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Philological Faculty  
Department of English Language Practice and Teaching Methodology**

**Diploma research of the educational qualification level «Bachelor Degree»**

**«Amplification of teaching pupils culture  
of English-speaking countries»**

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## SUMMARY

**Bolshakova Dariia (2024). Amplification of teaching pupils culture of English-speaking countries.** Diploma research of the educational qualification level «Bachelor Degree». Rivne State University of the Humanities. *The manuscript.*

**The scientific novelty of the obtained research results** is determined by the fact that for the first time the peculiarities of formation of sociocultural competence in English reading in English lessons are theoretically substantiated, approaches to determining the purpose and content of formation of sociocultural competence in English reading in English lessons are improved. the model of formation of sociocultural competence in English reading in English lessons is substantiated, the theoretical substantiation of criteria of selection of English country texts as a component of the content of teaching reading of senior pupils for the purpose of formation of sociocultural competence is formed, the subsystem of exercises reading in English lessons.

**The practical significance of the research results** lies in the selection of educational local lore texts from modern Internet sources, the development of sets of exercises combined in the subsystem, the conclusion of guidelines for organizing and conducting relevant training that can be used by foreign language teachers in practice. and teaching English in a specialized school in particular.

**The Introduction** substantiates the relevance of the topic, defines the purpose and objectives, object and subject of research, indicates scientific novelty, practical significance, research methods, connection with scientific programs, plans and topics, provides information on testing the results.

**The first section** of the research is devoted to the theoretical preconditions for the formation of high school students' linguistic and sociocultural competence in English reading in English lessons.

**The second section** of the research is devoted to the technology of formation of sociocultural competence in English reading in high school students in the course of local lore. Peculiarities of selection of regional studies texts in the process of

formation of linguistic and sociocultural competence in English reading in English lessons at English lessons in the line of modern tendencies are investigated. As a result of the research, qualitative criteria of content were singled out: literary and local lore criterion with indicators: 1) awareness of genre features of texts; 2) the ability to distinguish genre features of large texts (fairy tales, stories, legends, myths, legends, etc.); familiarity with the structural features of the texts: theme, plot, composition, characters, etc.); emotional and evaluative criterion with indicators: 1) the ability to perceive the means of artistic expression of texts of local lore; 2) the ability to express their own evaluative judgments about the content of the read texts; evaluation-reflexive criterion with indicators: 1) ability to use local lore vocabulary in one's own speech; 2) the ability to independently create coherent texts of socio-cultural orientation. According to the indicators, we determined the levels of formation of socio-cultural competence of high school students in English lessons by means of processing local lore texts and identified lexical, grammatical, diamonological and communicative skills.

**Key words:** amplification, culture of English-speaking countries, sociocultural competence, reading, country study text, sociocultural approach, high school students, English language lessons, social success.

**Большакова Дарія Андріївна (2024). Ампліфікація навчання учнів культурі англomовних країн.** Дипломна робота освітньо-кваліфікаційного рівню «Бакалавр». Рівненський державний гуманітарний університет. *Рукопис.*

**Наукова новизна** одержаних результатів дослідження визначається тим, що вперше теоретично обґрунтовано особливості формування в учнів старших класів соціокультурної компетентності в англomовному читанні на уроках англійської мови з огляду на залучення школярів до вивчення англomовної культури, удосконалено підходи до визначення мети і змісту формування у учнів старших класів соціокультурної компетентності в англomовному читанні

на уроках англійської мови, обґрунтовано модель формування у старшокласників соціокультурної компетентності в англомовному читанні на уроках англійської мови, набуло подальшого розвитку теоретичне обґрунтування критеріїв добору англомовних країнознавчих текстів як компоненту змісту навчання читання учнів старших класів із метою формування соціокультурної компетентності, створено підсистему вправ для формування у старшокласників соціокультурної компетентності в англомовному читанні на уроках англійської мови.

**Практичне значення одержаних результатів дослідження** полягає у доборі навчальних країнознавчих текстів із сучасних інтернет-джерел, розробці комплексів вправ, об'єднаних у підсистему, укладанні методичних рекомендацій з організації та проведення відповідного навчання, які можуть бути використані вчителями іноземної мови в практичній професійній діяльності в цілому та викладанні англійської мови в профільній школі зокрема.

У **Вступі** обґрунтовано актуальність теми, визначено мету і завдання, об'єкт і предмет дослідження, зазначено наукову новизну, практичне значення, методи дослідження, зв'язок роботи з науковими програмами, планами та темами, наведено відомості щодо апробації одержаних результатів.

**Перший розділ** дослідження присвячений теоретичним передумовам формування у старшокласників лінгвосоціокультурної компетентності в англомовному читанні на уроках англійської мови.

**Другий розділ** дослідження присвячений описові технології формування у учнів старших класів соціокультурної компетентності в англомовному читанні в курсі країнознавства.

Досліджено особливості відбору країнознавчих текстів у процесі формування у старшокласників лінгвосоціокультурної компетентності в англомовному читанні на уроках англійської мови у руслі сучасних тенденцій. В результаті дослідження були виокремлені якісні критерії змісту: **літературно-краснознавчий критерій** з показниками: 1) обізнаність із

жанровими особливостями текстів; 2) уміння розрізняти жанрові особливості великих текстів (казки, оповідання, легенди, міфи, перекази та ін.); обізнаність зі структурними особливостями текстів: темою, сюжетом, композицією, персонажами та ін.); **емоційно-оцінний критерій** з показниками: 1) уміння сприймати засоби художньої виразності текстів краєзнавчого спрямування; 2) уміння висловлювати власні оцінні судження про зміст прочитаних текстів; **оцінно-рефлексивний критерій** з показниками: 1) уміння використовувати краєзнавчу лексику у власному мовленні; 2) уміння самостійно створювати зв'язні тексти соціокультурного спрямування.

Відповідно до показників, ми визначили **рівні сформованості соціокультурної компетентності старшокласників на уроках англійської мови** засобами опрацювання краєзнавчих текстів і визначили **лексичні, граматичні, діалогологічні та комунікативні вміння**.

**Ключові слова:** ампліфікація, культура англійськомовних країн, соціокультурна компетентність, читання, країнознавчий текст, соціокультурний підхід, старшокласники, уроки англійської мови, соціальний успіх.

## INTRODUCTION

The search for promising directions for the development of general secondary education in Ukraine leads to revolutionary changes and constant modernization of the educational process, which poses new challenges to the national education system in the context of training graduates of secondary schools. The problem of improving the quality of education becomes even more important, since a modern graduate of a specialized school must possess a large number of competencies that will allow him to carry out high-quality training aimed at future professional activity.

Studying a foreign language contributes to the integration of the individual into the system of world and national cultures, because graduates of a specialized school must be able to perceive and understand not only a foreign language, but also the culture of the country whose language is being studied, be ready to quickly adapt to the modern intercultural space and actively interact in it. When selecting topics of a cultural nature, it is not just about the systematic presentation of country studies knowledge about the country whose language is being studied, but about the need to teach students to perceive another culture from the standpoint of socio-cultural sensitivity (sensitization) and intercultural tolerance. Otherwise, the accumulation of factual country-scientific material can confuse rather than prepare for intercultural communication.

The modern paradigm of school education is focused on mastering a foreign language in integration with an intercultural orientation of its content, which is ensured by the readiness of graduates of specialized schools to use a foreign language as a means of intercultural interaction and the adaptation of students' educational activities to the European standards of modern world society (Про затвердження Державного стандарту базової і повної загальної середньої освіти. Постанова Кабінету Міністрів України № 1392, 2018; Закон України «Про освіту» № 2145-19, 2017; Міністерство освіти і науки України, Проект Концепції профільного навчання в старшій школі, 2019).

The existing contradictions determine the relevance of the problem of creating a methodology for the formation of high school students' sociocultural competence in reading in English classes. The relevance of the problem of the formation of sociocultural competence in high school students in English lessons is due to the need to create an appropriate teaching methodology in the conditions of a social order for the preparation of a competitive graduate of a secondary school capable of intercultural dialogue, and the urgent need to reform the content of foreign language teaching in a secondary school.

**The object of the research** is the process of formation of sociocultural competence of high school pupils at the English lessons.

**The subject of the research** is the peculiarities of the formation of socio-cultural competence at the English language classes of high school pupils by teaching them culture of English-speaking countries.

**The purpose of the research** is the theoretical substantiation, amplification, practical development and experimental verification of the proposed features of the formation of socio-cultural competence at the English language classes among secondary school pupils.

Achieving the goal involves solving **the following tasks**:

1) analysis of the history of the research problem and modern approaches to the formation of socio-cultural competence in high school students in English language classes, studying the psychological and cultural foundations of learning to read English-language texts with linguistic-socio-cultural potential in English language classes;

2) characteristics of sociocultural competence formed in the process of reading country studies texts by high school students, analysis of English-language authentic texts of country studies content for teaching students of a specialized school with the aim of forming sociocultural competence and selection of country studies texts;

3) determination of methodical principles, content and stages of formation of socio-cultural competence in reading authentic national history texts in secondary school students;



4) creation of a subsystem of exercises for the formation of socio-cultural competence in English language classes in secondary school students, development of a model for organizing the educational process of formation of socio-cultural competence in reading in English language classes in high school students;

5) experimental verification of the effectiveness of the developed methodology and compilation of methodological recommendations for teaching secondary school students to read English-language national history texts with the aim of forming sociocultural competence.

The following **research methods** were used to solve the tasks: theoretical (critical analysis, synthesis and generalization of the provisions of domestic and foreign sources on psychology, pedagogy, linguistics, foreign language teaching methods, recommended programs for elective courses, modern regulatory documents, country studies manuals for high school students and determining the content of the formation of socio-cultural competence, as well as for the purpose of developing a model of the organization of the educational process and substantiating the corresponding subsystem of exercises); empirical (scientific observation of the formation of sociocultural competence of high school students in English-language reading in English classes and a questionnaire survey of high school students with the aim of the feasibility of creating the proposed methodology, forecasting and modeling of the educational process according to the developed methodology; conducting an experiment to verify the effectiveness of the proposed teaching methodology); statistical processing (mathematical statistics for checking the reliability of experimental data, their quantitative and qualitative analysis).

**The scientific novelty of the research results** is determined by the fact that, *for the first time*, the method of forming sociocultural competence in English-language reading in English language classes in high school students has been *theoretically substantiated*, approaches to determining the purpose and content of the formation of sociocultural competence in English-language reading in English language classes in English language classes *have been improved*, the model for the formation of sociocultural competence in high school pupils in English-language

reading in English language classes *has been substantiated*, the theoretical justification of the selection criteria for English-language country studies texts as a component of the content of reading education for high school pupils with the aim of forming socio-cultural competence *has been further developed*, a subsystem of exercises *has been created* for the formation of socio-cultural competence in English language of high school pupils readings in English lessons.

**The practical significance of the research results** is the selection of educational country studies texts from modern Internet sources, the development of sets of exercises combined into a subsystem, the preparation of methodological recommendations for the organization and conduct of appropriate training, which can be used by foreign language teachers in practical professional activities as a whole and teaching English in a specialized school in particular.

**Approbation and implementation** of the research results into the practice of primary secondary school was carried out through discussion at the pedagogical councils of Alternative school KrOK, town Kropyvnytskyi, meetings of the Department of English Language Practice and Teaching Methodology of Rivne State University of the Humanities, reported at the conferences on modern problems of teaching methods of foreign languages (Rivne, 2024). **One article** was published:

1. **Bolshakova Dariia (2024). The cultural approach of teaching English in contemporary secondary schools.** *Матеріали I Всеукраїнської студентської науково-практичної конференції «Актуальні проблеми сучасної іноземної філології» (20 травня 2024 року).* Рівне: РДГУ. С. 33–34.

# **Chapter 1. Use of socio-cultural approach in teaching English pupils of high school**

## **1.1. The cultural approach to teaching English in contemporary secondary schools**

The cultural approach to teaching English in a modern secondary school assumes in the educational process a close interaction of the language and the culture of its speakers, the inseparability of the linguistic and cultural picture of the world that exists in the mind of the student, in his worldview, created on the basis of his educational experience of learning the language through the prism of cultural phenomena and explanation of cultural features through their embodiment in language.

Therefore, we consider the methodical principle of interrelated language and culture training to be the leading one in the formation of sociocultural competence of high school pupils in English lessons.

The principle of interactivity ensures the establishment of a dialogue between a pupil of a specialized school and the author of a country science text, during which the student creates his invariant content of the text, which can be presented in the form of an oral or written speech product under the conditions of integration of other types of speech activity. According to scientists (Binder, Frost, Hammeke, Cox, Rao & Prieto, 1997), the methodical implementation of this principle takes place under the conditions of the organization of the reading process by the teacher in such a way that the joint activity of students (in pairs, micro-groups) determines the solution of the set problematic tasks, which will speed up and diversify the reading process, and the result of which can be presented in the form of an oral or written speech product (discussion, drawing up a synopsis, participation in a project, etc.).

The principle of taking into account the native language according to the dictionary of methodological terms can be implemented within two approaches: the first approach is latent, that is, there is a hidden reliance on the native language, the

material is presented in such a way that prevents the interference of cultural phenomena, according to another option, there is a conscious comparison of the features of the native and foreign languages.

There is a huge difference between written language and spoken language in term of patterns recognition. In case of the written language the brain recognizes the letters, words meaning but the process is more profound for the spoken language as our brain has to work harder. If for the written language the brain could recognize the spaces between words giving the sentence the proper meaning in the spoken language people don't pause between words when speaking and yet the brain has to recognize the difference between, for example, "greenhouse and green house" or the difference between "sea horse" and "see horse", such operation being related very much to thinking (Mocanu & Neguț, 2019). At first it was stated that the left hemisphere has a function mainly to manage language matters and the right hemisphere for other things. As predicted from classical models of language organization based on lesion data, cortical activation associated with language processing was strongly lateralized to the left cerebral hemisphere and involved a network of regions in the frontal, temporal, and parietal lobes. (Binder et al., 1997). For what looks like more than a century, it's been accepted that our capacity to use language is usually located in the left hemisphere of the brain, specifically in two areas: Broca's area (associated with speech production and articulation) and Wernicke's area (associated with comprehension). Hence any harm to either of these, caused by a person stroking out or blunt force trauma or another injury, can lead to language and speech problems or aphasia; a language deficit caused by damage to the brain, often be stroke or an accident (Bernice, 2021).

Old thinking indeed said that language matters were handled by the left hemisphere, and until now that view is still held by many people and there is a lot of truth to it. Although cases support the role of the left hemisphere as the language hemisphere, recent studies show that this view is not entirely correct. The right hemisphere also has a role (Soenjono, 2018: 212). The left hemisphere of the human brain has been understood to be the primary site of language processing for more

than 100 years, with the key prevailing question being why is this so; what is the driving force behind such organization? Recent functional imaging studies of the brain have provided powerful support for the view that specific language functions and specific brain sites are uniquely linked (Petitto et al., 2000). This indicates that there is a role for other parts of the brain, which do not focus on the left hemisphere alone, but are connected in a unique structure.

According to Yule (1985) the function of certain parts of a damaged brain area will be replaced by a replacement in another part of the brain. Therefore, carefulness is needed to state the relationships between aspects of linguistic behavior and their location in the brain. Meanwhile, Withaker (1977) stated that the content in the brain that composes human behavior involves several brain regions. Speech production is not just a part of the brain, it's just a matter of sequencing the nervous system. Speech channels are not only processed by a part of the brain called speech, but also involve phonological arrangements, pronunciation programs, visible and audible input about the speech concept, speech syntactic structures, and other parameters that involve several parts of the brain.

Language is lateralized to the left hemisphere of the brain but can occasionally also be found in the right hemisphere (Knecht et al., 2000). This variability indicates the high degree of freedom with which the brain can instantiate language (Knecht, Dra'ger, Deppe, Bobe, Lohmann, Floel & Ringelstein, 2000). Right hemisphere language functions In contrast to the left hemisphere, the right hemisphere does not normally have much responsibility for linguistic processes such as phonology, morphology and syntax. However, it is the primary mediator of a set of paralinguistic or pragmatic phenomena that accompany the words of an utterance and that can modify or influence its meaning (Mitchell & Crow, 2005). According to Jackson, the right hemi-sphere not only played a role in automatic language, but it also shared the ability of the left hemisphere to learn and com-prehend speech. Despite Jackson's clinical findings in support of a hemispheric balance of function, the general neurological maxim that conceptualized a "dominant" hemisphere as synonymous with the left hemisphere persisted. A challenge to left hemisphere

language dominance. The neurological axiom of an exclusive left hemisphere pre-eminence in language was fundamentally challenged by behavioral studies with callosotomy patients (Taylor & Regard, 2003).

For a right hemispheric involvement in language processing, in particular at the level of word meaning, has emerged within the last half century. Hemispheric functional specializations are dynamic; right hemispheric language participation significantly increases under certain conditions, such as during an epileptic seizure and during recovery from stroke. Interhemispheric connections via the corpus callosum critically mediate these and other higher cortical functions (Taylor & Regard, 2003). Far from mere supportive tasks, the right hemisphere appears to be functionally dominant for some aspects of language processing (e.g., pictographic reading, metaphor appreciation, and other semantic functions). This dichotomy in hemispheric processing of language accounts for the complexity and flexibility of our language skills. Temporary or permanent disruptions of the left hemispheric language system release the opposite hemisphere from the inhibitory control. These instances have shown that the language capacity of the right hemisphere may extend far beyond pictographic or semantic processing to include language functions for which the left hemisphere has classically been deemed dominant (Taylor & Regard, 2003).

In a study of functional language shifts in brain tumor patients, it was found that lesions within language-eloquent brain can induce plasticity as a shift of language function to the non-dominant hemisphere although this plasticity seems to show a more diffuse pattern (Krieg et al., 2013). This indicates that the right hemisphere also plays a role in linguistic function.

Damage or lesions to the right hemisphere can result in a lack of emotional prosody or intonation when speaking. Right hemisphere damage also has grave effects on understanding discourse. People with damage to the right hemisphere have a reduced ability to generate inferences, comprehend and produce main concepts, and a reduced ability to manage alternative meanings. Furthermore, people with right hemisphere damage often exhibit discourse that is abrupt and perfunctory

or verbose and excessive. They can also have pragmatic deficits in situations of turn taking, topic maintenance and shared knowledge ([https://en.wikipedia.org/wiki/Lateralization\\_of\\_brain\\_function](https://en.wikipedia.org/wiki/Lateralization_of_brain_function)).

This view certainly supports the view that the brain in the right hemisphere also plays a very important role in speech or understanding an utterance. If a specific region of the brain, or even an entire hemisphere, is injured or destroyed, its functions can sometimes be assumed by a neighboring region in the same hemisphere or the corresponding region in the other hemisphere, depending upon the area damaged and the patient's. Medical reports by Paul Broca and Carl Wernicke state that the language center is present in the left hemisphere, there is also a medical report from Geschwind (1968) which states the same evidence. Geschwind reports the case of a young woman (22 years) who was poisoned by carbon monoxide. The woman was rescued, but later found to have severe brain damage. During his hospitalization, his circumstances were scrutinized from a linguistic point of view, until he died 10 years later. During her illness, the woman could not move her limbs at all, except for her mouth, tongue and face. Although his understanding of language is some what lacking as well as his production of language, he can still repeat the sentences he hears fluently. After he died and was operated on, it turned out that his entire brain had been damaged, except for the language fields in the left hemisphere which only suffered minor damage. Thus, his language centers had become isolated and disconnected from the other parts of the brain that had been severely damaged. This case also provides evidence that the localization of language centers is located in the left hemisphere (Chaer, 2015: 129).

There are several theories that have developed about the division of work areas in the brain that function in the production and understanding of language. First, there is the lateralization theory, which states that the centers for language and speech are in the left hemisphere. This theory argues that the entire brain is responsible for and involved in the process of understanding and producing language. Then there is localization theory which argues that language and speech centers are in Broca's area and Wernicke's area. From the theory of Broca and

Wernicke, it can be concluded that there is a specialization or division of labor in the areas of the brain (cortex) of the human cerebrum. One theory can be concluded that the dominant cerebral hemisphere (left hemisphere) is responsible for controlling the storage of understanding and production of natural language, and in neurolinguistic studies this is called lateralization (Chaer, 2015 124). Supporting the theory of lateralization, several experiments have been carried out, including a) Dichotic Listening which was first introduced by Broadbent (1954), b) Electrical Stimulation of the Brain which was first introduced by Penfield and Rasmussen, c) Electrical-Encephalo-Grafhy which was first introduced by Whitaker, d) Amysal test which was first introduced by Japanese expert J. Wada, e) Direct Physiological Technique conducted by Cohn, and Bisected Brain Technique.

However, these views later raised objections from some experts, because in principle the right hemisphere also plays a role in language processing in the human brain. The left hemisphere is indeed dominant for the speech-language function, but without the activity of the right hemisphere, one's speech will become monotonous, without prosody, no song of sentences, without showing any emotion; and without signs of language (Chaer, 2015: 120). Whilst most of the research on the neural basis of emotional processing has focused on detecting facial emotion, there is little clear evidence that such processing is an asymmetrical function. In contrast, there is strong evidence that the processing of emotional prosody is lateralized and, in particular, that it is lateralized to the right hemisphere (Mitchell & Crow, 2005).

Recent developments show that the right hemisphere is also responsible for language use, although it is still the left hemisphere that has the dominant function. Evidence of specific areas of the brain functioning in terms of speech-language and other functions was initially carried out by studies of people who had brain damage or head injuries. Then carried out also with various experiments on healthy people. Krashen (1977) says that although there is an advantage in the left hemisphere, not all aspects of language are limited to the left hemisphere. Krashen also said that how the specific hemisphere works in each person can vary. Antonio in Cahyono (1995) said that the brain does have a special location for acquiring language, but that

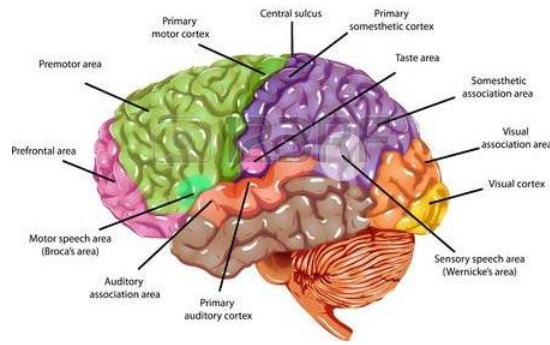


location is not an independent language organ. There is an important location in language processing known as the convergence region. At about the same time that findings by Broca and Wernicke were being published, a French neurologist, Joseph Jules DeJerine, suggested a role for the corpus callosum, the thick band of nerve fibers connecting the right and left hemispheres. This role concerns the manner in which visual impressions are conveyed from the eyes to the brain (Nancy & Kane, 1979). Joseph Jules DeJerine discovered the corpus callosum, a thick band of nerve fibers that connects the right and left hemispheres. This role concerns the way in which visual impressions are conveyed from the eyes to the brain. This supports the notion that both hemispheres are involved in language processing. In spoken language, the processing of sentences simultaneously activates multiple brain regions that can vary across speakers, involving areas of activation that include both classical left-hemisphere speech-language areas and those that involve other regions not necessarily crucial to linguistic processes, such as visual processing areas (Petitto et al., 2000). There are several areas of the brain that are activated when there is spoken language.

Brain imaging studies in adults demonstrate that the process of meaning integration between speech and co-occurring gesture involves classic language areas in the left frontal and temporal lobes and their right hemisphere homologues (Andric and Small 2012; Dick et al. 2014) (Vulchanova et al., 2019). Research by these experts indicates that the right hemisphere also has a role in language, even though the function of language in the dominant brain is in the left hemisphere. Many psychologists doubt the lateralization theory, that the centers for language and speech are in the left hemisphere. They argue that the entire brain is responsible for and involved in the process of understanding and producing language. In addition to the lateralization theory, there is a localization view or theory which argues that the centers of language and speech are in Broca's area and Wernicke's area. Gazzaniga's (1979) research suggests that all language and all spatial functions are not strictly and exclusively lateralized to the respective left and right hemisphere. Psychologist, Robert Ornstein, (1977) believes that we naturally alternate between our left and

right thinking modes. He suggests that the two modes complement one another without being able to readily substitute for one another (Hickerson, 1983). The area associated with speech was known until now as Broca's area. This name comes from a French neurosurgeon named Piere Paul Broca. In 1861 Paul Broca treated a patient who could not speak, only able to pronounce "tan-tan". After the patient died and was operated on, brain damage was found in the frontal area, which was then called Broca's area. So, damage to Broca's area causes a person to have difficulty producing speech (Chaer, 2015: 122). Broca also reported that damage to the same area of the right hemisphere did not have the same effect, meaning that the patient could still produce speech normally.

Another area involved in speech processing is the superior speech cortex area or the supplementary motor area. Evidence that this area is involved in the articulation of physical speech was provided by neurosurgeons Penfield and Robert, who conducted a study using the ESB (Electrical Stimulation of Brain) (Chaer, 2015: 123). Speech is heard and understood through Wernicke's area in the left hemisphere, then speech cues are transferred to Broca's area. Speech response cues are then sent to the supplementary motor area to physically produce speech. To connect what we hear or see with what we say there is a group of fibers called the arcuate fasciculus. The job of these fibers is to coordinate the hearing, vision, and comprehension processes that are processed in Wernicke's area and the speech processes that are carried out in Broca's area (Soenjono, 2018: 208). The left hemisphere processes stimuli serially and excels in language tasks, computation, and logical analysis with attention to detail (Wheatley in (Hickerson, 1983). If it is associated with language disorders it is called aphasia, the aphasia that develops from the lack of functioning of the Broca's area is an expressive and non-fluent aphasia. It is called 'non-fluent' due to the issues that arise because Broca's area is critical for language pronunciation and production.



**Figure 1. Structure of the Human Brain**

Source: <https://www.utakatikotak.com>

Functions of the Brain help the person in Understanding Spoken Language. When humans are born, there is no lateralization in the two hemispheres, that is, there is no division of tasks between the two. However, before the child reaches the age of about 12 years, there is a division of functions called lateralization (Seojono, 2018: 205). Research in the 19th century established that language function, such as speech production and comprehension, is critically dependent on specific areas of the left hemisphere (Broca, 1861; see Petrides, 2014). Note that there is considerable evidence that the right hemisphere also has an important function in language processing. Some of the best evidence comes from studies of epilepsy patients who underwent callosotomy for relief from seizures. Such studies demonstrated that the disconnected RH processes to a variable degree language-related information necessary for word comprehension, spelling, rhyming, object categorization, and exhibits an impressive extent of lexical knowledge (Gazzaniga, 1970, 1998). In 1873, a German doctor, Carl Wernicke found cases of patients having speech disorders, namely not understanding the meaning of other people's speech, but still being able to speak, although limited. According to Wernicke, the reason was that after surgery there was damage to the brain in the back (temporalis), which was then called Wernicke's area. This indicates that Wernicke plays an important role in understanding speech (Chaer, 2015: 123).

Spoken sentence comprehension requires a number of sub- processes to derive the meaning of a sentence from the auditory input, as there are acoustic-phonological, syntactic, and semantic processes. We will discuss the brain regions supporting these different processes in turn (Friederici, 2011). If the incoming input is in spoken form, then those sounds are responded to in the temporal lobe, especially by the primary auditory/auditory cortex. Auditory is the area that processes spoken language mainly through the right ear. After being received, digested, and processed like this, the sounds of the language are “sent” to Wernicke’s area to be interpreted. In this area the sound is broken down into syllables, words, phrases, clauses, and finally sentences. After the meaning is given and the contents are understood, then there are two possible paths. If the input was just information that doesn't need to be responded to, then the input just needs to be stored in memory. If this input needs to be responded to verbally, then the interpretation is sent to Broca's area via the arcuate fasciculus (Soenjono, 2018: 209).

In Broca's area the response process begins. After deciding what the verbal response should sound like, Broca's area instructs the motor cortex to carry it out. The execution process in the motor cortex is also not simple. For a single utterance there are at least 100 muscles and 140,000 neuromuscular trains involved. The motor cortex has the function of controlling speech such as the tongue, jaw, lips, teeth, and vocal cords. The motor cortex must also consider word order and sound sequence, as well as the sequence of features in each sound that must be uttered (Soenjono, 2018: 209). If it is associated with a language disorder called aphasia, Wernicke's aphasia is the result of damage to the area of the brain that is commonly in the left hemisphere above the Sylvian fissure. Damage to this area causes primarily a deficit in language comprehension. This means that the Wernicke area in the brain is very functional in terms of understanding a language

The left hemisphere is more dominantly responsible for the production and comprehension of spoken language. However, the existence of the right hemisphere also cannot be ruled out by its role in the process of understanding and producing spoken language. There are differences in thinking about the part of the brain that

functions in the production and comprehension of spoken language from the past to the present, indicating that the results of previous research are not final and more comprehensive research is needed. The collaboration between neurologists and linguistics experts is needed to provide final conclusions regarding the processing of spoken language in the human brain.

**The principle of contrasting native and foreign languages and cultures** in the formation of sociocultural competence of high school students is based on the principle of dialogue between Ukrainian and English-speaking cultures based on their comparison. As a result of the perception and personal assessment of cultural differences, the students of the specialized school will develop a deep understanding of both native and foreign culture. We claim that the object of learning in the lessons of country studies is linguistic, sociocultural, linguistic and extralinguistic information, which partially or completely does not coincide with the linguistic, sociocultural reality of the native culture, because students learn English-speaking reality through the corresponding foreign language, which acts as a building material of the secondary picture of the world.

**The principle of authenticity of educational materials** is associated with the need to select and use authentic country studies texts for reading, which are a real product of the speech activity of native speakers and are not adapted to the needs of high school students, and also have a high linguistic and sociocultural potential (artistic texts, especially essays about travels by native speakers languages to English-speaking countries or foreigners to Ukraine, newspapers, magazines, pragmatic texts (announcements, booklets, advertisements, tickets), texts from Internet sources (authentic sites containing information on the country, blogs, chats, electronic directories, etc.), which creates conditions for obtaining an almost unlimited amount of country science information.

**The principle of professional orientation** of foreign language educational communication in teaching reading of English-language national history texts is expressed in taking into account the interests of students who have chosen to study in high school according to the philological profile. Since the majority of high school

students studying in the philological profile classes are preparing for the foreign language external examination, international foreign language tests (TOEFL, FCE, CAE, IELTS), admission to higher education institutions according to the chosen profile, study abroad. Studying specialized subjects allows you to acquire the necessary linguistic and sociocultural knowledge of a professional direction (we mean any profession related to the use of a foreign language, and therefore to a foreign language culture) and expands the range of linguistic and sociocultural training of graduates.

We assume that the spheres of communication for the use of a foreign language for intercultural communication by secondary school graduates can be professional contacts, trade, business, international exchanges, study abroad, travel, migration, diplomatic activity and even military actions, which are quite relevant in the conditions of the current political situation in Ukraine.

**The principle of interconnected communicative and linguistic and socio-cultural development** of the student's personality assumes that the result of the formation of socio-cultural competence of high school students in English lessons in reading national studies texts is the ability and readiness for intercultural communication and the development of linguistic and socio-cultural abilities (observation, impartiality, empathy, communicative flexibility, which must be developed ) and student qualities (linguistic, sociocultural politeness, tolerance and sensitivity). We see the implementation of the principle proposed by her in the presence of tasks of a multifunctional nature aimed both at mastering the culture of foreign language communication and at the linguistic and sociocultural development of the student's personality. To achieve this goal, in the process of forming the sociocultural competence of high school students, the main characteristics characteristic of mediated communication are reproduced in English lessons.

**The principle of step-by-step formation of socio-cultural competence** of pupils in English classes involves orientation (in our study, preparatory) and executive (in our understanding, main and final) stages of such a process.

**The orientation stage** begins with the analysis of the information of the country studies text, with the extraction of cultural information, represented by “value capsules”, which contain information about the peculiarities of perception and understanding of foreign-language cultural reality, as well as national value orientations presented in foreign-language culture. At the executive stage, students implement their linguistic and sociocultural knowledge in intercultural interaction, applying their linguistic and sociocultural abilities and qualities.

Thus, **the didactic** (interdisciplinary coordination and intercultural interaction) and **methodical** (interrelated learning of language and culture, interactivity, contrastiveness, authenticity of educational materials, professional orientation of foreign language educational communication, interconnected communicative and linguistic and sociocultural development of the student’s personality, step-by-step formation socio-cultural competence) principles create a theoretical basis for the organization of reading education with the aim of forming the socio-cultural competence of high school students in English lessons in a modern specialized school.

Considering the specificity of our research, the considered general methodological principles must be supplemented with special methodological principles that reflect the regularities of teaching reading as a type of speech activity. In our research, we will adhere to the special methodical principles of teaching reading, developed by scientists (Holovei & Rybalko, 2005). According to the first principle, we will consider the process of formation of socio-cultural competence in reading in English language classes as teaching speech activity. The implementation of this provision is facilitated by the use of authentic English-language national history texts as educational material, the presence of a communicative task in the exercise instructions, which ensures students' motivation and purposefulness during reading, and the focus of control on checking the understanding of the linguistic and sociocultural content of national history texts.

According to the second principle of learning, reading sociocultural texts is a cognitive process. The cognitive activity of schoolchildren is ensured by the

availability of interesting and current country-scientific information in texts for reading in English language classes.

According to the following principle, learning to read should include not only receptive, but also reproductive or productive activities of students of specialized schools at linguistic and semantic levels.

The last principle is implemented in the transfer of techniques of semantic processing of information, which the student possesses in the process of reading in his native language. For this, it is necessary to form in students an attitude to reading as communication with speakers of a foreign language mediated by text, in the instructions for the exercises it is necessary to set a communicative task of a practical nature, connected with the further use of the received linguistic and sociocultural information from the text, it is necessary that students have the ability to change one type reading to another (review reading turns into familiarization, and familiarization turns into learning, and take into account the linguistic complexity of reading materials. In accordance with the special principles of education, we consider reading of country studies texts as a speech activity that has the characteristics of a cognitive activity that includes receptive, reproductive and productive activity of students of a specialized school and involves transferring the techniques of semantic processing of information that a high school student possesses when reading in his native language.

Thus, we specified the most relevant for our research principles of formation of sociocultural competence of high school students in English lessons and determined the ways of their implementation. The specified principles will be reflected in the determination of the principles of selection of country studies texts and the creation of a subsystem of exercises according to our methodology.



## **1.2. Sociocultural approach in education and upbringing of high school students at the English lessons**

The linguistic-cultural approach, as a kind of cultural approach, aims to create the cultural competence of the student almost at the same level as the native speaker of a foreign language as a means of building a cultural-historical theme, and the native culture is not ignored, there is a parallel study of the cultural manifestations of the native people and the people whose language is being studied.

The sociocultural approach to learning a foreign language aims at interdisciplinary integrated language education with the aim of enriching the bilingual sociocultural competence of the student in order to fulfill the role of a subject of cultural dialogue and a cultural mediator in intercultural communication.

According to scientists (Mitchell & Crow, 2005), from the standpoint of the sociocultural approach, intercultural communication in a foreign language is understood as the functionally determined communicative interaction of people who are carriers of different cultural communities and belong to different geopolitical, continental, religious, regional, national, ethnic groups, as well as social subcultures. Communication partners, of course, can differ from each other in value-oriented worldview, lifestyle, models of speech and non-verbal communication. For productive intercultural communication, a linguistic personality must be a mediator of cultures, by which we understand a linguistic personality that is knowledgeable in the peculiarities of different cultures and the peculiarities of their interaction. And intercultural competence allows a linguistic personality to go beyond the boundaries of his native culture and acquire the qualities of a mediator of cultures, without losing his personal cultural identity.

The cultural approach organically combines two objects: language learning and familiarization with the peculiarities of the country's culture. However, it is necessary to clearly understand the difference between the concepts of "cultural" and "socio-cultural". In the first case, this is an ethnographic concept, in the second case it is a social science concept.

With such an approach to language learning based on the ethnocultural component, the primary task is to learn not culture, but language and the formation of sociocultural competence. In the process of communication, similar language norms are used between speakers of the same language.

The purpose of sociocultural work is the study of nationally specific lexical units that reflect the peculiarities of the people's culture and to ensure the formation of communicative skills that are necessary for students to communicate in the educational and sociocultural spheres of our country.

The cultural approach provides an understanding of all language realities on the basis of the text. That is, we consider texts on cultural studies topics (oral and written) to be an integrated exercise, during which speech, language and socio-cultural content lines are comprehensively realized.

As it was confirmed by the observation of the educational process in English language classes, the implementation of the cultural approach is a new direction of work in pedagogical education. To date, the methods of leadership, methods and techniques of socio-cultural orientation have not yet been properly clarified, the content of socio-cultural work has not been fully defined, the meaning of the term “socio-cultural competence” has not been revealed.

According to the intercultural concept of learning a foreign language, the content of learning is foreign language intercultural communication, that is, communication between representatives of different cultures, and the ultimate goal of this process is the formation of intercultural competence, which, according to scientists (Ovcharova, 2003), has a special nature and is based on knowledge and skills to implement intercultural communication by creating a common awareness of what is happening for communicators and achieving positive results for both communication partners results. Also, scientists (Greenson, 2018) understand the structure of socio-cultural competence as a complex and multi-component formation and includes general cultural, country studies marked, cultural studies, linguistic didactic, sociolinguistic and social competence. So, scientists (Krieg, Sollmann, Hauck, Ille, Foerschler, Meyer & Ringel, 2013) understand sociocultural

competence as a multi-component formation, the components of which are general cultural, linguistic and regional, sociolinguistic and cultural competence.

Almost all researchers who have devoted their research to the question of the structure of socio-cultural competence understand it as a complex and multi-component formation. Based on the structure of sociocultural competence developed by scientists (Knecht, Dra'ger, Deppe, Bobe, Lohmann, Floel, Ringelstein, 2000), according to which sociocultural competence consists of subject, or thematic, general cultural, sociolinguistic and country studies competences.

Scientists (Knecht, Dra'ger, Deppe, Bobe, Lohmann, Floel, Ringelstein, 2000) include general cultural, country studies marked, cultural studies, linguistic didactic, sociolinguistic and social competence. They understand sociocultural competence as a multi-component formation, the components of which are general cultural, linguistic and regional, sociolinguistic and cultural competence.

Scientists (Lamberts, 2013) see in the structure of sociocultural competence the general cultural, country studies, linguistic and country studies, sociolinguistic and social competence of a person and notes that the sociocultural competence formed in general educational institutions ensures the development of its varieties of a professional and professional nature, as well as independent research of other countries, peoples and cultural communities.

Scientists (Gladun, Vashchenko, Velichko & Tkachenko, 2004) examine the structure of the specified competence in more detail and singles out the country studies and sociocultural, intercultural and sociolinguistic components of sociocultural competence.

According to the authors (Gladun, Vashchenko, Velichko & Tkachenko, 2004), the components of sociocultural competence are implemented in three aspects of intercultural communication, namely linguistic or linguistic, cultural-content and social aspects of intercultural communication.

In turn, scientists (Korobko & Korobko, 2021) also single out cultural and local history competence in the structure of sociocultural competence.

Summarizing the above information, we'll note, that the existence of different definitions of the structure of sociocultural competence and its components indicates the complexity of the problem of distinguishing and distinguishing the components of a complex multifaceted object, and proposes to distinguish sociolinguistic, sociocultural and social competence in the structure of sociocultural competence.

Therefore, we believe that it is most appropriate to distinguish two interrelated components in the structure of sociocultural competence in reading in English language classes: the structural-orientational and the linguistic-sociocultural one, which, in turn, consists of sociolinguistic, sociocultural and social aspects.

Another important issue that must be resolved before providing a detailed description of each of the components of socio-cultural competence is the definition of the composition of said competence.

The sociocultural content line provides for a variety of English language teaching methods through the implementation of the ethnocultural component in the language material being studied.

The sociocultural content line directs to the final goal of education - the ability to communicate normatively, because without mastering the literary norms of orthography, phonetics, grammar, vocabulary, syntax, it is impossible to form an English-speaking communicative personality.

The basis of sociocultural competence consists of two concentrations: sociocultural and linguistic didactic. The subject of sociocultural competence is the analysis of the vocabulary of the English language for the purpose of identifying lexical units of national and cultural semantics; search for optimal methods, techniques for activating students' vocabulary with the norms of the English literary language based on the processing of English-language texts.

Mastering the English language as a means of communication will contribute to the comprehensive development of students, increase their communicative ability in various spheres of life, and increase the effectiveness of the entire learning process.

For the effective selection of educational material, the characterization of the national science text as a reflection of the linguistic picture of the world (text-language), the socio-cultural component of foreign language education (text-culture), and the communicative nature of reading as a type of speech activity (text-personality) was given. A feature of the country studies texts in our study is their stylistic diversity. Any cognitive-informational text, polylogue text, excerpt of a work of an artistic nature, prose, song or verse, pragmatic and journalistic text is considered to be country studies if it has linguistic, socio-cultural value.

We also highlighted the peculiarities of the lexical content of English-language country studies texts. Since the methodology is based on materials from Internet resources, the characteristics of electronic publications were given and the concept of media competence was clarified from the standpoint of our research. In accordance with the purpose of the study, linguistic and sociocultural competence in reading national history texts was defined as a set of linguistic and sociocultural knowledge, skills and abilities that ensure the ability of high school students to navigate the structural and semantic organization of a text with linguistic and sociocultural potential, to recognize, adequately understand and critically interpret linguistic and sociocultural information that it contains and ensures the readiness of secondary school graduates to carry out effective intercultural communication.

So, we'll define **the sociocultural competence of high school pupils** as a holistic integral characteristic of a student-communicator, who organically combines general educational competencies (phonetic-ortho-epic, lexical, grammatical, diachronological and communicative). The effective component of socio-cultural competence involves the formation of knowledge, abilities and skills from all types of specified competences.

## **Chapter 2. Psychological ways of teaching high school pupils culture of English-speaking countries**

### **2.1. Involvement of high school pupils to the culture of English-speaking countries**

When determining the criteria for the selection of country studies texts, we took into account the following factors: 1) the purpose of training – formation of socio-cultural competence in English language reading in English language classes in secondary school pupils; 2) levels and descriptors of foreign language proficiency at the end of the 11th form in accordance with the All-European Recommendations on language education: study, teaching, assessment of the requirements of the current English Language Program for students of grades 10-11 (Іноземна мова у загальноосвітніх навчальних закладах, загальний рівень), (Навчальні програми для 10-11 класів загальноосвітніх навчальних закладів: англійська мова: академічний рівень, 2018; Навчальні програми для 10-11 класів загальноосвітніх навчальних закладів: англійська мова: профільний рівень, 2018): a) regarding the level of development of receptive skills and reading skills among pupils of forms 10-11, b) regarding the recommended content of thematic blocks of the English language; 3) conditions of training organization: classroom / home (classes as needed).

The foreign language program for the 10-11 forms highlights the functions of foreign languages in the implementation of learning goals for high school pupils. In the process of learning foreign language communication, educational, educational and developmental functions are comprehensively realized.

***The educational function*** has the aims:

- students' awareness of the importance of a foreign language for life in a multilingual and multicultural world space;
- acquiring knowledge about the culture, history, realities and traditions of the country of the studied language;

- involvement of students in the dialogue of cultures (native and foreign);
- understanding of one's own individual characteristics as the psychophysiological basis for mastering a foreign language;
- awareness of the meanings of language phenomena, another system of concepts, with the help of which reality is perceived;
- formation of the ability to use, if necessary, various strategies to satisfy one's own foreign language communicative intentions (work with a textbook, dictionary, reference literature, multimedia tools, etc.).

***The educational function*** contributes to:

- forming in students a positive attitude towards a foreign language as a means of communication, respect for the people, speakers of this language, tolerant attitude towards its culture, customs and way of life;
- the development of the culture of communication adopted in modern civilized society;
- emotional and value attitudes towards everything that surrounds us;
- understanding the importance of mastering a foreign language and the need to use it as a means of communication.

***The developmental function*** contributes to the development of students:

- language, intellectual and cognitive abilities;
- willingness to participate in foreign language communication;
- the need for further self-improvement in the field of foreign language use;
- the ability to transfer knowledge and skills to a new situation by performing problem-searching activities.

From the language inventory – the vocabulary that 10th grade students must master, the following ***topics*** are singled out:

**Me, my family, my friends.** The lexical range that a high school student should actively use: personality and its qualities, types of personal relationships, relationships with friends, mutual assistance, conflict resolution.

**Sports and leisure.** The role of sports in society and human life, sports events/competitions, health and sports.

**Food.** National dishes of Ukraine and countries whose language is studied, tastes, preferences, healthy and useful food, bad habits.

**Nature and weather.** Natural disasters and their types, influence of weather on health and mood, protection of nature.

**Painting.** Genres of painting, famous artists and their works, visits to museums, exhibitions or galleries, Ukrainian artists.

**Science and technical progress.** Computer equipment, modern means of communication and information, the influence of science on the development of society, technology.

**Ukraine.** Administrative and political system, natural resources, public holidays.

**Countries of the studied language** (optional), administrative and political system, natural resources, public holidays.

**School life.** Educational institutions, education in Ukraine and abroad.

**Work and professions.** Modern professions.

Language inventory – Grammar for pupils of the 10th grade is separated by the following grammatical material according to a clear structure:

**Clause.** Past Perfect with adverbial clauses of time first and second conditionals so ... that for results and consequences declarative sentence + so/therefore + declarative sentence.

**Modality.** Use(d) to/would + infinitive for past routines and habits.

**Phrasal Verb.** Phrasal and prepositional verbs: position of indirect object.

**Phrase.** Verbs taking gerund.

**Preposition.** Prepositions of reason and purpose: due to, owing to, so, because prepositions in time phrases, e.g.: before, for, since, till, until, by.

**Verb.** Past Perfect Continuous Future Continuous Future Perfect Going to / will for predictions verb + '-ing' vs. + 'to' infinitive.

The Ministry of Education and Science of Ukraine recommends devoting the 10th form course to the study of the country studies of Great Britain, and studying the country studies of the USA in the 11th form (Навчальні програми для 10-11



класів загальноосвітніх навчальних закладів: англійська мова: академічний рівень, 2018; Навчальні програми для 10-11 класів загальноосвітніх навчальних закладів: англійська мова: профільний рівень, 2018).

**We propose to expand the content of English language lessons in the 10th form and to devote the studied material not only to the cultural portrait of Great Britain and the USA, but also to study the country studies features of other English-speaking countries, such as Canada, Ireland, Australia, New Zealand, etc. in order to exclude duplication of topics.**

The requirements of foreign language training programs for forms 10-11 (professional level), recommended by the Ministry of Education and Science, the results of the above-mentioned studies by methodologists, taking into account the level of education and information needs of high school students, give us reasons to highlight speaking and reading skills that are improved in the process of forming sociocultural competence high school pupils at the English lessons.

We'll note that on the basis of the Regional Scientific Lyceum in the city of Rivne, the Rivne Regional Council teachers of foreign languages conduct introductory courses based on Oxford textbooks: H. Q. Mitchell - Marileni Malkogianni "Full Blast Level B2. Workbook" and Q. Mitchell - Marileni Malkogianni "Full Blast Level B2. Students' Book", which contain anticipatory information aimed at learning a foreign language in specialized schools with in-depth study.

These tutorials contain 12 chapters:

- 1) Going places
- 2) Let's dress up!
- 3) Something in the air
- 4) Beyond belief
- 5) Life at the top
- 6) And the verdict is...
- 7) Encore!
- 8) As fit as a fiddle

- 9) Far frontiers
- 10) Learn your lesson
- 11) What a laugh!
- 12) High tech

General reading skills are classified according to the concept of scientist (Friederici, 2011), which include three groups: 1) ensure the accuracy of understanding the linguistic sociocultural information of the country studies text; 2) ensure the complete understanding of the content of the language sociocultural information in the country studies text; 3) ensure the depth of understanding of the language sociocultural content of the country studies text.

A group of skills that ensure the accuracy of understanding the linguistic sociocultural information of the country science text: 1) understanding the linguistic material of the text; 2) the use of a contextual guess; 3) compensation of linguistic means in the process of reading (Friederici, 2011).

A group of skills that ensure a complete understanding of the content of linguistic, sociocultural information in a country science text: 1) understanding of the content of the text; 2) tracing the sequence of content presentation in the text; 3) predicting text content by structural elements; 4) understanding of background information based on background knowledge.

## **2.2. Characteristics of the levels of formation of socio-cultural competence of senior pupils at the English lessons (declarative stage)**

**The purpose of the first stage** – ascertaining one – is to determine the existing level of formation of socio-cultural competence of senior pupils at the English lessons.

The experimental research was carried out on the basis of the Regional Scientific Lyceum in the city of Rivne of the Rivne Regional Council. The experiment included 63 pupils. It consisted of two 10th classes (respectively, 31

pupils – in the control 10th – B class and 32 pupils – in the experimental 10th – A class).

Experimental 10-A class includes 32 pupils, they worked according to a complex system of tasks with the aim of forming socio-cultural competence. The control 10-B class includes 31 pupils acted as a standard, a model against which the developing and formative effect of the experiment, which will be evaluated.

Based on the state requirements for educational achievements specified in the curriculum and the requirements for monitoring and evaluating the educational achievements of students, we have developed criteria that will determine the formation of sociocultural competence at the English lessons.

**Literary and local history criterion** has such indicators:

- 1) awareness of genre features of texts;
- 2) the ability to distinguish genre features of large texts (fairy tales, stories, legends, myths, tales, etc.); familiarity with the structural features of texts: theme, plot, composition, characters, etc.).

**Emotional evaluation criterion** has such indicators:

- 1) the ability to perceive the means of artistic expressiveness of local history texts;
- 2) the ability to express one's own evaluative judgments about the content of the texts read.

**Evaluative and reflective criterion** has some indicators:

- 1) the ability to use local vocabulary in one's own speech;
- 2) the ability to independently create coherent socio-cultural texts.

**Evaluative and reflective criterion** has some indicators:

- 1) the ability to use local vocabulary in one's own speech;
- 2) the ability to independently create coherent socio-cultural texts.

According to the indicators, we determined **the levels of formation of the sociocultural competence** of senior pupils in English lessons by means of processing local history texts and determined lexical, grammatical, diamonological and communicative skills.

### **Lexical skills:**

**High level (10-12 points):** the pupil has a large vocabulary, distinguishes between the literal and figurative meaning of words, chooses synonym-antonym series for words, explains the meaning of phraseological units, English vocabulary, shows awareness of the etymological origin of country-scientific words; has thematic grouping skills, uses figurative expressions (epithets, similes, metaphors) in his speech; controls own speech and corrects lexical deficiencies on normative literary options.

**Sufficient level (7-9 points):** the pupil has a sufficient vocabulary, correctly performs most of the tasks for understanding the semantics of words, explaining the etymological origin of the English vocabulary, and demonstrates a wealth of vocabulary. Performs tasks with partial errors, controls own speech, can find equivalent substitutes for words, notice and correct speech defects.

**Satisfactory level (4-6 points):** the pupil has a satisfactory level of vocabulary; partial completion of tasks to explain the literal and figurative meaning of words, selection of synonyms and antonyms, misinterpretation of the meaning of English vocabulary, phraseology, etymology. There are speech deformations in speech.

**Low level (1-3 points):** the pupil does not have lexical knowledge, incorrectly performs the task of explaining the meaning of English vocabulary, phraseological turns, cannot find synonyms and antonyms for words and phrases, cannot explain the etymological origin of words. The speech is unclear, the vocabulary is poor, it is full of language contortions that the student cannot control.

### **Grammatical skills:**

**High level (10-12 points):** the pupil has a high sense of grammatical forms according to the rules of grammar; high mastery of the norms of word change, form formation and expressive, functional and stylistic possibilities of the English language through mastering the skills of morpheme, morphological and word-formation analysis and knowledge of syntax; the student correctly operates with all grammatical forms, knows how to build a simple common sentence with

homogeneous members; complex and complex sentences with conjunctions, determine sentences by intonation and the purpose of the statement.

**Sufficient level (7-9 points):** the pupil has a sufficient amount of knowledge and rules of grammar, while performing all the tasks he makes single mistakes of various nature. Able to correlate schemes with sentences, compose sentences according to the model, determine sentences by the purpose of expression and intonation.

**Satisfactory level (4-6 points):** the pupil has a satisfactory amount of grammatical knowledge. During the performance of all tasks, makes mistakes in the process of morpheme, morphological and word-forming analyses; confuses cases, the gender of nouns and adjectives, does not always correctly determine the endings in words; mistakes are observed in the construction of sentences according to models, in the design of sentence records.

**Low level (1-3 points):** the pupil does not have grammatical material, does not correctly perform the task of determining grammatical forms, makes numerous mistakes in the construction of sentences, in the selection of morphemes, and word-forming devices. The speech is uncontrolled, there is no consistency in the presentation of thoughts, there are linguistic errors of a grammatical nature.

**Diamonological skills:**

**High level (10-12 points):** the pupil freely and casually builds dialogues and monologues of a creative nature, shows initiative and activity in building dialogic units (up to 12 of them) using various types of replicas. The student, without the teacher's help, composes an expression of a reproductive nature (invents the title of the story independently, retells the content of the read text); builds expressions of a creative nature according to the content of the text. The speech is expressive, there is a dynamic and logical presentation of thoughts. The number of sentences in statements reaches 20. The content of dialogic and monologic units reveal the topic and purpose of the statement, sentences are characterized by grammatical correctness, intonation expressiveness and completeness of construction, sentences have a detailed structure.

**Sufficient level (7-9 points):** the pupil builds replicas of dialogue units of a somewhat simplified form (their number is up to 10) mainly from one simple sentence. Shows initiative and independence in composing expressions of a reproductive and creative nature (the number of sentences is up to 15). During the narration, there are slight pauses and omissions of text fragments.

**Satisfactory level (4-6 points):** dialogue units have a simplified structure, consist of short and one-word sentences (their number reaches 8). There is a lack of initiative and independence in the construction of dialogues and monologues, the student often responds to cues with short phrases. When composing expressions of a reproductive and creative nature, he does not show creative skills, does not fully reveal the topic and purpose of the text, does not understand its plot line (the number of sentences reaches 10). Speech lacks logic, expressiveness and structural unity of the text.

**Low level (1-3 points):** the pupil does not show initiative and independence in building dialogue units (their number is up to 5), demonstrates his own inability to bring the dialogue to a logical conclusion, cannot come up with the name of the text without the help of the teacher in his statements, cannot reveal his subject. Speech is poor, full of pauses, incomplete sentences (their number reaches 7-8).

#### **Communication skills:**

**High level (10-12 points):** the pupil's speech is saturated with speech etiquette formulas according to various situational tasks; the student works well with various forms of communication, shows initiative in communicating with adults and peers; takes an active part in role-playing and situational games, explains the meaning of proverbs and sayings about speech etiquette, can independently reproduce a significant number of proverbs and sayings and uses them in his own statements.

**Sufficient level (7-9 points):** the pupil possesses a sufficient number of speech etiquette formulas according to each communicative situation, appropriately uses words of courtesy, various forms of address except in some situations, interprets the meaning of proverbs and sayings with some inaccuracies.

**Satisfactory level (4-6 points):** the pupil operates with the formulas of speech etiquette in some communication situations; does not show initiative and independence in his statements, enters the conversation only after the partner's cue - stimulus; does not understand the meaning of proverbs and sayings about speech etiquette; does not give his own examples of phraseological turns, proverbs and sayings about speech etiquette in his statements.

**Low level (1-3 points):** the pupil knows the general formulas of speech etiquette in the simplest communication situations; successfully uses polite words only in certain communicative situations; cannot explain and does not use phrases, proverbs and sayings about speech etiquette in his own statements.

We include **grammatical, lexical, and stylistic complexity as language criteria for selecting texts of a country science nature**. In our study, extralinguistic criteria determine linguistic ones. We agree with scientists' (Mocanu & Neguț, 2019) opinion, which, as the main linguistic selection criterion, determines the adequacy of speech means to the communicative intention of the author of the text, which is the primary basis of the text. Therefore, we will determine the adequacy of the use of speech means of communication in the text from the point of view of the presence of a relevant linguistic and sociocultural component in them. In accordance with the language criterion for the selection of texts of a country-scientific nature for the purpose of forming the sociocultural competence of high school pupils in English lessons, we suggest clearly observing the lexical, grammatical and stylistic complexity of texts at the B1-B2 level.

In our study, the educational unit is an English-language country studies text of **various genres from authentic Internet sources**. We consider the local history text as:

- 1) the main source of linguistic and sociocultural information about the country whose language is studied;
- 2) as material for building skills and improving reading skills in English lessons;

3) as an object of illustration of language units reflecting the culture of the people whose language is being studied. Hence, a country studies text is a written text designed according to the laws of the appropriate functional style, which conveys reliable and up-to-date information about English-speaking countries.

For an adequate understanding of the country studies text, the concept of discourse acquires special importance. The linguistic dictionary defines discourse as a coherent text combined with extralinguistic, pragmatic, sociocultural, psychological and other factors; as a text taken in the effective aspect; as speech, which is considered as a purposeful social action, as a component that participates in the interaction of people and the mechanisms of their consciousness. We, following scientists, understand discourse as a text or its part, the feature of which is the logical combination and interaction of language forms at different linguistic levels, between which there are correlative links of linguistic and extralinguistic content and, as a result, the logic and content of the structural structures.

We also adhere to the point of view of scientists (Hickerson, 1983), who consider the text as the result of communication, its structural-linguistic component and at the same time its final realization; as a structure into which “living” discourse is embodied after its completion. In this understanding, the text appears as a speech product created by someone, which at a certain moment, in a specific situation, as a result of the reader’s interpretive activity, is filled with an individual, personal meaning, that is, it turns into a discourse. Following the scientists, we define hypertext (Harris) as the ability to combine information of different types, which can be placed in different files, into a single semantic chain. It contains text elements that are united by topic and are based on associative links - hyperlinks that connect text elements into a single whole. The use of hypertext makes possible a multi-level distribution of educational material, in which the most important information is located at the top level, and access to a lower level is provided upon request. Electronic encyclopedias and dictionaries provide for the use of hypertext in order to expand their reference and educational capabilities.



**Local history materials from Internet sources** can be easily adapted to create interesting cognitive tasks, with a connection to the Internet, because high school pupils have the opportunity to get unlimited access to any authentic linguistic, sociocultural information. The information obtained in this way is relevant, authentic in content, form and function, with illustrations (photo cards, graphs, etc.) that correspond to the age interests of the students. Hypertext contains not only information, but also an apparatus for its effective search. Such opportunities are necessary for the selection of country studies texts.

Based on the goals of our research, we will analyze the country studies text in the aspect of intercultural communication according to the following **criteria**: *stylistic and genre characteristics, language features, compositional and semantic structure, extralinguistic means*.

Let's begin the linguistic-stylistic analysis by considering the stylistic and genre characteristics of country studies texts. The functional style of language is defined by scientists as a type of literary language that is determined by different spheres of communication, characterized by special language means and used for functions related to human activity. From the standpoint of our research, a more complete definition is provided by scientists (Ganaie & Hafiz, 2015), such as: functional style is a type of literary language that has historically developed to the present in a certain language group, and represents a relatively closed system of linguistic means of all levels, which regularly functions in a certain sphere of social activity.

As we know, there are several classifications of functional styles, in which functional styles are distinguished according to the main functions of language - communication, message, influence. The following functional styles are traditionally distinguished: artistic, journalistic, scientific, official-business and conversational (Nancy & Kane, 1979).

In our research, we will use English-language authentic country studies texts of journalistic (genre: articles from newspapers and magazines), artistic (poems, excerpts of poems, proverbs, sayings, aphorisms), scientific (reference articles from

electronic encyclopedias and reference books) and colloquial (personal letters, Internet comments) functional styles.

We support the opinion of scientists, who analyzed texts of various genres for the presence of linguistic and cultural information in them, that the most informative are texts of such styles and genres as: scientific style (encyclopedic article, review, abstract), journalistic style (interview, obituary, essay, essay), artistic style (poem, short story, play) (Everitt, Landau, Leese & Stahl, 2011).

We share the point of view of the scientists that readers' knowledge of the functional and structural-semantic features of the text contributes to the understanding of its content (Fomenko, 2018). As you know, the ability to navigate in the structural and semantic organization of a country science text and to determine the corresponding semantic components by structural parts facilitates the prediction of the content of the text, contributes to its adequate understanding and the search for the necessary information. Hence, we consider it expedient to teach students to navigate the structural and semantic organization of English-language country studies texts of various genres from authentic Internet sources in the process of forming the sociocultural competence of high school students at the English lessons. Following scientists (Everitt, Landau, Leese & Stahl, 2011), the following context will be included in the composition of lexical units characterized by pronounced national and cultural semantics:

1) **denotative words-reality** – definition of objects or phenomena characteristic of one culture and absent in another;

2) **connotative vocabulary** – words that match in basic meaning, but differ in cultural and historical associations;

3) **background vocabulary** – words denoting objects and phenomena that have analogues in the studied culture, but differ in national features of functioning, form, purpose of objects, etc.;

4) **idioms are fixed word combinations that reflect the national uniqueness of history, culture, and the traditional way of life of the people who speak the language.**

So, we proposed for pupils of experimental form the plan of analyzing the fiction.

## **How to Analyze Fiction**

### **Steps**

Have the fictional work and paper available to take notes. Analyzing fiction involves asking yourself a series of questions and possibly reviewing the material for content. Although most of the work with analyzing fiction is done through thought, notes are important if you plan to discuss or use the information.

### **Consider the main events of the story. This is called the plot.**

- Ask yourself the following questions: What is the main series of the events that take place in the story? Are these events in chronological order or do they flash back or forward? What is the main conflict in the story? What is the turning point in the story?

- Plots can be unified, meaning they work in order with a beginning, middle or end. They can be episodic, held together through how they affect the protagonist. Plots can also be polyphonic, which means that smaller subplots are interwoven through the main plot to enhance the overall meaning of the events.

**Identify the setting.** Where does the story take place? What is the time period? How does the setting affect the story? Could the story be told in another setting? How does it affect the characters?

**Choose the point of view of the narrator.** This is an important step in analyzing the viewpoint from which the events and the setting are recounted to you. Is it a subjective or objective point of view?

- If the narrator uses the words “I” and “Me” throughout the story, it is a first-person narrative. Is your protagonist narrating the book, or is it an observer of the events? Is the narrator reliable or unreliable? Is the character aware of narrating the book?

- If the narrator only uses “I” and “Me” in dialog, then it is likely a third-person narrative. Choose whether the third-person is omniscient, all-knowing of the events, or if it is limited, or told from perspective of 1 character.

**Identify the characters.** You may want to write a list of all the characters in the story. Which character changes most during the plot? This is called the protagonist. Who causes the change in the character? This is called the antagonist. What do the appearance, actions and dialog tell you about their interests and beliefs?

- Although the antagonist is sometimes called the villain, there is not always a good guy and a bad guy in a story.

**Establish the story's main themes.** The theme is the main idea of the story, or the unifying concept. There can be a number of themes in a story. Which theme do you see as the most important?

- Take a look at the book in a larger context. What does the story's theme say about the world, human experience or human values? What was the author trying to convey? Themes are highly subjective.

**Look at the words themselves.** What imagery does the author use? This is easiest to identify if you take notes throughout reading or watching the story since it can be a chapter or just a few words. In what places does the author evoke your senses: touch, taste, smell, sight and hearing?

**Identify symbolism in the story.** Symbolism means the use of objects, people or elements of the story to represent something else. They often represent subjective concepts, like greed, wisdom or motherhood. For example, the use of the color green throughout a stockbroker's office could represent hidden greed in the character. A fox can represent trickery or stealth.

- Do any of the characters symbolize something? Is the setting symbolic? Symbolism is easier to spot the second time you watch or read a story, when you are already aware of the general events of the story and can focus on the underlying meaning.

**Consider the style and tone of the narrative. Is it formal or informal?** Does the narrator make you laugh or feel sad? The ways in which sentences and chapters are structured can have a large effect on how you respond to the story.

**Identify any figurative language.** Figurative language is similar to imagery and symbolism. It is a way that the author uses words to mean more than 1 thing.

The most common ways to do this are through simile, metaphor and personification. Simile is to compare something using the words “like” or “as”. Metaphor compares to things without using “like” or “as”. Personification is using human qualities to describe inanimate things.

- An example of a simile is: the tree branches are like my mother's hair. An example of metaphor is: trees are tangled strands of hair. An example of personification is: the silky branches were braided together.

**Gather your notes together.** If you are writing an analysis, you may want to choose elements to write about or dwell on some more than others.

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to things without using “like” or “as”. Personification is using human qualities to describe inanimate things.

- An example of a simile is: the tree branches are like my mother’s hair. An example of metaphor is: trees are tangled strands of hair. An example of personification is: the silky branches were braided together.

11

**Gather your notes together.** If you are writing an analysis, you may want to choose elements to write about or dwell on some more than others.

We will give examples of lexical units, which propose the characteristics of country studies texts about **Canada**. Lexical units denoting denotative realities: the principal Francophone Acadian centers, United Empire Loyalists.

By **onomastic realities** we mean the following:

- anthroponyms (King George V, Prime Minister Wilfred Laurier);
- toponyms (Quebec, The Confederation Bridge, Prince Edward Island, The Trans-Canada Highway);
- names of institutions and organizations (the Hudson's Bay Company, the Canadian Pacific Railway);
- chrononyms (November 21, 1921, April 25, 1996).

The examples of **connotative vocabulary**: maple leaf, “cap and gown” outfit.

**The background vocabulary** includes such lexical units as: the “Quiet Revolution”.

Examples of **phraseological units**: every twitch and grunt.

Examples of **abbreviations**: P.E.I. (Prince Edward Island) B.C. (British Columbia).

We will give examples of LO that denote **denotative realities** characteristic of country studies texts about **Australia**: slang (“Strine”).

By **onomastic realities** we mean the following:

- anthroponyms (Mel Gibson, Russell Crowe);



– toponyms (Oceania, Canberra, Kangaroo Island, the Heart Shaped Reef, Uluru);

– names of institutions and organizations (Sydney Opera House, Kingsford Smith Airport);

– chrononyms (January 29, 1957).

Examples of **connotative vocabulary**: “G’day, mate”, Bar Mitzvah Invitations. **The background vocabulary** includes such lexical units as: “black tie”.

Examples of **phraseological units**: to cause a drop in one’s popularity. Examples of abbreviations: “R.S.V.P” (from the French phrase repondez s’il vous plait, means “please reply”).

We will give examples of lexical units, denoting denotative realities characteristic of country history texts about New Zealand: The Maori, marae (a sacred place), “Kiwi”.

By **onomastic realities** we mean the following:

– anthroponyms (Faye Kilday, Katherine Mansfield);

– toponyms (Robertson Island, Bay of Islands, Wellington);

– names of institutions and organizations (the Te Papa national museum, Vayama’s Customer Care Commitment);

– chrononyms (1642).

### **2.3. Clustering of Psychological Profiles of Social Success of pupils of high School**

The operational activity of pupils, in particular at high school, has a rather fundamental multidisciplinary and multicriteria psychological interpretation (Ganaie & Hafiz, 2015; Greenson, 2018; Ilina, 2008). Even more, younger schoolchildren in whose minds a complete worldview, reflecting its various aspects, and above all a generalized image of the social environment, just now define the formation of self-creation in concepts, in particular in the learning process, is usually fragmentary in the format of a rather simplified narrative.

Therefore, these narratives in terms of content, and especially in terms of attributes of concepts, reflect the level of formation of their social success according to various psychological profiles. In our understanding, the social success of schoolchildren is an integrative personality formation, which is characterized by: a valuable attitude towards oneself as a doer; possession of flexible knowledge and skills according to the elementary school program; emotional, volitional and communicative qualities of an active personality.

In general, we consider the psychological profiles of schoolchildren social should comprise: the desire to become aware of the environment properties; the ability to prove the truth or falsity of one's own position, to express opinions in a reasoned, clear, concise manner; independent, persistent new information acquirement; ability to think original and creative; the ability to assess one's own strengths and resources; learning of moral knowledge; the ability to rational mental operations, the object of which are the processes of interpersonal interaction; developed emotional intelligence, the ability to be aware of oneself as a student who explores the world around him with the help of significant adults, etc.

In our opinion, these psychological profiles are closely interconnected. It is clear that social success is possible only if the person evaluates the peculiarities of educational and life situations and his own representation in these situations. In turn, the depth of the child's awareness of educational and life situations depends on the value attitude to the subject of consideration, which depends on the child's knowledge acquisition on the basis of practical activity under the conditions of developed conceptual and divergent thinking, etc. At the same time, the leading motive is the child's desire to learn, to achieve success with the help of strong-willed qualities, the actualization of abilities in the products of his activity, within the limits of adequate expression of his emotions, the ability to identify his own communication problems and establish effective relationships with others.

However, schoolchildren are not always able to think perfectly and logically express narratives, which complicates the process of determining the psychological profiles of personal achievements of pupils, in particular in the learning process.

Therefore, the levels of formation of their social success, in this way, are revealed with the help of psychodiagnostics, which contributes to the study and understanding of their personal, psychological properties by a practical psychologist of an educational institution, who is able to provide them with an objective interpretation.

So, in the process of research both active, conscious and passive, unconscious manifestations of the child's behavior and the corresponding motivation for it, we can determine the psychological profiles that influence the nature of the child's behavior and evaluate the effectiveness of this influence. Traditionally, psychological diagnosis of various types of activities, psychological processes, psychological states and psychological peculiarities of students uses certain sets, which consist of methods, in particular, projective and unstructured, if it concerns elementary school pupils, as well as tests, questionnaires. Psychological profiles are determined by levels, the values of which are usually displayed by numerical scales with different intervals. However, it should be noted that all these intervals can be normalized by the interval.

In such formulation, the above-mentioned psychological profiles have certain linguistic variables that determine the respective levels of students, and take specific numerical or linguistic significance. We will note that the linguistic significance in the end of the assessment also take numerical significance from the previously defined interval.

Even more, the indicated psychological profiles of the assessment of the social success formation of junior high school pupils can be interpreted as corresponding students' qualities with different levels of manifestation in their leading activity, that is, learning. In this case, we can differentiate pupils according to the level of manifestation of their qualities. In other words, when conducting a certain psychodiagnostic procedure based on the psychological profiles of the pupils' activity, we reveal the manifestations of their qualities. And in future, when we consider these manifestations, we can, based on the results of the corresponding psychological profiles of assessing their social success, cluster pupils according to the corresponding qualities (Everitt et al., 2011).

Today, assessment of psychological profiles of social success of elementary school students and their relationships is an extremely relevant problem. It is especially necessary to identify the interdependence of psychological profiles in the social interaction of students with each other in the learning process. Precisely, this study is devoted to the problem of identifying group psychological characteristics of pupils' interaction. Taking this into account, the following hypothesis can be formulated: "The psychological profile of the activities of younger school children can be represented by a coherent set of certain clusters that characterize the directions of the formation of social success".

To begin with, we will define psychological profiles that reflect social success and characterize the psychological states of schoolchildren (Bevzenko, n.d.; Diedov, 2014; Fatykhova, 2011; Fomenko, 2018; Ganaie & Hafiz, 2015; Holovei & Рыбalko, 2005; Ilina, 2008; Korobko & Korobko, 2021; Ovcharova, 2003; Tunyk, 2003). In this case, psychological profiles reflect the personal psychological development of schoolchildren at the beginning of their formation in the society as individuals. Table 1 shows a list of the named psychological profiles, in particular some of their factors, and the levels of their assessment according to the appropriate scales.

The psychological profiles, that are shown in generalized form in Table 1, reflect the following hyperproperties typical for schoolchildren – 1) the desire to understand the properties of the environment; 2) the ability to learn the latest knowledge; the ability to consider problematic issues, to express various hypotheses and communicate when solving them using conceptual thinking; 3) the ability to express speed, flexibility, originality, elaboration, verbal abilities; 4) the ability to evaluate one's own actions and resources; 5) to form true moral values; 6) to have personal organization, perseverance in obtaining results; 7) the ability to evaluate and interpret one's own emotions, actions and emotions, actions of others; 8) the awareness of his new social situation, himself as a student who explores the world around him with the help of teachers. In fact, the listed psychological profiles determine certain classes of psychological states of pupils.

Table 1

**Psychological profile of pupils of high school**

№ п/ п	Psychological profile	Factors	Assessment levels	Scales
1.	school motivation		1. high level 2. good school motivation 3. positive attitude to school 4. low school motivation 5. negative attitude to school	25-30 24-20 15-19 10-14 0-10
2.	mental development		1. high level 2. average 3. insufficient (below average) level 4. low level 5. very low level	100-80 79-60 59-40 39-20 19-0
3.	divergent thinking	1. speed of thinking 2. flexibility of thinking • 3. originality of thinking 4. elaboration of thinking 5. creative use of language	<p>1. high level (hI)</p> <p>2. average (a)</p> <p>3. low level (II)</p>	<p><b>hI      a      II</b></p> <p>12-11    10-8    7-0</p> <p>11-8     7-6     5-0</p> <p>33-26    25-22    21-0</p> <p>31-18    17-14    13-0</p> <p>34-26    25-23    22-0</p>
4.	self-esteem		1. overestimated self-esteem 2. adequate self-esteem 3. adequate self-esteem 4. underestimated self-esteem 5. low self-esteem 6. low self-esteem 7. sharply underestimated self-esteem	завищена самооцінка адекватна самооцінка адекватна самооцінка занижена самооцінка  низка самооцінка низка самооцінка різко занижена самооцінка
5.	moral guidelines		1. very low level 2. low level 3. average 4. high level.	3 2 1 0
	persistence and self-discipline		1. the minimum measure persistence and self-discipline	0-4  5-16

6.			2. normative values of the scale of persistence and self-discipline 3. maximum degree of persistence and self-discipline	17-20
7.	social and emotional intelligence		1. high level 2. average 3. below average level 4. low level 5. very low level	4 3 2 1 0
8.	learning motivation		1. learning motivation 2. social motivation 3. game motivation 4. the attitude towards oneself as a schoolboy is not formed 5. attitude to school is negative	25 – 30 20 – 24 15 – 19 10 – 14 0 - 10

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Under this condition, we consider all pupils with the help of their educational and cognitive activities, which are performed in a separate class. In other words, pupils interact with each other in a certain way and this process has a network character. They express their opinions, evaluate each other and themselves, etc. Considering this, their interaction has a narrative character. Therefore, students can be considered as certain persons who, in the process of learning, when studying the

same type of disciplines, show certain qualities of their personality, which show how to which extent their worldview, which is just being formed in the process of learning, corresponds to the level of their social success.

The educational and cognitive activity of younger school children, as a certain behavior, can be imagined in the form of a logical-linguistic model (LLM) (V. Gladun et al., 2004; Velychko, 2019), which is able to reflect the relationships that arise between children in the process of interaction in the educational environment of the class and, accordingly, the school. Indeed, students realize their behavior in the classroom in the form of communication, expressing certain narratives to each other and addressing teachers. Certain moral and logical relationships arise between them based on interests in the form of friendship, help, joint games and decisions, etc.

When evaluating the results of this behavior, the researcher must understand that he will have to process both qualitative and quantitative values of the psychodiagnostic results. Moreover, a relation of any order is not determined over these results. He is interested only in nominal values that characterize a certain psychological state of the pupil. LLM precisely provides processing of similar variables that characterize and determine the processes of test measurements in the formats of answers to questions or performance of certain actions.

LLM network mapping of the interaction of psychological states of junior high school students takes into account the manifestations of their personal qualities, which are presented in Table 1, as psychological profiles. Psychodiagnosis according to the indicated psychological profiles was carried out according to the following psychodiagnostic methods, which were specially selected in order to record in detail the manifestations of the psychological profiles of the social success of younger school children in connection with a number of psychological variables significant in the context of our study. When selecting psychological methods, such requirements for psychodiagnostic tools as reliability, representativeness, validity, objectivity, clarity and unequivocalness of the instructions for the diagnostic

procedure were taken into account. Testing according to certain psychological methods took place in individual and group form.

Therefore, psychological profiles are interpreted as hyperproperties that reflect the social success of junior high school students. In the future, there is an opportunity to form certain clusters that unite students into groups according to their personal manifestations when conducting the psychodiagnostics presented above.

One of the possible well-tested implementations of logical-linguistic models is the growing pyramidal network (GPN) (Dovgyi & Stryzhak, 2021; Velychko, 2019). An important feature of GPN is their property of structuring information based on the processing of property values that characterize the objects included in the GPN. In our case, the formation of the network structure of the interaction of primary school students is implemented through the hyperproperties of their psychological profiles, which are determined as a result of processing the values of these properties obtained in the process of their psychodiagnosis according to the psychological profiles presented in Table 1.

According to the definition (Velychko, 2019), a growing pyramidal network  $Q$  is called an acyclic directed graph  $Q = (U, E)$ , in which there are no vertices that have a single incoming arc.  $U = \{u_i | i = \overline{1, n_1}\}$  – the set of network vertices, where  $u_i$  – an arbitrary vertex of the network,  $n_1$  – the number of vertices in the network.  $E = \{e_i | i = \overline{1, n_2}\}$  – the set of network arcs, where  $e_i$  – arbitrary arc,  $n_2$  – the number of arcs in the network. An example of a semantic network of a pyramidal structure is shown in Fig. 1.

Vertices that do not have incoming arcs are called receptors. Vertices that have arcs incoming are called – conceptors. Receptors correspond to individual values of features from descriptions of objects. Conceptors correspond to combinations of values of features – qualities that identify an object, or common parts of descriptions of several objects. Conceptors can have a single incoming arc.



In this case, the conceptor is connected to other conceptors or receptors by an arc, with any name.

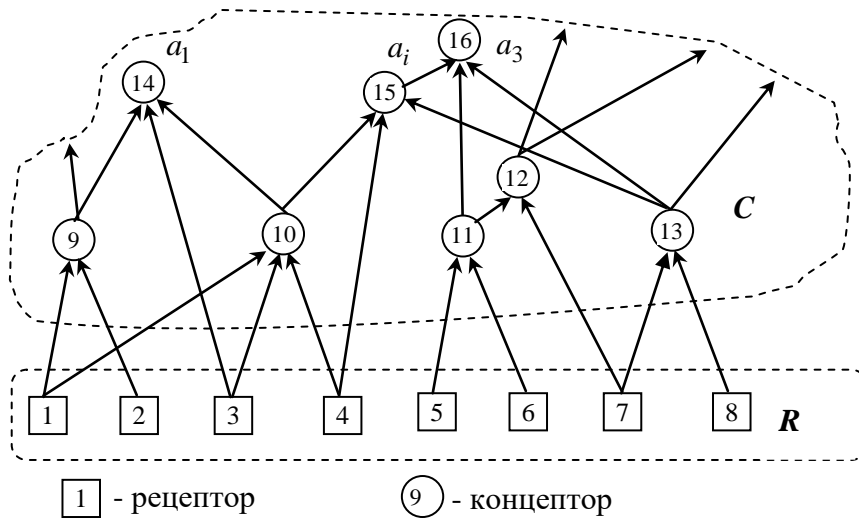


Fig. 1. An example of a semantic network of a pyramidal structure

The set of vertices of the GPN is a set  $U = R \cup C$ , where  $R = \{r_j \mid j = \overline{1, n_3}\}$  – set of receptors GPN;  $r_j$  – arbitrary network receptor;  $n_3$  – a set of receptors in the network;  $C = \{c_k^l \mid k = \overline{1, m}\}$  – a set of pyramid network conceptors;  $c_k^l$  – arbitrary network conceptor;  $l = |R_{c_k^l}|$  – the level of the conceptor in the network, which is equal to the number of receptors with which it is connected by incoming arcs;  $m$  – the number of conceptors in the network.

At the initial stage, there are only receptors from the set in the network  $R_A$ , each of which corresponds to the value of the feature of the object and the conceptors from the set  $C_A$ , which correspond to known objects. Known objects form set  $C_A = A = \{a_i \mid i = \overline{1, n_4}\}$ , where  $n_4$  – number of known objects. For each of the objects  $a_i$  the corresponding set of receptors is known  $R_{a_i}$ .

The construction of the network begins with the implementation of rule A1.

**Rule A1.** For a new object  $a_i$ , which is added to the network, and each object  $a_j, j = \overline{1, i-1}$ , which already exists in the network, a non-empty set of receptors is formed  $R_{a_j}^{a_i} = R_{a_j} \cap R_{a_i}$ .

If  $|R_{a_j}^{a_i}| \geq 2$  and conceptor  $c_k^l$ , the set of receptors of which is identical to the set  $R_{a_j}^{a_i}$ , exists in the network, then  $c_k^l$  is added to  $\mathbf{0}$ -subsets of objects  $a_i$  та  $a_j$ . If conceptor  $c_k^l$  doesn't exist in the network, then  $c_k^l$  is created and connected by incoming arcs to the vertices of the set  $R_{a_j}^{a_i}$  and outgoing arcs with vertices  $a_i$  and  $a_j$ . Arcs from receptors with  $\mathbf{0}$ -subset of the new conceptor, which directly went to the top  $a_i$  and  $a_j$ , are breaking up.

On Fig. 2 it is shown the application of rule A1 in the construction of the GPN. The initial state of the GPN is shown in Fig. 2.a. After adding a new object to the network  $a_i$ , a new conceptor with the number 10 appears in the network –  $sc_{10}^3$  (Fig. 2.б).

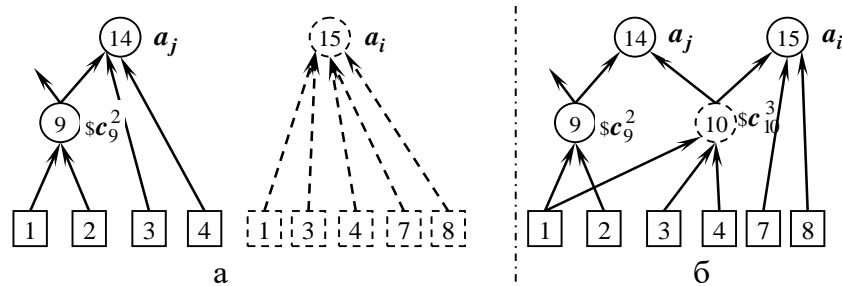


Fig. 2. **Rule A1 of building a pyramidal network**

Names of all conceptors being added to the network as a result of the rule A1 implementation, we will denote by ordinal numbers with the addition of the symbol \$ in front of the number. After the addition of new objects to the network is complete, the rule A2 is performed.

**Rule A2.** For all conceptors of the set  $C$  subordination of the conceptor  $c_k^l$  to conceptor  $c_m^n$  is carried out under conditions:  $R_{c_k^l} \subset R_{c_m^n}$ ,  $n = \min\left(\overline{l+1, \max_{a \in A} |R_a|}\right)$ , and with the absence of a directed path between  $c_k^l$  and  $c_m^n$ .

The logical-linguistic model in the format of the GPN is implemented on the basis of the presentation of input information that specifies the process being researched in the format of a text file. The specified file marking should include the following: a title line, lines with object property descriptions. Header line structure: object, class, (the name of the attribute 1), ..., (the name of the attribute n). The names “object” and “class” are required in the title line. The separating character between line elements is a comma. The structure of such lines:

(The name of the object 1), (the name of the class), (value of the attribute 1),  
..., (meaning value of the attribute n)

(The name of the object m), (the name of the class), (value of the attribute 1),  
..., (value of the attribute n).

Different objects can have a different number of attributes, which are listed in the object descriptions in an arbitrary order. The format of the input file without a header line is used to build logical-linguistic models of semantic analysis of text documents, where objects are described by an arbitrary number of various features. Relationships between objects are being established on the basis of the coincidence of attribute names in the descriptions of different objects.

As it can be determined from the above, the GPN format implements a graph-theoretic approach to clustering. Based on GPN, graph algorithms are implemented, and hierarchies between objects that make up a pyramidal network are formed and displayed. The fact that they implement both agglomeration (combining) and divisional (dividing) algorithms (V. Gladun et al., 2004; V. P. Gladun, 1994) should also be noted among the characteristic features of GPN during clustering. Moreover, as it can be seen from Fig. 1 and Fig. 2, we can distinguish certain taxonomic structures

(Dovgyi & Stryzhak, 2021; Lamberts, 2013) from the GPN, which reflect the hierarchies of the transition between students’ psychological states according to their psychological profiles. Rules A1 and A2 also specify the algorithm for building such taxonomies.

In turn, taxonomies as a certain format of LLM display quite objectively represent the structure of an arbitrary operational environment. In our case, we consider the operational environment of group interaction of students in the classroom according to the psychological profiles of the manifestation of their certain qualities as personalities (Table 1).

Each student is characterized by a certain set of taxonomies that reflect the manifestations of his qualities as it is defined in psychological profiles in the Table 1. But, as it will be presented later, the entire set of taxonomies of all the pupils in the class form the GPN, which realizes their distribution into multiple clusters. The multiplicity fixes the fact that each student belongs to the classes defined in the Table 1 by psychological profiles, according to the values of assessment scales according to psychological methods.

Thus, we actually define a certain technological platform, which, based on the taxonomic representation of assessment levels of psychological profiles of high school pupils' social success forms the operational space of their interaction in classroom activities.

So, let us show the assessment of psychological profiles of high school pupils. According to the defined methods, based on the psychological profiles presented in Table 1, the results of the evaluation of the psychological states of elementary school pupils social success were obtained, and are presented in general for the entire class in Table 2. Besides, with the help of this table it is possible to see all the hyperproperties of students which have certain numerical values that characterize them according to the corresponding psychological profile of Table 1. That is, according to the values of each cell of Table 2, we can determine the corresponding indicators of the psychological profiles of a particular pupil. However, the very process of determining a specific profile for each student requires a choice taking into account the factors of the psychological profile and the corresponding assessment scales.

In our case, only one profile has five manifestation factors. This is divergent thinking, which includes such factors as speed of thinking, flexibility of thinking,

originality of thinking, elaboration of thinking and creative use of language. Other profiles are single-factor and can be defined for each pupil directly.

Since we consider all values as nominal, we do not need to arrange them and determine the sequence of processing for further research on the levels of pupils' psychological profiles. Indeed, the formation of each student social success, which is characterized by the corresponding psychological profiles from the Table.1 is random and chaotic in nature. Here everything depends on his attention to a specific problem/task, his competence in solving it, etc.

From the point of view of the clustering technology based on the use of the GPN of the pupils' interaction in class, the main thing, according to the definition of the GPN and rule A1 regarding its construction, are the names of the psychological profiles, which are defined in the Table 1. We will note that each state is formed on the basis of combinations of the names of the corresponding psychological profiles and factors, values of their assessment according to certain scales, which are also presented in the Table 1.

We will register this with a certain rule, since the entire study is implemented on the basis of certain psychological profiles, which we also interpret as hyperproperties, in our case, they are the receptors. However, their number expands in the direction of specifying their levels, which determines the set of combinations of the very states in which students can be in the class. That is, each GPN receptor of the class operating environment will have a name that is determined according to rule A3:

< psychological profile >+< factor >+< assessment >.

Thus, psychological profile *school motivation*, as hyperproperty defines five receptors namely:

*school motivation\_high level*

*school motivation\_good school motivation*

*school motivation\_positive attitude to school*

*school motivation\_low school motivation*

*school motivation\_negative attitude to school*

It is the intersections of sets of receptors of objects (pupils) that form the entire set of clusters into which students can be divided according to their psychological profiles of social success, which are determined by performed psychodiagnostics.

The correspondence between the specified assessment scales according to the selected methods and the values of specific psychological profiles is implemented on the basis of the “Scale” column of Table 1. The GPN implements the selection of a specific value by the name of the corresponding psychological profile in Table 2. After that, the hierarchical relationship between the receptor and a specific group of students (research subjects) is determined.

The main task of further research of psychological profiles of pupils’ social success is to identify clusters that are formed on their basis. On the basis of the identified clusters, it is possible to implement psychological and pedagogical support for the formation of the social success of high school children: to determine the complexity of educational tasks that they are able to solve first in interaction with an adult, that is, to determine the zone of their proximal development, and then independently; to discover their abilities, inclinations, interests, resources, etc.

As one can see, the format of presenting information based on the results of psychodiagnostics meets the mentioned above technological requirements for the formation of LLM interaction of psychological profiles of pupils’ social success. First, we will define the receptors of our LLM.

After applying the rules A1-A3 to the data presented in Table 2, we will get the LLM in the format of the GPN, a fragment of which is presented in Fig. 3. The specified fragment of the general GPN reflects the interaction of psychological profiles of younger school children, which were displayed using psychodiagnostics according to methods (Bevzenko, n.d.; Diedov, 2014; Fatykhova, 2011; Fomenko, 2018; Holovei & Рыbalko, 2005; Korobko & Korobko, 2021; Tunyk, 2003; Velychko, 2019).

Table 2

## Generalized results of psychodiagnostics of high school students of the experimental form

Child №	school motivation	learning motivation	mental development				divergent thinking					self-esteem	moral guidelines	persistence and self-discipline	social and emotional intelligence
			I	II	III	IV	speed	flexibilit	originalit	elaborat.	creative				
1	21	22	20	25.6	13.8	22.5	12	4	16	4	2	1	2	10	1
2	18	16	15.8	20.2	11.6	19.6	10	9	16	8	0	2	1	9	3
3	19	18	19.9	23.2	9	25	6	5	15	6	0	3	1	13	2
4	21	20	15.8	18.1	20.5	22.5	12	4	10	3	1	2	2	7	1
5	25	24	15.1	25.6	2	22.6	12	3	4	1	1	4	2	7	2
6	13	12	15.8	15	9	17.5	12	3	6	2	2	5	1	10	1
7	9	8	15.9	25.6	0	15.3	12	1	3	0	21	2	2	11	1
8	30	26	17.7	22.9	20.5	19.7	12	9	21	9	13	1	3	11	1
9	16	15	7.3	18.1	11.6	12.6	12	5	22	9	2	5	2	17	4
10	17	16	17.7	23.3	4.5	19.7	12	4	22	7	3	2	2	14	2
11	25	25	19.9	25.6	0	17.5	12	0	19	7	0	4	1	10	1
12	20	21	17.7	23.2	0	17.1	12	11	17	16	17	1	2	12	1
13	21	22	19.9	23.2	18.3	19.7	12	5	25	17	12	2	2	10	4
14	15	16	15.8	20.4	11.7	12.2	10	5	26	4	0	2	0	8	1
15	27	26	22.7	25.6	9	19.4	12	4	14	3	14	3	2	12	1
16	26	27	18.6	17.9	17.9	18.2	11	8	20	1	7	3	2	18	2
17	22	21	7.3	7.7	18.8	0	8	4	9	1	8	2	1	7	1
18	16	17	18.6	20.4	11.6	15	12	3	14	1	12	2	1	10	2
19	16	15	14.1	15	0	12.6	5	3	9	4	0	2	1	8	1
20	17	16	15.8	20.4	20.5	19.6	8	5	11	2	8	3	1	15	3
21	18	16	19.1	25.6	16	17.5	4	3	7	4	5	1	1	15	3
22	14	11	15.8	17.9	0	17.1	7	5	4	3	0	5	1	11	1
23	26	27	7.3	18	20.5	9.2	5	4	15	6	0	3	1	7	1
24	18	17	22.7	25.6	18.3	19.7	12	1	15	3	8	2	1	8	1
25	29	28	22.7	20.7	11.3	22.5	12	9	19	7	9	1	2	17	2
26	16	15	15.8	15.4	0	0	12	2	15	1	1	3	1	10	1
27	13	12	20.8	18	20.5	20.3	12	5	18	4	12	2	1	13	2
28	9	8	14.1	15	0	9.2	4	1	2	1	0	3	1	9	1
29	11	10	22.7	20.5	13.8	22.5	12	2	9	5	2	4	1	5	3
30	30	26	22.7	12.8	20.5	12.6	6	3	9	1	6	2	2	17	2

According to the defined rule A3, receptors are defined by compositions of the names of psychological profiles, their factors and assessment levels. Their meanings, which are given in Table 2, characterize the psychological profiles of pupils in the class. And on the basis of these meanings processing, the GPN of their network interaction is built, which is presented in Fig. 3. All states of GPN are formed by a set of hyperproperties determined for research, which are the interpretation of psychological profiles.

In future, we can display all the connections that are formed between students with the help of psychological profiles determined during psychodiagnosis.

It is best to use network clusters, which are subgraphs of the GPN (Dovgyi & Stryzhak, 2021; V. Gladun et al., 2004; V. P. Gladun, 1994; Lamberts, 2013) [14-17]. We will note that network clustering based on GPN has a so-called soft character. That is, objects that are clustered by their properties can belong to different clusters. The only condition is that all the objects that form the entire set of clusters also form a complete GPN. Even more, each cluster must include at least two objects that are characterized by at least two common receptors.

From now on, we can identify and consider specific clusters that may be of interest to us, as well as to an arbitrary researcher.

If the researcher is interested in a certain hyperproperty, then he can isolate it from this GPN and get a list of those pupils who are directly in the psychological profile determined by this hyperproperty. Let's choose a hyperproperty *DT FLEXIBILITY\_HIGH LEVEL*, which corresponds to the psychological profile *DIVERGENT THINKING* by factor *2.FLEXIBILITY OF THINKING* and by level *1.HIGH LEVEL (HL)* (Fig. 4). As we can see, a cluster is formed here, which determines the appropriate psychological profile for a group of students, namely – **child\_2**, **child\_8**, **child\_12** та **child\_25**.



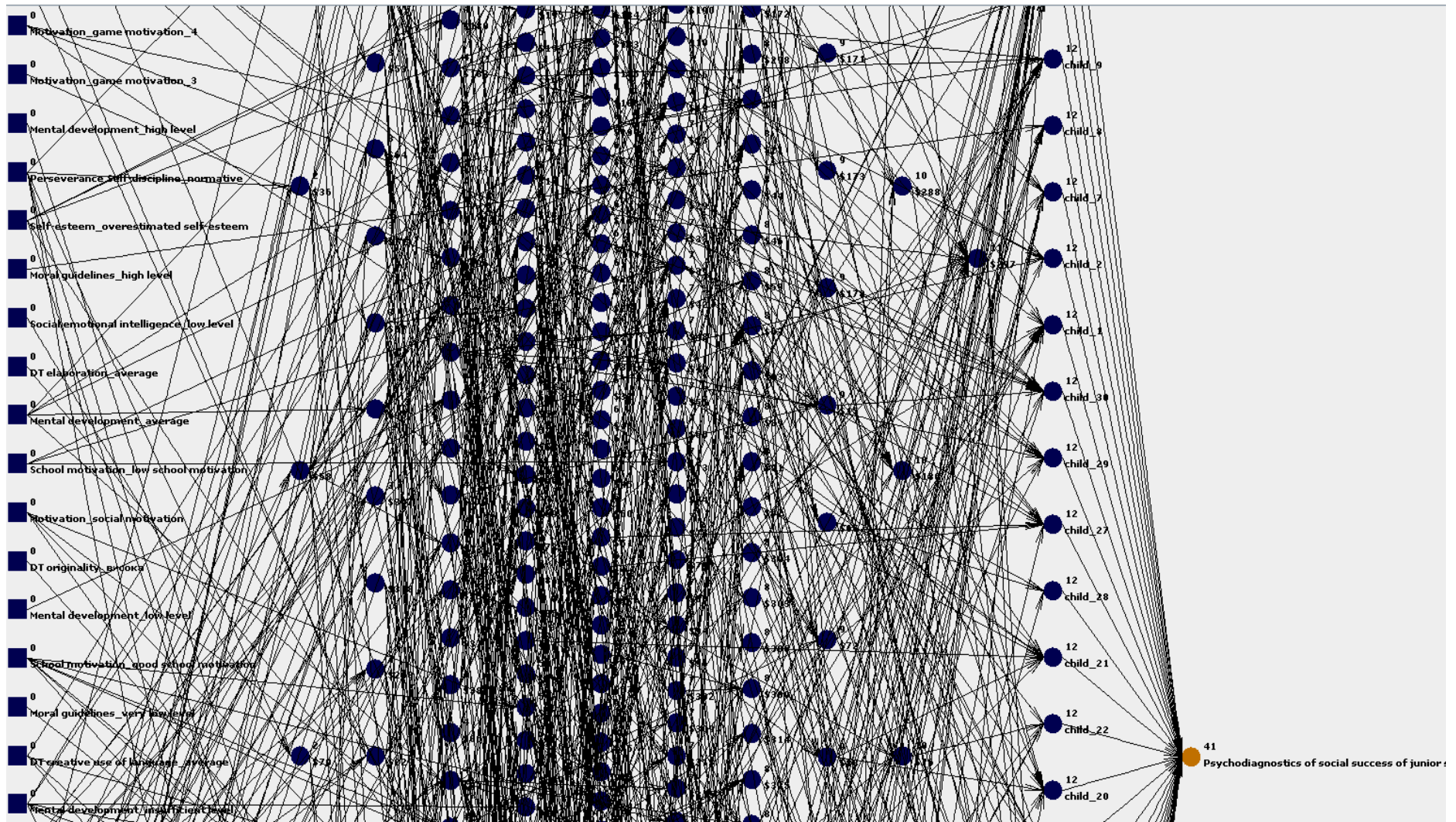


Fig. 3. LLM in the format of GPN display of network interaction of psychological profiles of high school children

As it was mentioned above, the clustering of objects whose psychological profiles are being studied has a multiple character. That is, there is a certain number of clusters that include a defined set of common objects. So, to the cluster, which is characterized by a hyperproperty *MOTIVATION\_GAME MOTIVATION\_3* (Fig.5) and determines the appropriate psychological profile for a group of students, namely – **child\_2**, child\_3, child\_9, child\_10, child\_14, child\_18, child\_19, child\_20, child\_21, child\_24, child\_26; and cluster, which is characterized by a hyperproperty *DT FLEXIBILITY\_HIGH LEVEL* (Fig.4), a shared object is included – **child\_2**. And it can act here as a transition to interaction between all students of these two clusters.

It should be noted here that in fact these students form certain groups according to psychological profiles, which, due to interaction through common pupils, allow improving the psychological state of the profile for each student. For this, the practical psychologist of the institution, in cooperation with the class teacher, should create for the participants of the specified clusters certain various developmental tasks, projects that will be interesting to all the students of the clusters.

Let's pay attention to specially marked conceptors that have a marker "\$" and the corresponding number in the format of a natural number from **1** to the specified **N**. These conceptors have a dual nature.

First, they form clusters of students' psychological profiles. This happens due to taking into account the probabilities that determine the possibilities of forming connections between the pupils of the class when choosing receptors according to specific psychological profiles.

Secondly, they directly determine the intermediate stages of transitions between the psychological profiles of students, which are also determined by the values of the receptors (Table 2).

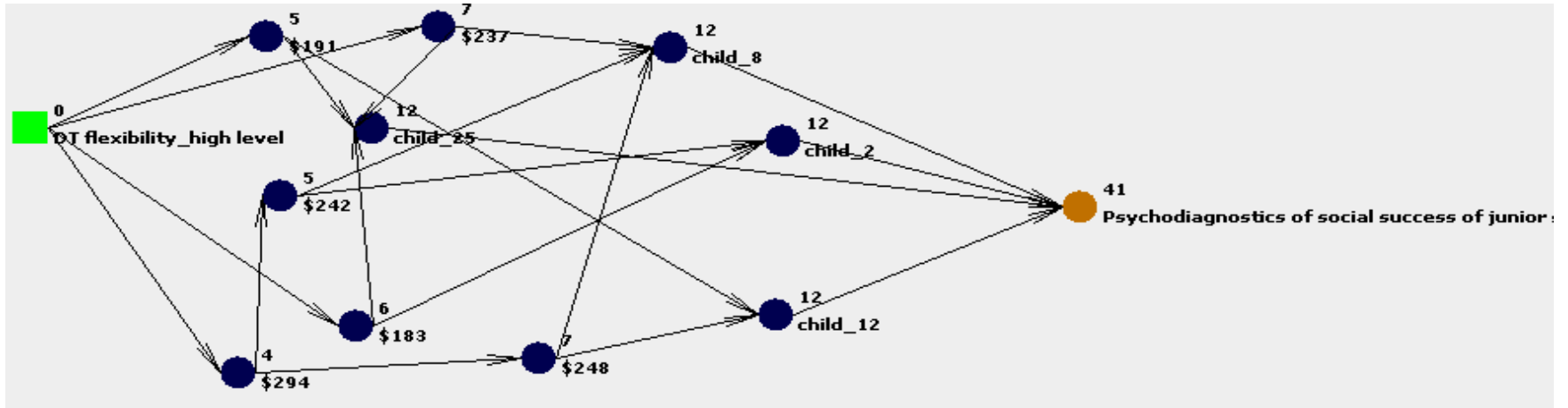


Fig.4. Cluster with hyperproperty *DT FLEXIBILITY\_HIGH LEVEL*

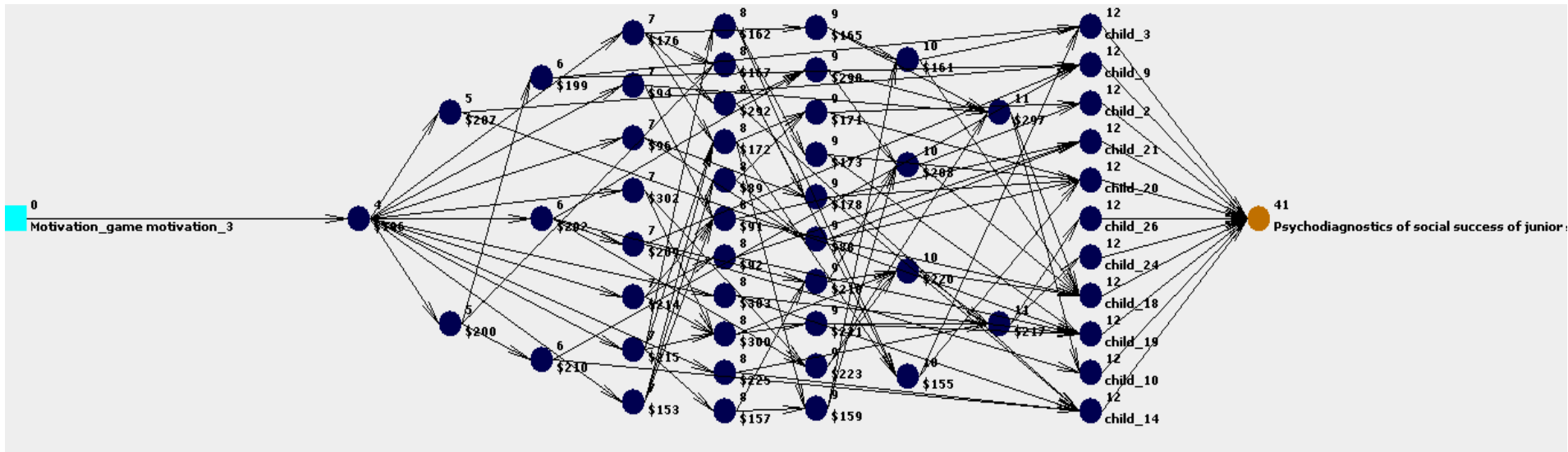


Fig.5. Cluster with hyperproperty *MOTIVATION\_GAME MOTIVATION\_3*

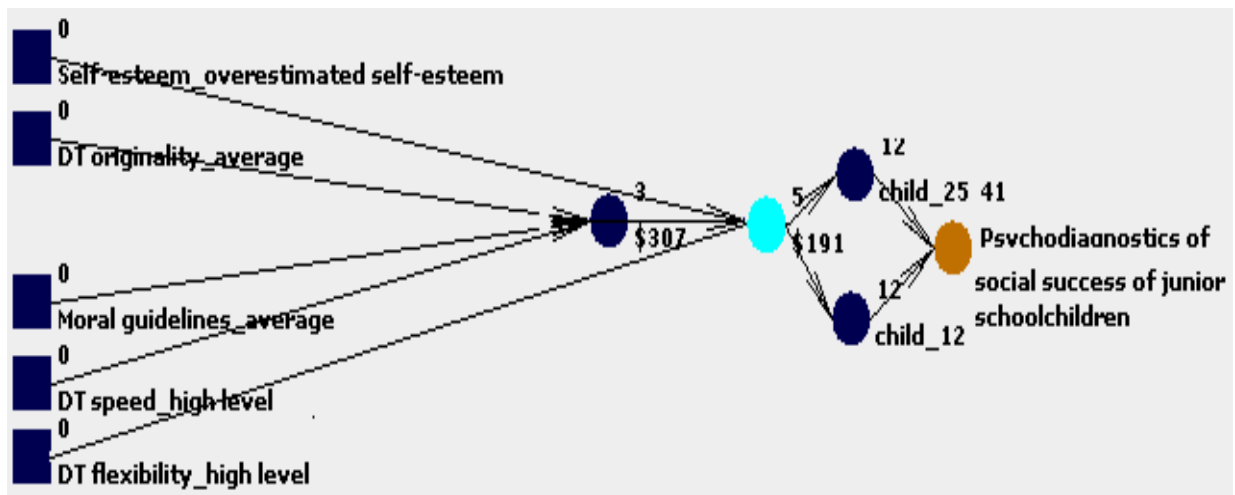


Fig. 6. Formation of a cluster by a conceptor \$191.

We will consider one of such clusters. Let's take the conceptor \$191 (Fig. 6), which forms a cluster characterized by a receptor *DT FLEXIBILITY\_HIGH LEVEL* (Fig. 4). Child\_2 enters to the composition of the cluster with the conceptor \$191, child\_2 is also included in the cluster presented in Fig. 5. (Hyperproperty *MOTIVATION\_GAME MOTIVATION\_3*).

Probability of activation of the conceptor \$191 (entrance of the object to the cluster) is 0,0666667, which is calculated by the ratio of the number of pupils included in the cluster to the total number of students:  $2/30=0,0666667$ . This is also reflecting the cluster formation protocol, which is given below.

*The protocol of cluster formation by the conceptor \$191:*

**\$191:** 5; DT flexibility\_high level; DT originality\_average; DT speed\_high level; Moral guidelines\_average; Self-esteem\_overestimated self-esteem  
0.0666667; child\_12; child\_25

As it follows from the cluster formation protocol, it includes two students child\_12 and child\_25, which are characterized by five common receptors.

We will consider another cluster, the transition to which is implemented through the conceptor \$307 (Fig.7). This is a cluster of psychological profiles of pupils in a class characterized by three receptors from different classes of psychological profiles: DT originality\_average; Moral guidelines\_average; DT

speed\_high level, and which unites 7 students. The receptors of this cluster belong to two different classes of psychological profiles: *divergent thinking* (DT) and *moral guidelines*. The probability of activation of the cluster is 0,2333333.

*The protocol of cluster formation by the conceptor \$307:*

**\$307:** 3; DT originality\_average; DT speed\_high level; Moral guidelines\_average  
0.2333333; child\_1; child\_10; child\_12; child\_15; child\_16; child\_25;  
child\_9

As we can see from the protocol, transitions between clusters are possible with the participation of students: child\_2; child\_12 and child\_25, which are included in this and some other clusters (Fig.4 – Fig.7).

In fact, the clusters in the GPN format indicate which hyperproperties of students characterize the psychological profiles of their interaction and determine the vectors of transitions between different psychological states in the process of their interaction.

One of the attributes of the cluster formation protocol is the distribution of probabilities of activation of hyperproperties of pupils in the class. If we define these probabilities as distances between students when certain hyperproperties are manifested, we can obtain certain taxonomic bundles.

Thus, in Fig. 8 bundle of three taxonomies is presented, which unite all pupils of the class with the exception of child\_12. As it can be seen, the distances between students in this taxonomic bundle are in the interval [0.7333333; 0.8333333]. At the same time, as we can see, in this bundle, the transition states are also defined by three conceptors – \$58, \$99, \$236.

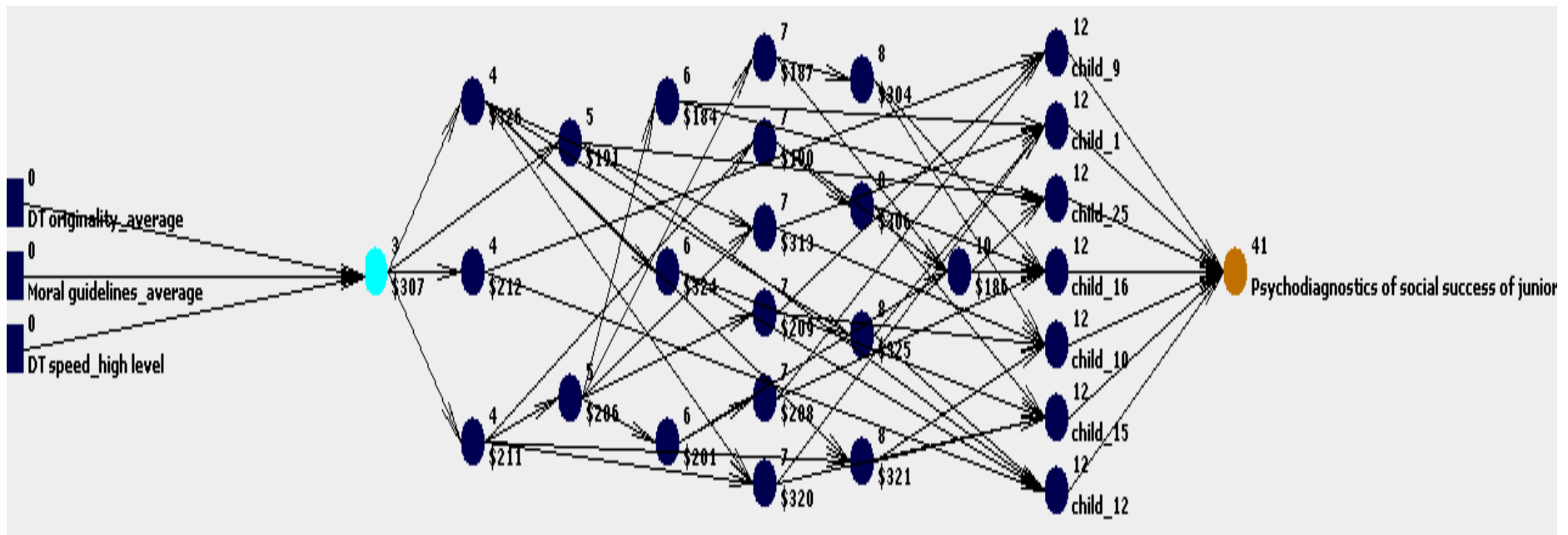
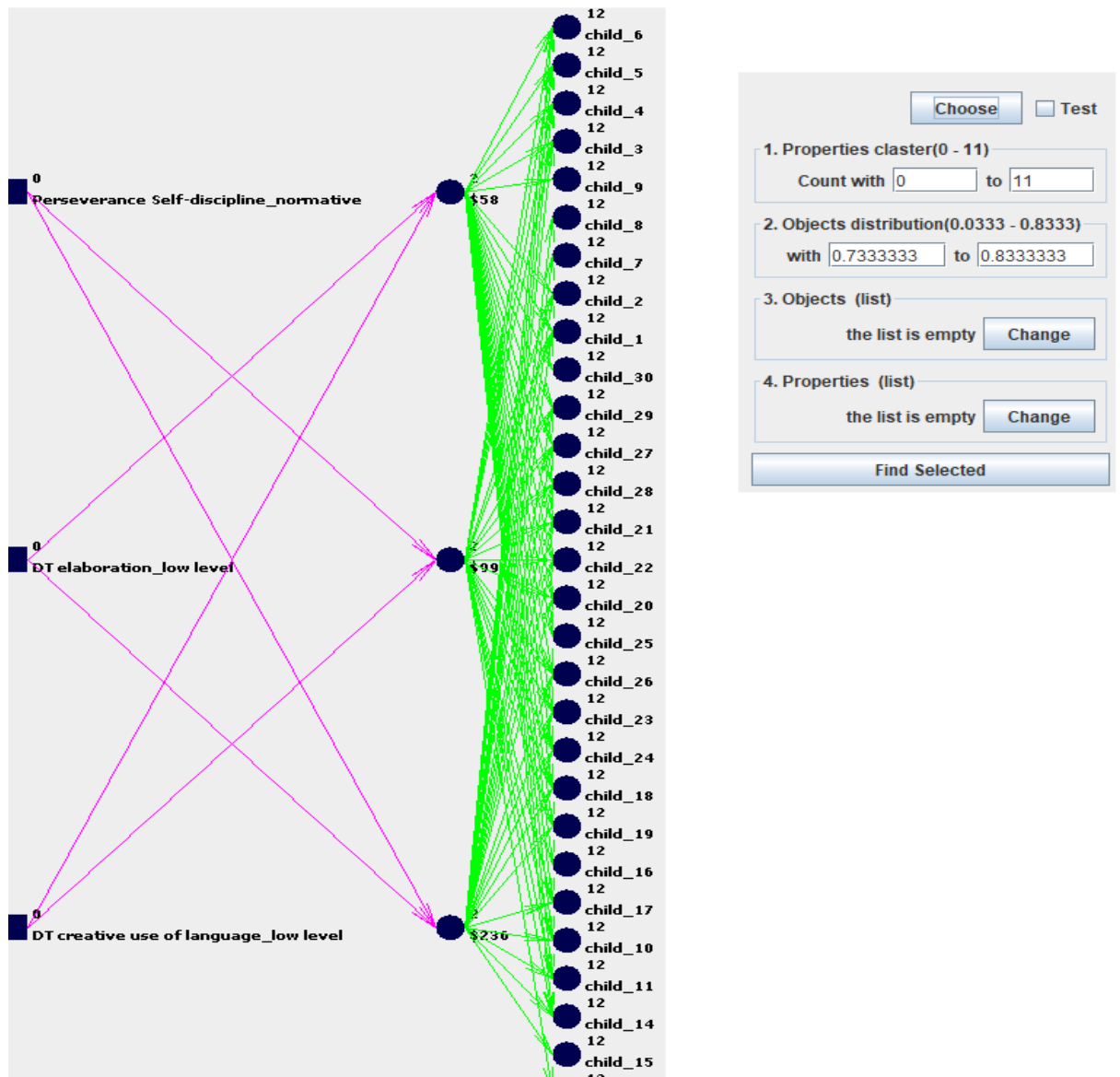


Fig. 7. A cluster of psychological states of students in the class, that is formed in the GPN format, which are characterized by three receptors from different classes of psychological profiles: DT originality\_average; Moral guidelines\_average; DT speed\_high level



**Fig. 8. Taxonomic bundle by hyperproperties PERSEVERANCE SELF\_DIXCIPLINE\_NORMATIVE, DT CREATIVE\_LOW LEVEL, DT CREATIVE USE OF LANGUAGE\_LOW LEVEL**

Even more, if you look carefully at Fig. 8, certain symmetries can be identified in this bundle. Thus, if you draw a conventional line between the receptor (hyperproperty) DT CREATIVE\_LOW LEVEL and the transition conceptor \$99, one can see that it splits the bundle into two symmetrical halves.

It is difficult to define what does this mean. However, the following hypothesis can be formulated – in the educational and cognitive activities of younger schoolchildren in the classroom, the states of their interaction according to various



manifestations of psychological profiles can form certain fractal groups [fractals, homotopy taxonomies]. Such formations will ensure the optimization of the formation of pupils' interaction groups in the classroom based on the consideration of hyperproperties revealed during their psychodiagnostics. However, this is a separate problem that requires further separate research.

The dynamics of changes in the distances between the states of transitions – the probabilities of the manifestation of the activity of certain hyperproperties, is characterized by the concentration of such states in the average values of the probabilities and their local concentration at large values close to the value 1.

So, in Fig. 9 a comparison of two taxonomic bundles is presented. The first bundle is formed on the segment  $[0.469000; 0.790000]$  of probabilities-distances to transition states, and the second is formed on the segment  $[0.590000; 0.8900000]$ .

In Fig. 9, it can be seen when shifting the distance values on the scale to the segment  $[0; 1]$  to the left, the number of active hyperproperties, transition states decrease while keeping the number of pupils fairly constant. That is, taxonomic clustering realizes the identification of stable groups of students whose hyperproperties have an active manifestation. This gives the practical psychologist of the institution and the teacher who works with these pupils the opportunity not only to identify certain dependencies for each pupil, but also to create an action plan that will contribute to increasing the levels of these hyperproperties, that is, the formation of social success.



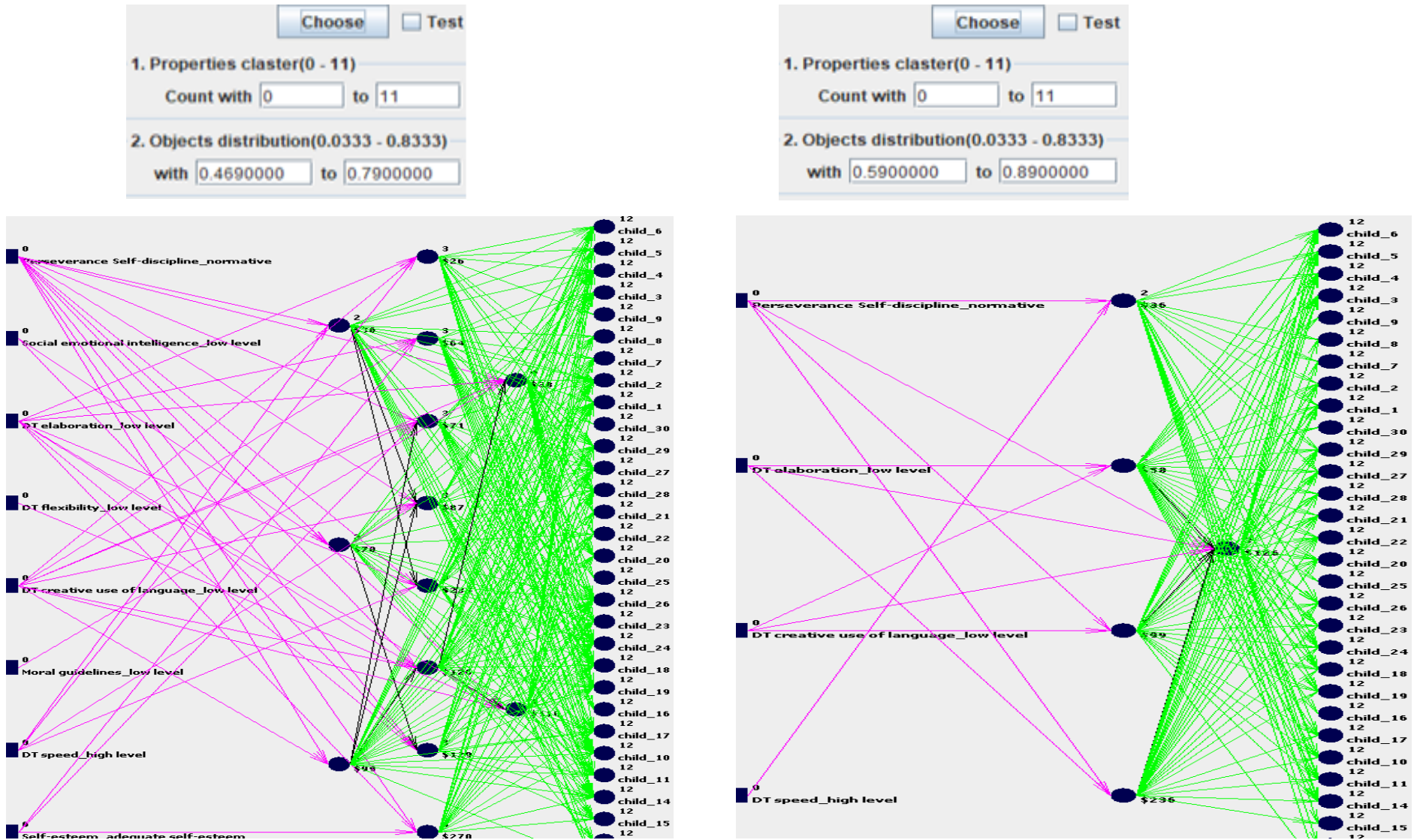


Fig. 9. Two taxonomic bundles formed by different probabilities

## CONCLUSIONS

**The principle of contrasting native and foreign languages and cultures** in the formation of sociocultural competence of high school pupils is based on the principle of dialogue between Ukrainian and English-speaking cultures based on their comparison. As a result of the perception and personal assessment of cultural differences, the students of the specialized school will develop a deep understanding of both native and foreign culture. We claim that the object of learning in the lessons of country studies is linguistic, sociocultural, linguistic and extralinguistic information, which partially or completely does not coincide with the linguistic, sociocultural reality of the native culture, because students learn English-speaking reality through the corresponding foreign language, which acts as a building material of the secondary picture of the world.

**The principle of authenticity of educational materials** is associated with the need to select and use authentic country studies texts for reading, which are a real product of the speech activity of native speakers and are not adapted to the needs of high school students, and also have a high linguistic and sociocultural potential (artistic texts, especially essays about travels by native speakers languages to English-speaking countries or foreigners to Ukraine, newspapers, magazines, pragmatic texts (announcements, booklets, advertisements, tickets), texts from Internet sources (authentic sites containing information on the country, blogs, chats, electronic directories, etc.), which creates conditions for obtaining an almost unlimited amount of country science information.

**The principle of professional orientation** of foreign language educational communication in teaching reading of English-language national history texts is expressed in taking into account the interests of pupils who have chosen to study in high school according to the philological profile. Since the majority of high school students studying in the philological profile classes are preparing for the foreign language external examination, international foreign language tests (TOEFL, FCE, CAE, IELTS), admission to higher education institutions according to the chosen

profile, study abroad. Studying specialized subjects allows you to acquire the necessary linguistic and sociocultural knowledge of a professional direction (we mean any profession related to the use of a foreign language, and therefore to a foreign language culture) and expands the range of linguistic and sociocultural training of graduates.

We assume that the spheres of communication for the use of a foreign language for intercultural communication by secondary school graduates can be professional contacts, trade, business, international exchanges, study abroad, travel, migration, diplomatic activity and even military actions, which are quite relevant in the conditions of the current political situation in Ukraine.

**The principle of interconnected communicative and linguistic and socio-cultural development** of the pupil's personality assumes that the result of the formation of socio-cultural competence of high school students in English lessons in reading national studies texts is the ability and readiness for intercultural communication and the development of linguistic and socio-cultural abilities (observation, impartiality, empathy, communicative flexibility, which must be developed ) and student qualities (linguistic, sociocultural politeness, tolerance and sensitivity). We see the implementation of the principle proposed by her in the presence of tasks of a multifunctional nature aimed both at mastering the culture of foreign language communication and at the linguistic and sociocultural development of the pupil's personality. To achieve this goal, in the process of forming the sociocultural competence of high school pupils, the main characteristics characteristic of mediated communication are reproduced in English lessons.

**The principle of step-by-step formation of socio-cultural competence** of pupils in English classes involves orientation (in our study, preparatory) and executive (in our understanding, main and final) stages of such a process.

**The orientation stage** begins with the analysis of the information of the country studies text, with the extraction of cultural information, represented by "value capsules", which contain information about the peculiarities of perception and understanding of foreign-language cultural reality, as well as national value

orientations presented in foreign-language culture. At the executive stage, students implement their linguistic and sociocultural knowledge in intercultural interaction, applying their linguistic and sociocultural abilities and qualities.

Thus, **the didactic** (interdisciplinary coordination and intercultural interaction) and **methodical** (interrelated learning of language and culture, interactivity, contrastiveness, authenticity of educational materials, professional orientation of foreign language educational communication, interconnected communicative and linguistic and sociocultural development of the student's personality, step-by-step formation socio-cultural competence) principles create a theoretical basis for the organization of reading education with the aim of forming the socio-cultural competence of high school students in English lessons in a modern specialized school.

**We propose to expand the content of English language lessons in the 10th grade and to devote the studied material not only to the cultural portrait of Great Britain and the USA, but also to study the country studies features of other English-speaking countries, such as Canada, Ireland, Australia, New Zealand, etc. in order to exclude duplication of topics.**

We include **grammatical, lexical, and stylistic complexity as language criteria for selecting texts of a country science nature**. In our study, extralinguistic criteria determine linguistic ones. The main linguistic selection criterion, determines the adequacy of speech means to the communicative intention of the author of the text, which is the primary basis of the text. Therefore, we will determine the adequacy of the use of speech means of communication in the text from the point of view of the presence of a relevant linguistic and sociocultural component in them. In accordance with the language criterion for the selection of texts of a country-scientific nature for the purpose of forming the sociocultural competence of high school students in English lessons, we suggest clearly observing the lexical, grammatical and stylistic complexity of texts at the B1-B2 level.

In our study, the educational unit is an English-language country studies text of **various genres from authentic Internet sources**. We consider the local history text as:

1) the main source of linguistic and sociocultural information about the country whose language is studied;

2) as material for building skills and improving reading skills in English lessons;

3) as an object of illustration of language units reflecting the culture of the people whose language is being studied. Hence, a country studies text is a written text designed according to the laws of the appropriate functional style, which conveys reliable and up-to-date information about English-speaking countries.

Based on the goals of our research, we will analyze the country studies text in the aspect of intercultural communication according to the following **criteria**: *stylistic and genre characteristics, language features, compositional and semantic structure, extralinguistic means*.

We share the point of view of the scientists that readers' knowledge of the functional and structural-semantic features of the text contributes to the understanding of its content. As you know, the ability to navigate in the structural and semantic organization of a country science text and to determine the corresponding semantic components by structural parts facilitates the prediction of the content of the text, contributes to its adequate understanding and the search for the necessary information. Hence, we consider it expedient to teach students to navigate the structural and semantic organization of English-language country studies texts of various genres from authentic Internet sources in the process of forming the sociocultural competence of high school students in English lessons. The following context was included in the composition of lexical units characterized by pronounced national and cultural semantics:

1) **denotative words-reality** – definition of objects or phenomena characteristic of one culture and absent in another;

2) **connotative vocabulary** – words that match in basic meaning, but differ in cultural and historical associations;

3) **background vocabulary** – words denoting objects and phenomena that have analogues in the studied culture, but differ in national features of functioning, form, purpose of objects, etc.;

4) **idioms are fixed word combinations that reflect the national uniqueness of history, culture, and the traditional way of life of the people who speak the language.**

On the basis of GPN graph algorithms are implemented, hierarchies between objects that make up a pyramidal network are formed and displayed. The initial data for the GPN are a set of hyperproperties determined for the study, which are an interpretation of the psychological profiles of elementary school pupils.

Network clustering on the basis of GPN is hierarchical in nature, and objects can belong to different clusters at the same time. On the basis of identified clusters of psychological states of students according to psychological profiles, which also determines their possible interaction, it is possible to implement psychological and pedagogical support for the formation of social success of younger school children, that is, to determine the complexity of educational tasks that they are able to solve, to identify their inclinations, resources and combine them into interest groups, etc. Here, interest groups mean the definition of certain tasks, projects that can be solved collectively within the framework of their common psychological profile.

Taxonomic clustering realizes the identification of stable groups of students whose hyperproperties have an active manifestation. This gives the practical psychologist of the institution and the teacher who works with students the opportunity not only to identify certain dependencies for each student, but also to determine for them the directions of project activities and create an action plan that will contribute to increasing the levels of the identified hyperproperties.

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