TERMINOLOGICAL THESAURUS AS A MEANS OF OVERCOMING LEXICAL INTERFERENCE IN ENGLISH-LANGUAGE SCIENTIFIC COMMUNICATION

ТЕРМІНОЛОГІЧНИЙ ТЕЗАУРУС ЯК ЗАСІБ ПОДОЛАННЯ ЛЕКСИЧНОЇ ІНТЕРФЕРЕНЦІЇ В АНГЛОМОВНІЙ НАУКОВІЙ КОМУНІКАЦІЇ

Yeremenko T.Ye.,
orcid.org/0000-0003-2840-8465
Cand. Sc. (Philology), Professor,
Head of the Department of the Germanic Philology and Methods of Teaching Foreign Languages
South Ukrainian National Pedagogical University named after K.D. Ushinsky

Demchuk A.I.,
orcid.org/0000-0003-0894-1684
Cand. Sc. (Philology), Associate Professor,
Associate Professor at the Department of the Germanic Philology and Methods of Teaching Foreign Languages
South Ukrainian National Pedagogical University named after K.D. Ushinsky

Lukyanchenko I.O.,
orcid.org/0000-0003-4762-0736
Cand. Sc. (Pedagogy), Associate Professor,
Associate Professor at the Department of the Germanic Philology and Methods
of Teaching Foreign Languages
South Ukrainian National Pedagogical University named after K.D. Ushinsky

The article reveals the results of developing a terminological thesaurus in the EFL teaching methodology, which may be a reliable tool to overcome lexical interference for non-native English researchers. The lack of a standardized system of English-Ukrainian terminological equivalents in the field of EFL teaching methodology further complicates English-language scientific communication among members of the academic community, as terminological distinctions between Ukrainian and English create barriers in achieving semantic accuracy and terminology consistency in scientific discourse. Thus, the aim of the research is to elaborate the content and structure of the terminological thesaurus for EFL methodology, which will assist Ukrainian researchers, educators, and postgraduate students in using precise English-language terminology. Analysis of the selected corpus of the English-language scientific articles with AntConc software resulted in the formation of the content base for the thesaurus. The thesaurus was structured using hierarchical and logic-based approaches, which ensure systematic classification and facilitate efficient retrieval of semantic information. The resulting thesaurus comprises twelve thematic categories ("Learning and educational processes", "EFL learners' skills and abilities"; "English language proficiency levels", "EFL teaching methods" etc.), arranged in a sequence that guides researchers from general educational concepts to specific aspects of EFL teaching methodology. The thematic categories are divided into subcategories, each containing key terms, narrow terms, their synonyms, examples of contextual usage, and Ukrainian equivalents. The devised thesaurus promotes standardized terminology, minimizes lexical interference, and enhances international scientific communication. The proposed thesaurus model requires further expansion to provide a more comprehensive coverage of terms related to EFL teaching methodology, which indicates a clear prospect for future research.

Key words: terminological thesaurus, English-language scientific discourse, lexical interference, EFL teaching methodology, terminology consistency, scientific communication.

У статті презентовано результати розробки термінологічного тезаурусу з методики викладання англійської мови як іноземної, який слугуватиме надійним інструментом у подоланні лексичної інтерференції дослідниками, для яких англійська мова не є рідною. Відсутність уніфікованої системи термінологічних англо-українських відповідників у сфері методики викладання англійської мови дещо ускладнює англомовну наукову комунікацію між представниками академічної спільноти, так як термінологічні розбіжності між українською та англійською мовами створюють перешкоди для досягнення семантичної точності та термінологічної єдності в науковому дискурсі. Отже, метою дослідження є розробка змісту та структури термінологічного тезаурусу з методики викладання англійської мови як іноземної, який допоможе українським науковцям, викладачам та аспірантам у використанні точної англомовної термінології. В результаті аналізу відібраного корпусу англомовних наукових статей за допомогою програмного забезпечення AntConc було сформовано змістову базу тезаурусу та окреслено його структуру із залученням ієрархічного та логіко-орієнтованого підходів, які забезпечують системність класифікації та сприяють ефективності семантичного пошуку інформації. Запропоновано дванадцять тематичних рубрик («Навчальні та освітні процеси», «Навички та здібності здобувачів», «Рівні володіння англійською мовою та англомовні компетентності», «Методи навчання англійської мови» і т. д.), розташованих у такої послідовності, яка скеровує дослідників від загальних освітніх концептів до конкретних аспектів методики викладання англійської мови. Тематичні рубрики поділяються на підрубрики, кожна з яких містить ключові галузеві терміни, вузькі галузеві терміни, їхні синоніми, приклади контекстного використання та українські відповідники. Розроблений термінологічний тезаурус є дієвим інструментом стандартизації термінології у сфері методики викладання англійської мови як іноземної, мінімізації лексичної

інтерференції та покращення інтернаціональної наукової комунікації. Запропонована модель тезаурусу потребує подальшого розширення для більш повного охоплення термінів з методики викладання англійської мови, що є чіткою перспективою подальших досліджень.

Ключові слова: термінологічний словник, науковий дискурс, лексична інтерференція, термінологічна єдність, методика викладання англійської мови, англомовна наукова комунікація.

Introduction. Modern scientists tend to promote their research results in order to win a wider readership in the international scientific community, therefore they choose the English language as a means of global communication. In such conditions of the internationalization of science, the issue of language interference in the scientific discourse seems to have become a topical one. Researchers who are non-native English speakers face the problem of their native language interference in the English scientific discourse.

Literature review. Scientific discourse is commonly defined as a specific type of interaction that aims at realizing the addresser's communicative intention through definite tactics and strategies [1]. Unlike subjective representation of reality in the belles-lettres or political discourses, scientific discourse constructs "an objective stance through the particular stratification of its language and its generic conventions" [2, p. 644–645]. As H. Holubova notes, the main features of scientific discourse are "creativity, objectivity, the logic of transmitted information and professional value" [3, p. 91].

If to consider scientific discourse as communication between an author and professional readers, the author is supposed to communicate through a specific scientific language that is an effective "exploratory, problem-solving tool that utilizes unique patterns of argumentation", in other words, "a proper research instrument" [4; 5]. Scientific language has its typical characteristics: "a high frequency of discipline-specific terms, complex sentences containing subordination, and an impersonal style created by frequent use of passive constructions" [6, p. 551]. These linguistic characteristics are specified by its standard organizational structure and definite requirements. However, scientists as language personalities possess their individual traits. It follows that scientific discourse is, on the one hand, "the product of the scientist's adaptation to the requirements", and their own way "of structuring the professional scientific activities", on the other hand [7, p. 84]. To facilitate English scientific discourse organization a researcher, being a non-native English speaker, ought to conform the norms of their native scientific texts to the specific structural, semantic, and morphological features of the English scientific discourse.

Undoubtedly English plays an increasingly dominating role in sharing modern research findings with the international scientific community. This idea is sustained by many scientists. K. Englander argues that English has taken on increasing importance in the process of spreading scientific knowledge due to the "confluence of socio-historic and economic factors" [8] L. Usyk et al. lay emphasis on a pivotal role of English as a source of terms for the majority branches of knowledge [9]. This fact increases researchers' interest to studying not only "scientific" English-language textual norms but also "their relevance for non-native speakers of English as they nativize or hybridize these norms" [10, p. 3]. Therefore, the problem of native language interference, including linguistic units of phonetic, grammatical and lexical levels, seems to be crucial in the process of international scientific communication.

Any scientific discourse is characterized by a semantically dense specialized language [11], as scientists use specific lexis and terminology to present arguments, explanations, interpretation of the empirical data, findings, etc., attempting to express their ideas clearly and unambiguously. It is obvious that scientists long for transferring their knowledge and findings to wider international readership. At this point researchers face a problem of lexical interference, as on the one hand, they tend to preserve terminology national identity, on the other hand – to precisely conform national and English terminology systems in order to avoid misunderstandings and ambiguity [12; 13].

From the methodological viewpoint language interference is defined as a negative result of automatic transferring of former linguistic experience on a foreign language [14; 15; 16]. In the process of scientific writing in a foreign language, English in particular, an issue of lexical interference comes to the fore. Especially when a research article deals with methods of teaching EFL, as there is no unified Ukrainian and English terminology of teaching FL methodology.

One of the ways to conform the above-mentioned terminology in the context of scientific internationalization is to construct a thesaurus of the most frequently used teaching FL methodology terms as thesaurus is an effective tool which assist researchers to use the same terms to describe the same notions, concepts or subjects allowing easier search of information for a particular domain [17].

The aim of the study is to devise a core content and basic structure of the EFL methodology terminological thesaurus to sustain consistency in using specific

terms in the English scientific discourse by non-native (Ukrainian) researchers of a particular field.

The research is carried out on the basis of «Cognitive and communication studies» laboratory at the department of Germanic philology and methods of teaching foreign languages, the State institution «South Ukrainian National Pedagogical University named after K. D. Ushynsky».

Methods. The design used in the research initially involved a corpus-based approach for data collection and data analysis. The corpus consists of 40 scientific articles in EFL teaching, retrieved from blind peer-reviewed scientific journals, and includes 177346 tokens in total. AntConc text analysis was employed in order to single out teaching EFL methodology terms and their concordances. Frequency indices were taken into account as they mark the most used terms in the international scientific community. The data analysis results allow to devise content and structure of the thesaurus. Thesaurus modeling is based on hierarchical and logic-based approaches. The hierarchical approach ensures the thesaurus structure conformity "for capturing relationships between categories" [18, p. 387], meanwhile the logic-based approach facilitates the semantic information retrieval and therefore the acquisition of semantic data [19].

Results and discussion. The findings of a corpus-based analysis suggest the following set of thesaurus thematic categories: *(1) Learning and educational processes; (2) EFL learners' skills and abilities; (3) English language proficiency levels and competencies; (4) EFL teaching and teaching methods; (5) Technology in (foreign) language teaching; (6) English language learning strategies: (a) Reading and text comprehension strategies, (b) Writing and writing strategies, (c) Listening and listening strategies, (d) Speaking and speaking strategies; (7) Interaction and communication; (8) Discourse and communicative practices; (9) EFL classroom management; (10) Feedback and assessment; (11) Data and data collection methods; (12) Research and analysis.*

The suggested order of thematic categories is structured to guide researchers from general educational concepts to specific methodological aspects of EFL teaching, ensuring a logical and coherent thesaurus organization. Each category builds upon the previous one, creating a systematic framework for understanding and applying EFL teaching terminology in scientific discourse.

Each category includes subcategories where domain-specific terms are given in the alphabetic order for easy location of entries. The term entries con-

sist of a key term, narrower terms (labeled NT), their definitions, synonyms (labeled UF – "used for"), and examples of contextual use (labeled CU). Ukrainian equivalents of key and narrower terms are given to ensure terminology unification and minimize lexical interference. This contributes to the coherence of terminology usage both within the Ukrainian academic community and in the international scientific sphere.

"Learning and educational processes" is a category of general character that covers the core concepts of knowledge acquisition and diverse aspects of education. It contains the terms related to learning theories, practical aspects of learning, formal and informal education systems and approaches, educational policies, and institutional frameworks. It serves as a theoretical foundation upon which all other categories are built, providing essential insights into how knowledge is structured and transmitted in educational settings.

The second category, *"EFL learners' skills and abilities"*, covers the fundamental linguistic and cognitive skills that learners develop in the process of acquiring English as a foreign language. It includes terms related to receptive and productive skills, cognitive and metacognitive abilities, assessment-related skills. The subcategories reflect how learners process, internalize, and apply linguistic knowledge in varied contexts; analyze and evaluate language input, overcome difficulties, identifying and self-correcting mistakes; monitor, manage and assess their own language progress.

The thematic category *"English language proficiency levels and competencies"* organizes terminology related to language proficiency frameworks, including internationally recognized scales (e.g., CEFR, ACTFL). It covers key competencies such as grammatical, lexical, sociolinguistic, etc., providing a structured approach to assessing and describing learners' language abilities. This category follows "EFL learners' skills and abilities" because proficiency levels represent the measurable outcomes of skill development.

"EFL teaching and teaching methods" logically comes after, as it addresses the pedagogical approaches and instructional techniques and strategies that facilitate the development of learners' competencies. It incorporates key pedagogical frameworks such as communicative language teaching (CLT), task-based learning (TBL), content-based instruction (CBI), unplugged teaching, content and language integrated learning (CLIL), etc.; as well as teaching techniques and strategies (scaffolding, code-switching, multimodal teaching, differentiated instruction, etc.). The terminology within this cate-

gory reflects the process from understanding how learners acquire language to how educators organize and optimize this process.

As modern education increasingly integrates digital resources, the next category, *"Technology in (foreign) language teaching"* describes the role of technological advancements in language education. This section provides terms regarding digital tools, online platforms, artificial intelligence applications, and multimedia resources used to enhance EFL instruction. It encompasses blended learning models, gamification, and virtual learning environments. Overall, this thematic thesaurus category aims at assisting to stay updated with modern trends in foreign language teaching.

"English language learning strategies" builds upon the foundational understanding of learning and educational processes by specifying the approaches and techniques employed by learners to acquire English as a foreign language. This category includes cognitive, metacognitive, socio-affective, memory and compensation strategies that aid learners in processing, organizing, and internalizing linguistic material effectively. Terms within this category specify strategic behaviors such as self-regulated learning, active learning, reflective learning, memory-enhancing techniques – all of which contribute to optimizing language acquisition.

The four subcategories: (a) *Reading and text comprehension strategies*, (b) *Writing and writing strategies*, (c) *Listening and listening strategies*, (d) *Speaking and speaking strategies* overlay terminology of specific skill-related strategies. These subcategories logically follow general learning strategies. They provide a detailed explanation of skill-specific learning mechanisms highlighting such strategies as skimming and scanning for reading, brainstorming and drafting for writing, active listening and note-taking for listening, and fluency-enhancing techniques for speaking. Thus, subcategories provide a structured overview of how learners refine their language abilities in a targeted manner.

"Interaction and communication" extends beyond individual skills to focus on the dynamics of language use in social and academic contexts. This thematic thesaurus category comprises terminology in discourse management, turn-taking mechanisms, conversational strategies, interpersonal dynamics, pragmatic awareness and speech acts in EFL context, EFL classroom interactions, and intercultural communication.

"Discourse and communicative practices" further refines this focus by analyzing a foreign language use within specific discourse genres and communicative settings. This category is instrumental in understanding how language is adapted to different communicative purposes and sociocultural contexts. The core of this thematic category is terminology commonly utilized to describe communicative EFL teaching practices, EFL classroom discourse, EFL teachers' discourse (structure, strategies, markers, etc.) and their analysis. This follows *"Interaction and communication"* as discourse structures shape effective communication in different contexts.

Thematic category *"EFL classroom management"* aims at highlighting key aspects of organizing and regulating classroom interactions, including lesson planning, student engagement techniques, and discipline strategies. It also encompasses terms related to differentiated instruction and inclusive education. Placed here, it connects communicative aspects with the practical organization of the EFL learning environment.

"Feedback and assessment" is a category that supports both teaching and learning by outlining methods for evaluating student performance and providing constructive feedback. It comprises terminology denominating various procedures and assessment techniques for measuring students' proficiency, i.e. conceptual, factual, and procedural knowledge at different levels of cognitive processes along with feedback practices conducted by the EFL teachers, all of which contribute to learners' continuous improvement and motivation. This follows "EFL classroom management" category, as assessment is an integral part of instructional effectiveness and learner progress monitoring.

The final two categories, *"Data and data collection methods"* and *"Research and analysis,"* are essential for the empirical foundation of language education. These categories contain terms frequently used in scientific works to organize "research methodology", "results and discussion", and "conclusion" sections. They provide a methodological framework for conducting research in EFL teaching and contribute to evidence-based educational practices.

Picture 1 illustrates the thesaurus structure and the content of one term entry.

Each thesaurus entry reflects the relationships between terms, assisting researchers in overcoming the difficulties of using EFL teaching terms. Narrower terms (NT) and synonyms (UF) facilitate semantic clarity, reducing the risk of terminological misinterpretation. Contextual usage examples (CU) illustrate how each term is employed in English academic writing providing practical guidance for non-native English speakers.

Ukrainian equivalents of the English terms assist in eliminating lexical interference. The terms "reflective"/"reflexive" can illustrate this statement as non-native researchers may experience difficulties in differentiating their meanings and therefore in their appropriate use. In terms of education "reflective" is defined as "able to apply logical thinking to analyze a situation and/or ourselves in order to achieve an end result" [20, p. 66], meanwhile "reflexive" is interpreted as "involving interactive introspection of one's life and social experience; moving from certainty to doubt, to new possibilities" [20, p. 66]. As data analysis demonstrates, "reflective" consistently collocates with "assessment", "learning", "teaching", and "capacity":

"Reflective assessment is a formative process through which students can experience assessment as a part of learning, rather than as a separate evaluative process" [21, p. 174].

"Reflexive" is regularly combined with "practice", "approach", and "methodology":

"Analyzing trends of reflexive practice in teacher education we were able to see how this practice has developed over time" [22, p. 619].

Thus, the definitions along with collocations allow to select an appropriate English term for the Ukrainian word combinations, for example, "рефлексивна методологія" – "reflexive methodology", "рефлексивне навчання" – "reflective learning", etc.

Overall, hierarchical, structured order ensures that the thesaurus progresses from broad educational concepts to specific research methodologies, reflecting a logical, systematic approach to terminology classification in the field of EFL teaching methodology. Therefore, it aids in the systematic unified application of particular terms.

Conclusion. The research outlines a terminological thesaurus of EFL teaching methodology, designed to assist non-native (Ukrainian) scientific and professional communities: researchers, post-graduate students, EFL pre-service and in-service teachers in providing clarity, coherence, and precision in the English scientific discourse. The suggested hierarchical, logic-based framework contributes to terminology standardization, minimizing lexical interference and promoting effective international scientific communication.

Category "Learning and educational processes"

Subcategory "learning processes"

- **learning theory**

Definition:	Ukrainian equivalents
A model or a framework that explains how the cognitive system works and shows the basic components involved in human cognition.	теорія навчання

CU (context use): *Learning theory emphasizes development as a function of the external environment through a process of conditioning.*

NT (narrower terms):

✓ **Associative learning**   асоціативне навчання

Definition:

a type of learning that occurs when an element is taught through association with another separate, pre-occurring element.

CU: *O'Reilly and Norman (2002) have examined associative learning from the perspective of human brain memory information processing, indicating that the learning process and corresponding visual and auditory stimuli occur in parallel.*

✓ **Cognitivism**   когнітивізм

Definition:

posits learning as an active mental process involving the acquisition and organization of knowledge, emphasizing the role of cognitive processes such as memory, problem-solving, and information processing.

UF (used for): *cognitive learning*	когнітивне навчання
cognitive learning theory	теорія когнітивного навчання

CU: *Cognitivism is advantageous when there is a need to process and retrieve information and apply new knowledge.*

✓ **Collaborative learning**   спільне (колаборативне) навчання

Definition:

group (or groups) of individuals learn from each other by working together to solve a problem, complete a task, create a product, or share one's thinking.

CU: *"Collaborative learning" is an umbrella term for a variety of educational approaches involving a joint intellectual effort by students, or students and teachers together.*

✓ **Constructivist Learning**   конструктивістське навчання

Definition:

based on the idea that each learner develops their understanding through experience and reflection.

UF: *constructivist learning theory*	теорія конструктивістського навчання

CU: *In addition, this conceptual design is made as an endeavor to discuss how the theories of constructivist learning may impact the students' knowledge quality enhancement.*

Pic. 1. Thesaurus structure

However, the research presents a preliminary core content and structure design of the thesaurus that requires further devising and wider coverage of teaching EFL methodology terms to provide engaged searchers with full and comprehensive guidance on selecting the most appropriate terminological units and semantic information retrieval for the specific contexts which is a clear study perspective.

REFERENCES:

1. Маслова Т. Б. Типологія наукового дискурсу в сучасній мовознавчій парадигмі. *Англістика та америка-ністика*. 2013. № 10. С. 39–43. URL: https://core.ac.uk/download/pdf/234437927.pdf.

2. Nichols M. D., Petzold A. M. A crisis of authority in scientific discourse. *Cultural Studies of Science Education*. 2021. Vol. 16. P. 643–650. DOI: https://doi.org/10.1007/s11422-020-09989-1.

3. Holubova H. V. Variability of the concept "Scientific discourse": modern dimension. *Закарпатські філологічні студії*. 2022. Вип. 25 (1). С. 89–92. DOI: https://doi.org/10.32782/tps2663-4880/2022.25.1.17.

4. Banks D., Martino E. Introduction: Linguistic and discourse issues in contemporary scientific communication. Aspects of communicating science to a variety of audiences. *Journal of Pragmatics*. 2019. Т. 139. С. 185–189. DOI: https://doi.org/10.1016/j.pragma.2018.10.011.

5. Yore L. D., Hand B. M., Florence M. K. Scientists' views of science, models of writing, and science writing practices. *Journal of Research in Science Teaching*. 2004. Vol. 41. No. 4. P. 338–369. DOI: 10.1002/tea.20008.

6. Pahta P., Taavitseinen I. *Scientific discourse* / In: Historical Pragmatics. 2010. P. 549–586. DOI: https://doi.org/10.1515/9783110214284.

7. Orellana A. O. Popularising scientific discourse. *Quaderns de Filologia. Estudis Lingüístics.* 2012. Vol. 17. P. 83–96. URL: https://ojs3.uv.es/index.php/qfilologia/article/download/3379/3088.

8. Englander K. *The Rise of English as the Language of Science* / In: Writing and Publishing Science Research Papers in English. 2014. P. 3–4. DOI: 10.1007/978-94-007-7714-9_1.

9. Усик Л. М., Приймак Л. Б., Сілютіна І. О. Роль англійської лінгвістичної термінології у сучасному науковому дискурсі. *Міжнародний філологічний часопис.* 2022. Т. 13. № 1. С. 14–23. DOI: https://doi.org/10.31548/philolog2022.01.014.

10. Fryer D. L. Review of Perez-Llantada "Scientific Discourse and the Rhetoric of Globalization". *ResearchGate.* 2013. URL: https://www.researchgate.net/publication/235898755.

11. Marshall D., Case J. M. Discourse in the learning of physics: the design of an introductory physics curriculum. *African Journal of Research in MST Education*. 2010. Vol. 14. No. 2. P. 15–27. DOI: 10.1080/10288457.2010.10740679.

12. Norberg C., Johansson J. Accounting terminology and translation – a linguistic challenge. *LSP Journal*. 2013. Vol. 4, No. 1. P. 30–48. URL: http://lsp.cbs.dk.

13. Naveiro P. M. Problems in the translation and conceptual adaptation of linguistic terms. *RODIN* – Universidad de Cádiz institutional repository. 2018. URL: http://hdl.handle.net/10498/20694.

14. Baghirova S. M. The Kinds of the Linguistic Interference. *Theory and Practice in Language Studies.* 2021. Vol. 11. No. 2. P. 176–181. DOI: http://dx.doi.org/10.17507/tpls.1102.09.

15. Кульчицька Н. О. Особливості явища інтерференції в процесі навчання англійської мови як другої іноземної у філологічному ВНЗ. *Збірник наукових праць Бердянського державного педагогічного університету (педагогічні науки).* 2010. № 3. С. 241–245.

16. Єфіменко Т. М. Дослідження мовної інтерференції у соціальному, психологічному й лінгвістичному планах. *Science and Education a New Dimension. Philology.* 2018. Т. VI (43). № 150. С. 66–69. DOI: https://doi.org/10.31174/SEND-PH2018-150VI43-17.

17. Ryan C. Thesaurus construction guidelines: an introduction to thesauri and guidelines on their construction. Royal Irish Academy and National Library of Ireland, 2014. 107 p. DOI: 10.3318/DRI.2014.1.

18. Bang S. L., Yang J. D., Yang H. J. Hierarchical document categorization with k-NN and concept-based thesauri. *Information Processing and Management.* 2006. Vol. 42, No. 2. P. 387–406. DOI: https://doi.org/10.1016/j.ipm.2005.04.003.

19. Goeser S. A Logic-based Approach to Thesaurus Modelling. *International Conference on Intelligent Multimedia Information Retrieval Systems and Management (RIAO)*: Conference Proceedings. 1994. P. 185–196. DOI: https://doi/10.5555/2856823.2856841.

20. Cunliffe A. L. Reflexivity in teaching and researching organizational studies. *Revista de Administração de Empresas*. 2020. Vol. 60. No. 1. P. 64–69. DOI: 10.1590/S0034-759020200108.

21. Bond J., Denton D. W., Ellis A. Impact of Reflective Assessment on Student Learning: Best-Evidence Synthesis from Ten Quantitative Studies. *International Dialogues on Education Journal.* 2015. Т. 2. № 2. DOI: https://doi.org/10.53308/ide.v2i2.198.

22. Stîngu M. M. Reflexive practice in teacher education: facts and trends. *Procedia Social and Behavioral Sciences.* 2012. Vol. 33. P. 617–621. DOI: 10.1016/j.sbspro.2012.01.195.