is both an educational objective and a prerequisite for social integration and labour market participation.

The study has several limitations. First, it was conducted in a single multilingual border region using a broad voluntary rather than a probability sample; its findings therefore cannot be generalised automatically to other minority-language educational settings. Second, the online testing format may have introduced variation associated with students' familiarity with digital assessment, the available equipment, or local technical conditions. Third, although 969 unique and valid Ukrainian-language test records were available for psychometric evaluation, the analyses of background characteristics were limited to the 879 records that could be linked to the contextual questionnaire. Fourth, the present analysis is based on the first wave of the KOMP assessment, conducted in 2024, and therefore provides a cross-sectional baseline rather than evidence of change over time. The continuation of the assessment programme will enable the examination of trends across successive waves and, where individual records can be linked over time, the longitudinal analysis of students' competence development. Finally, the seven clusters represent relative groupings within the present sample rather than externally validated proficiency levels. Future analyses may also apply alternative latent-structure approaches, such as Latent Class Analysis or Growth Mixture Modeling, to examine the stability and development of learner profiles over time (Vermunt & Magidson, 2002).

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Черничко Степан, Гіреш-Ласлов Корнелія, Певсе Андрея. Вимірювання компетентності з української мови учнів класів з угорською мовою навчання в межах проєкту «КОМП»: результати дослідження. *Журнал Прикарпатського університету імені Василя Стефаника*, **13** (3) (2026), 150-163.

У статті представлено перше масштабне компетентнісно орієнтоване оцінювання рівня володіння українською мовою учнями угорської національної меншини Закарпаття (Україна). Спираючись на сучасні моделі компетентнісної освіти, дослідження зосереджене на вимірюванні прикладних мовних умінь — функціонального використання граматики й лексики, а також навичок читання та аудіювання, — а не лише на перевірці декларативних знань, що підкреслює значущість функціонального мовлення в автентичних комунікативних ситуаціях. Оцінювання було проведене у 2024 році в межах проєкту КОМП Закарпатським угорським університетом імені Ференца Ракоці II та охопило учнів 6-х і 8-х класів закладів освіти з угорською мовою навчання. Для виявлення відмінних відносних профілів результативності з української мови в межах досліджуваної вибірки було застосовано кластерний аналіз методом k-середніх. Результати засвідчують наявність статистично значущих зв'язків між рівнем мовної компетентності та низкою фонових змінних, зокрема класом навчання, статтю, типом населеного пункту, рівнем освіти батьків і мовою

домашнього спілкування. Міське та мовно різноманітне середовище пов'язане з вищими рівнями володіння українською мовою, тоді як учні з переважно угорськомовних сільських громад частіше представлені в кластерах нижчого та середнього рівнів. Гендерні відмінності вказують на більшу варіативність результатів серед хлопців, тоді як дівчата рівномірніше представлені в середніх і вищих профілях результативності. Освітній рівень обох батьків статистично значуще пов'язаний із профілями результативності учнів з української мови. Водночас виявлено соціолінгвістичний парадокс: використання української мови в родинному спілкуванні не завжди відповідає вищим результатам виконання оцінюваних завдань з української мови. Загалом дослідження засвідчує аналітичний потенціал компетентнісного оцінювання та кластерного аналізу для розуміння мовної результативності в умовах освіти національних меншин і створює емпіричне підґрунтя для педагогічного планування, цілеспрямованих освітніх інтервенцій і подальших досліджень.

Ключові слова: компетентнісне оцінювання, рівень володіння українською мовою, учні угорської національної меншини, соціолінгвістика, соціальна інтеграція, білінгвальна освіта, кластерний аналіз.