ПЕДАГОГИКА

(шифр научной специальности: 5.8.7)

ИСПОЛЬЗОВАНИЕ МЕТОДА ВЗАИМООБУЧЕНИЯ ДЛЯ ПОВЫШЕНИЯ ЭФФЕКТИВНОСТИ РАБОТЫ С СИНОНИМАМИ В ПРОЦЕССЕ ИНОЯЗЫЧНОЙ ПОДГОТОВКИ ПЕРЕВОДЧИКОВ

© *Яна Борисовна Емельянова*
Нижегородский государственный лингвистический университет имени Н.А. Добролюбова,
г. Нижний Новгород, Россия
yemelyanova2007@yandex.ru

Аннотация. Рассматривается проблема формирования навыков и стратегий сбора и анализа информации о иноязычных синонимах в процессе иноязычной подготовки переводчиков. Предпринята попытка использования метода взаимообучения для создания учебного контекста, способствующего формированию и практике соответствующих навыков и стратегий. Проведенное исследование дает теоретическое обоснование целесообразности использования метода взаимообучения для формирования профессионально значимых навыков работы с синонимами в процессе иноязычной подготовки переводчиков, а также предлагает практическую технологию организации такой работы.
Ключевые слова: перевод, иноязычная подготовка переводчиков, синонимы, взаимообучение.

PEDAGOGY

(specialty: 5.8.7)

Using peer teaching to improve the effectiveness of teaching synonyms in translation-oriented foreign-language instruction

© *Yana B. Emelyanova*
Linguistics university of Nizhny Novgorod, Nizhny Novgorod, Russian Federation
yemelyanova2007@yandex.ru

Abstract. Knowledge of synonyms in a foreign language (L2) and the ability to collect information about them form an essential part of the translator's professional competence. It has been observed that the approach to working with L2 synonyms used by translation students seems to have a number of shortcomings and hinders the successful acquisition of these lexical items. We developed a learning procedure based on peer teaching which was used to teach L2 synonyms to 3rd- and 4th-year full-time translation students. The findings suggest that peer teaching offers a number of significant benefits in terms of the acquisition and practice of the skills needed to work with synonyms, thereby contributing to better knowledge retention and learners' increased confidence in the ability to use L2 synonyms correctly. The findings also revealed some aspects which require further consideration. Overall, the study provides a theoretical basis for the use of peer teaching to improve the effectiveness of teaching L2 synonyms in translation-oriented foreign language instruction and offers a useful tool for achieving the above-mentioned goal.
Key words: translation, translation-oriented foreign language teaching, synonyms, peer teaching.

Introduction

Synonyms are words which share a core meaning but differ in many aspects, including connotations, collocations, degree of formality, grammatical patterns and style. These differences account for the individual patterns of behavior of L2 synonyms, knowledge of which is essential to using L2 synonyms correctly.

Extensive research has confirmed that L2 synonyms account for approximately 40% of all lexical errors [20]. This situation would be unacceptable in translation, as the translator uses their knowledge of L2 to ensure effective cross-lingual and cross-cultural communication. Inability to use L2 synonyms correctly can significantly affect the quality of both direct and inverse translation.

To acquire a comprehensive knowledge of L2 synonyms, one needs to obtain different types of information which requires the ability to (a) use various reference materials and (b) collect, analyse and synthesise information. However, it has been our observation that translation students often fail to collect comprehensive information about L2 synonyms which seems to be in line with recent research which has produced similar findings [24]. This suggests that translation students fail to acquire and/or practise some important and professionally significant skills. One way of dealing with this problem is to create a learning situation in which learners will have to develop and apply these skills. We believe that this can be achieved through peer teaching.

Peer teaching is a teaching strategy in which 'peers instruct each other in a purpose-driven, meaningful interaction' [3, p. 31]. A considerable amount of research has clearly demonstrated the benefits of peer teaching and confirmed its effectiveness (a) in different learning contexts [4; 11; 19] and (b) for different subject areas and levels of education [2; 14; 15; 16; 18; 22; 25; 26]. The aim of this paper is to develop, test and evaluate a learning procedure for using peer teaching to ensure the development and practice of the skills and strategies needed to work with L2 synonyms which, in turn, can contribute to the successful acquisition of these lexical items.

The paper provides a theoretical basis for the use of peer teaching to improve the effectiveness of teaching L2 synonyms in translation-oriented foreign language instruction. The practical contribution of the study consists in developing a learning procedure which can be a useful tool for achieving the above-mentioned goal.

Theoretical foundations

Synonyms

Synonyms are words which have the same denotational meaning but differ in many aspects, including connotations, collocations, degree of formality, grammatical patterns and style. They form clusters or sets which have their internal structure determined by the nuances of meaning of each synonym. In addition, differences can be observed between synonymic sets in a foreign language (L2) and learners' native language (L1).

Research has shown that the acquisition and use of L2 synonyms present a challenge for learners. The most common problems faced by learners include (a) inability to choose the right synonym for a given context, (b) inability to use collocations correctly, (c) false beliefs that synonyms are interchangeable and (d) negative transfer from L1.

The above-mentioned problems stem, among other things, from the fact that learners often fail to develop 'word consciousness' with regard to synonyms. It involves the 'awareness of the communicative power of words' and the ability to use them correctly [6]. In the case of synonyms, word consciousness should include knowledge of (a) the L2 concept described by a synonym, (b) its typical collocations and contexts of use, (c) the differences between L2 synonyms and the way they relate to each other and (d) the differences between concepts expressed by synonyms in L2 and their equivalents in L1.

Learners may fail to develop word consciousness with regard to L2 synonyms for a number of reasons. One of them is the shortcomings of learners' approach to working with L2 synonyms which include insufficient effort and/or a lack of the necessary skills and strategies. These shortcomings may stem from the fact that to grasp all the nuances of meaning of L2 synonyms one needs to collect, analyse and synthesise different types of information which requires time, effort and skills.

First, it is important to analyse dictionary definitions. However, it is advisable to study and compare several definitions as they are not without limitations. They may (a) fail to reflect all the nuances of meaning and subtle distinctions between synonyms [5], (b) provide vague and abstract definitions characterised by 'certain circularity' [21], (c) provide insufficient contextual and collocational information [7].

Second, dictionary-based knowledge should be complemented by 'contextual knowledge' [13] and 'collocational knowledge' [12] through observation of how synonyms are used in different contexts which is seen by many researchers as essential to mastering L2 synonyms.

It has been our observation that when students are given a task to comment on the differences between L2 synonyms from a particular synonymic set, their preparation is often limited to writing down a dictionary definition and possibly an example sentence. However, if asked to explain how the synonyms relate to each other and describe their typical contexts of use, many students are unable to give a clear answer. They expect these questions to be answered during class discussion or by the teacher.

Such an attitude is unacceptable for translation students for two reasons. On the one hand, the ability to independently collect and analyse information about L2 grammar, vocabulary etc. is an integral part of the translator's professional competence. On the other hand, lack of a fine-grained knowledge of the meanings of L2 synonyms and inability to use them correctly can affect the quality of translation. Thus, we believe that it is important to equip translation students with the necessary strategies and skills and provide them with an opportunity to practise them.

Peer teaching

Peer teaching is a teaching strategy in which 'peers instruct each other in a purpose-driven, meaningful interaction' [3, p. 31]. It involves learning the material in a collaborative way where students, who are experts in a subject area, teach their peers under the supervision of the teacher.

Peer teaching is a flexible teaching method and can be implemented in different ways: (a) in pairs or groups [19]; (b) student teachers and student learners can be of the same age or of different ages [11]; (c) learners can be equally involved in the process, or one of them may supervise it [4].

Extensive research has shown that peer teaching has been successfully used in various subject areas and at different levels of education, including mathematics, medicine, food science, foreign languages, physical education and theology as well as secondary and higher education [2; 14; 15; 16; 18; 22; 25; 26].

Overall, there is a consensus among researchers and practitioners that peer teaching is a highly effective teaching strategy. More specifically, it:

1. increases academic achievement [18], improves content mastery and knowledge retention [26], gives a better understanding of the subject and complex concepts [22];
2. develops motivation [14; 15] and a sense of responsibility for one's own learning [17; 25], gives learners a sense of purpose with regard to their learning [9];
3. encourages independent learning [3] and thinking [25], develops research skills [10];
4. encourages active and collaborative learning, actively engages students in the learning process [18; 25];
5. contributes to self-development [3; 26], develops the skills of self-reflection [23] and self-evaluation [1];
6. develops presentation skills and the ability to express ideas [9; 16; 22];
7. improves communication, interpersonal [25], teamwork [3] and organizational [1; 9] skills;
8. builds self-confidence and self-esteem [14; 16; 17];
9. improves classroom atmosphere and fosters a positive attitude to learning [3; 23].

We believe that peer teaching can be especially useful for helping learners develop the right approach to working with L2 synonyms. First, having to teach something to others reinforces the teacher's own learning, sharpens their skills, gives a better insight into the subject, consolidates knowledge, encourages them to conduct more research and fill the gaps in their own knowledge. Moreover, in the case of peer teaching, failure to present and explain the material clearly and concisely will result in immediate feedback from the class in the form of questions, requests for clarification, and possibly negative comments.

Second, thorough preparation will contribute to better knowledge retention through different cognitive operations involved in (a) collecting, analysing and synthesising information from different sources, (b) planning the teaching session and (c) preparing handouts for the class.

Third, preparation will give learners an opportunity to (a) acquire and practise the skills and strategies needed to work with different reference materials and (b) practise the sequence of steps to collect information about L2 synonyms. Another benefit lies in the fact that the peer teaching context can foster more effective communication and cooperation between teacher students and peer students. Due to cognitive and social congruence, i.e., similarity in intellectual development and social standing and age [11], peer teachers are better placed to (a) understand the potential difficulties of their peers, (b) find ways of explaining complex concepts using language that is clear and easy to understand. Similarly, peer students are more likely to (a) interact freely with peer teachers and ask clarifying questions and (b) actively participate in discussions.

Methodology

Participants

The participants were 3rd- and 4th-year students enrolled on a 5-year full-time translation training programme with English as their major foreign language. The groups included 17, 12 and 13 students (42 overall).

Research design

Peer teaching sessions were conducted during one semester. The students prepared and conducted teaching sessions in small groups (3–4 students). Each group conducted two peer teaching sessions, each lasting about 10–15 minutes. L2 synonymic sets were assigned to the groups by the teacher. To prepare a teaching session, the students had to:

1. analyse several dictionary definitions of the L2 synonyms;
2. provide L1 equivalents for the L2 synonyms;
3. find example sentences and analyse the patterns of usage of the L2 synonyms;
4. compare, analyse and synthesise the information from steps 1, 2 and 3;
5. prepare a presentation for the teaching session;
6. prepare handouts for the peer students.

It was the responsibility of the students to divide the tasks equally among group members. However, each student was supposed to take part in the presentation during the teaching session. After the presentation, the class, including the peer teachers, had 15–20 minutes to do several (2–3) practice exercises. The exercises were provided by the teacher and contained about 5–7 sentences each. The students could choose to do the exercises individually or in pairs. Their answers were then checked and discussed in class.

The task of the teacher was twofold: (a) to give guidance to peer teachers and (b) to minimise the possible disadvantages of peer teaching which include: (a) insufficient or inadequate knowledge of the content to be taught, (b) careless attitude to the task on the part of peer teachers and/or peer students, (c) students' reluctance to teach or be taught by their peers, (d) adversarial relationships among students.

At the beginning of the peer teaching project, the teacher explained its aims and objectives to both peer teachers and peer students to ensure their meaningful participation. At the preparation stage, the teacher's main role was to provide direction and support. The teacher had to (a) clearly define the objectives and expected outcomes of the teaching session, (b) describe the content to be taught, (c) give step-by-step instructions on how to prepare the teaching session, (d) recommend useful reference materials and other resources and instruct the students how to use them correctly and effectively, (e) provide ongoing support to the students.

During the peer teaching session, the teacher was supposed to (a) monitor the class, (b) fill knowledge gaps when needed and (c) keep an eye out for inappropriate behavior of the peer teachers and peer students.

Data collection and analysis

This study uses a quantitative approach. The data were collected through a questionnaire that consisted of 8 closed-ended questions. The questionnaire aimed to find out the students' opinions

about the usefulness of the peer teaching experience in terms of (a) the development and practice of the skills and strategies needed to collect, analyse and synthesise information about L2 synonyms, (b) the acquisition and retention of information about L2 synonyms and (c) the ease of interaction between peer teachers and peer students during peer teaching sessions. A 1–5 numerical rating scale was used, with 5 being the positive end and 1 being the negative end. For each response option 1–5, the percentage of students who chose this option was calculated.

Table 1

The questionnaire

Development and practice of the skills and strategies needed to collect analyse and synthesise information about L2 synonyms
1. Did you acquire any useful skills in and strategies for collecting information about L2 synonyms?
2. Do you think these skills and strategies can be used to learn L2 synonyms independently?
Acquisition and retention of information about L2 synonyms
3. Did the preparation for the teaching session help you to gain a clear understanding of the differences and similarities between the synonyms?
4. Did the experience of being taught by your peers help you to gain a clear understanding of the differences and similarities between the synonyms?
5. Do you think you can correctly use the synonyms which you taught to the class?
6. Do you think you can correctly use the synonyms which you were taught by your peers?
Ease of interaction between peer teachers and peer students during peer teaching sessions
7. Did you find it easier to understand the explanations of the peer teachers than those given by your regular teacher?
8. Did you find it easier to discuss points of confusion with the peer teachers than with your regular teacher?

Results and discussion

Questions 1–2 concerned the usefulness of the peer teaching experience for the development and practice of the skills needed to collect, analyse and synthesise information about L2 synonyms. The results are presented in Table 2.

Table 2

Development and practice of the skills and strategies needed to collect, analyse and synthesise information about L2 synonyms.

1	2	3	4	5
1. Did you acquire any useful skills in and strategies for collecting information about L2 synonyms?				
2,3%	4,8%	19%	40,5%	33,3%
2. Do you think these skills and strategies can be used to learn L2 synonyms independently?				
0	7,1%	14,3%	35,7%	42,9%

The data demonstrate that most participants positively evaluate their teaching experience in terms of the acquisition of useful skills and strategies (Q1). A large majority of the participants chose '3', '4' and '5' as response options, 19%, 40,5% and 33,3% respectively. However, it is important to note that (a) the largest proportion of the participants (40,5%) chose response '4' and not '5' and (b) a certain number of the participants (2,3% and 4,8%) chose responses '1' and '2'. This may suggest that the strategies that the students were supposed to employ were not quite new to them. However, our earlier observations indicate that not many students use them on a regular basis. Still, an overwhelming majority of the participants admitted their usefulness for working with synonyms independently (Q2).

Questions 3–6 addressed the usefulness of the peer teaching experience for the acquisition and retention of information about L2 synonyms. Table 3 summarises the results for these questions.

Table 3

Acquisition and retention of information about L2 synonyms

1	2	3	4	5
3. Did the preparation for the teaching session help you to gain a clear understanding of the differences and similarities between the synonyms?				
0	0	9,5%	23,8%	66,7%
4. Did the experience of being taught by your peers help you to gain a clear understanding of the differences and similarities between the synonyms?				
0	7%	16,6%	28,7%	47,7%
5. Do you think you can correctly use the synonyms which you taught to the class?				
0	0	14,3%	28,6%	57,1%
6. Do you think you can correctly use the synonyms which you were taught by your peers?				
0	5%	24%	36%	35,00%

As can be seen from the table above, the students seem to be more confident in their knowledge of and ability to use the synonyms which they taught (Q3, 5) than those which they were taught by their peers (Q4, 6). The difference is not dramatic but still deserves attention.

A substantial majority of the students chose '4' and '5' as their response options for Questions 3 and 5, 66,7% and 23,8% vs 57,1% and 28,6% respectively. These findings suggest that the students acquired a good knowledge of the L2 synonyms while they were preparing for the teaching sessions. However, for Question 5, there is a slight shift towards '3' as a response option which was chosen by 14,3% of the students compared to 9,5% for Question 3. This might indicate that despite having a fairly good understanding of the nuances of meaning of the L2 synonyms, the students were not sure that they could use them correctly in all contexts. It is also possible that the students made this conclusion after doing practice exercises.

The figures for Questions 4 and 6, which focused on the experience of being taught by peers, were slightly lower than for Questions 3 and 5. A larger proportion of the students chose '3' as a response option for both questions, 16,6% and 24% respectively. Response '2' was chosen by 7% (Q4) and 5% (Q6) of the participants, while for Questions 3 and 5, it was chosen by 0% of the participants. These findings can be accounted for by several factors. On the one hand, it may have been the case that the peer students had less trust in their peers than in their regular teacher which translated into lower levels of confidence in the knowledge which they acquired during the peer teaching sessions. On the other hand, the fact that some peer teachers (a) did not put enough effort into preparing for the task and (b) lacked the ability to clearly express their ideas to the class, could have also affected the results.

Finally, Questions 7–8 aimed to find out whether the peer students felt more comfortable when interacting with the peer teachers than with their regular teacher (Table 4).

Table 4

Ease of interaction between peer teachers and peer students during peer teaching sessions

1	2	3	4	5
7. Did you find it easier to understand the explanations of the peer teachers than those given by your regular teacher?				
2,4%	4,8%	31%	33,3%	28,5%
8. Did you find it easier to discuss points of confusion with the peer teachers than with your regular teacher?				
0	4,8%	28,6%	28,6%	38%

The responses to Questions 7 and 8 demonstrate that, overall, the participants had no difficulty following the peer teachers' explanations and discussing points of confusion with them. However, a closer look at the data for Question 7 reveals that a certain percentage of the participants (2,4% and 4,8%) seem to prefer the explanations given by their regular teacher as they chose responses '1' and '2'. In addition, fewer participants chose '5' as a response option (28,5%) compared to those who chose '3' and '4', 31% and 33,3% respectively. These figures give somewhat mixed results which can partly be explained by the lack of effort on the part of some peer teachers in terms of preparation for and delivery of the teaching session.

As regards Question 8, the participants seem to be in agreement about the ease of interaction with their peers when asking clarifying questions and discussing points of confusion. The majority of the participants chose response options ranging between '3' and '5', with the percentage rate for '5' being the highest (38%).

Overall, the study yielded some interesting findings, and the issues that emerge from these findings deserve careful consideration. The main conclusions will be presented in the final section of the paper.

Conclusion

The present paper was devoted to the problem of dealing with the shortcoming of the translation students' approach to working with synonyms which can (a) hinder the development and practice of the relevant skills and strategies and (b) affect their knowledge of L2 synonyms. The aim of the paper was to develop, test and evaluate a learning procedure for using peer teaching to address the above-mentioned problem.

Overall, it can be concluded that the results seem to confirm that peer teaching can be successfully used to ensure the acquisition and practice of the skills and strategies needed to work with L2 synonyms. The obvious benefits of this activity include (a) collection of comprehensive information about L2 synonyms, (b) the acquisition and practice of strategies and skills needed to collect, analyse and synthesise information about L2 synonyms, (c) better retention of this information, (d) increased confidence in the ability to use L2 synonyms correctly and (e) a more relaxed classroom atmosphere which invites discussion and interaction among learners.

However, the findings have also revealed a number of aspects which require further consideration. Firstly, the outcome of a peer teaching session to a large extent depends on the input and abilities of peer teachers. A perfunctory attitude, lack of adequate preparation as well as difficulty expressing ideas clearly and coherently can have a negative effect on the outcome of the activity. Thus, the second implication of the study is that peer teachers may benefit from this activity more than peer students. Thirdly, there seems to be a psychological factor at play. It lies in the fact that learners tend to have more trust in the information provided by the teacher, who is seen as an authority figure, than in the competence of their peers. It is apparent that these issues need to be taken into account when designing and preparing peer teaching activities.

We are aware that our research may have some limitations. First, no qualitative data were obtained through interviews or open-ended questions in the questionnaire. However, these data could have provided some valuable feedback from the participants about the peer teaching experience, the difficulties they faced and the benefits they received. Also, it was beyond the scope of this research to find out whether the peer teaching experience has contributed to the improvement of the participants' teamwork, organisational and communication skills as well as the skill of self-reflection.

Further studies could focus on (a) exploring ways of dealing with the problem areas identified earlier, (b) examining the possibility of using peer teaching in other areas of teaching foreign languages to translation students.

References

1. *Ali N.A., Anwer M., Abbas J.* Impact of peer tutoring on learning of students // Journal for Studies in Management and Planning. 2015. Vol. 1(2). P. 61–66.

2. *Al-Quadi H.M., Al-Oun I.S., Al-Barri Q.N.* The effect of using the strategy of peer teaching on developing the active learning skills of the basic sixth grade students in the Arabic language in Jordan // Journal of Education and Practice. 2013. Vol. 4(19). P. 71–76.

3. *Bradford-Watts K.* Students teaching students? Peer teaching in the EFL classroom in Japan // The Language Teacher. 2011. Vol. 35(5). P. 31–35.

4. *Boud D., Alison L.* (2007). 'Peer learning' as pedagogic discourse for research education // Studies in Higher Education. 2007. Vol. 30(5). P. 501–516.

5. *Edmonds P., Hirst G.* Near-Synonymy and Lexical Choice // Computational Linguistics. 2002. Vol. 28(2). P. 105–144.

6. *Graves M., August D., Mancilla-Martinez J.* Teaching vocabulary to English language learners (Language and literacy series). New York: Teachers College Press, 2013. 176 p.

7. *Jafarpour A., Koosha M.* Data- driven learning and teaching collocation of prepositions: the case study of Iranian EFL adult learners // Asian EFL Journal. 2006. Vol. 8(4). P. 192–209.

8. *Lee Ch-Y.* Effects of Collocation Information on Learning Lexical Semantics for Near Synonym Distinction // Computational Linguistics and Chinese Language Processing. 2009. Vol. 14(2). P. 205–220.

9. *Lim L.L.* A Case Study on Peer-Teaching // Open Journal of Social Sciences. 2014. No. 2. P. 35–40.

10. *Liu A.C., Liu M., Dannaway J., Schoo A*. Are Australian medical students being taught to teach? // The clinical Teacher. 2017. No. 14. P. 330–335.

11. *Lockspeiser T.M., O'Sullivan P., Teherani A., Muller J.* Understanding the experience of being taught by peers: The value of social and cognitive congruence // Advances in Health Sciences Education. 2008. Vol. 13(3). P. 361–372.

12. *McCarthy M., O'Dell F.* English collocations in use. Cambridge University Press, 2005. 190 p.

13. *Nichols W.D., Rupley W.* Matching Instructional Design with Vocabulary Instruction // Reading Horizons. 2004. Vol. 45(1). P 55–63.

14. *Oloo E.A., Mutsotso S.N., Masibo E.N.* Effect of peer teaching among students on their performance in mathematics // International Journal of scientific research and innovative technology. 2016. Vol. 3(12). P. 11–24.

15. *Raheem A., Y., Yusuf H.T., Odutayo A.O.* Effect of peer tutoring on student' academic performance in economics in llorin south, Nigeria // Journal of Peer-learning. 2017. Vol. 10(1). P. 95–102.

16. *Rahman N-T., Meyer C., Thakral D., Cai W.L., Chen A.T., Obaid R., Garcia-Milian Peer R.* Teaching as Bioinformatics Training Strategy: Incentives, Challenges, and Benefits // Medical Reference Services Quarterly. 2022. Vol. 41(1). P. 13–25.

17. *Rawlinson C., Willimott M.* Social justice, learning centeredness and first year experience peer mentoring program: How might they connect? // Journal of Peer-learning. 2016. Vol. 9(1). P. 41–48.

18. *Rusli M., Degeng N.S., Setyosari P., Sulton.* Peer teaching: students teaching students to increase academic performance // Teaching Teology and Religion. 2021. No. 24. P. 17–27.

19. *Secomb J.* A systematic review of peer teaching and learning in clinical education // Journal of Clinical Nursing. 2008. No. 17. P. 703–716.

20. *Shalaby N.A., Yahya N., El-Komi M.* Analysis of lexical errors in Saudi college students' compositions // Journal of the Saudi Association of Languages and Translation. 2009. Vol. 2(3). P. 65–93.

21. *Tognini-Bonelli E.* Corpus linguistics at work. Amsterdam: John Benjamins, 2001. 224 p.

22. *Vasay E.T.* The Effects of Peer Teaching in the Performance of Students in Mathematics // E-International Scientific Research Journal. 2010. No. 2. P. 161–171.

23. *Velez J.J., Cano J., Whittington M.S., Wolf K.J.* Cultivating Change Through Peer Teaching // Journal of Agricultural Education. 2011. Vol. 52(1). P. 40–49.

24. *Webb S.* The effects of synonymy on second-language vocabulary learning // Reading in a Foreign Language. 2007. Vol. 19(2). P. 120–136.

25. *Workman A., Vaughan F.* Peer-teaching and learning in art education // Art Education. 2017. Vol. 70(3). P. 22–28.

26. *Yang M.M., Golden B.P., Cameron K.A., Gard L., Bierman J.A., Evans D.B., Henschen B.L.* Learning through Teaching: Peer Teaching and Mentoring Experiences among Third-Year Medical Students // Teaching and Learning in Medicine. 2022. Vol. 34(4). P. 360–367.