doi: 10.18323/3034-2996-2024-2-19-26

Learning by teaching: an outside-the-classroom approach

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Received 06.05.2024 Accepted 18.06.2024

Abstract: The paper covers the issue of applying the learning by teaching method outside the classroom as an effective tool for the formation of academic (linguistic and transferrable) and life skills, positive personality traits and the popularisation of socially significant values among students of non-linguistic fields of study. The study is based on an experiment, the participants of which were 20 first-year students of Nevinnomyssk Technological Institute studying in the specialty "Chemical technology of inorganic substances". The experiment was guided by the author of the paper. During the experiment, which lasted two academic semesters (from September 2023 to December 2023), participants helped students (at the ages from 8 to 14 years) of a local boarding school with their homework. The purpose of the study was to identify academic and non-academic skills that can be acquired and improved through teaching practice. The results of the experiment were collected and processed using the narrative interview method (sharing experiences through answering a question) and showed the presence of both academic and transferrable skills. Thanks to the outside-the-classroom circumstances (living and learning conditions in a boarding school), participants were immersed in an environment of social-emotional learning, and noted the benefits of this experience both for future professional activities and for everyday life. Despite certain academic and non-academic difficulties that the participants and organisers encountered in the process of practical application of this method, it turned out to be productive, and the author recommends its use when learning and teaching other academic disciplines.

Keywords: learning by teaching; academic skills; transferrable skills; life skills; socially significant values; personality traits; outside-the-classroom environment.

For citation: Golodnaya V.N. Learning by teaching: an outside-the-classroom approach. *Evidence-based education studies*, 2024, no. 2, pp. 19-26. DOI: 10.18323/3034-2996-2024-2-19-26.

INTRODUCTION

Learning by teaching is an approach developed and introduced by Jean-Pol Martin, who taught French in German schools in the 1980s [1]. However, the link between teaching and learning was observed much earlier, which is proved by a number of famous people's quotations from different historical periods: "Teaching is learning" (Seneca); "He who teaches, learns" (Comenius); "Teaching means double learning" (Joubert); "One learns fastest and best when one teaches others" (Rosa Luxemburg); "An honest teacher must always remain an attentive student" (Maxim Gorky). Starting from the 1990s this method has been successfully applied at both academic and working environments [2]. Let us consider some definitions of the given term.

The basic idea of learning by teaching (also known as peer tutoring or peer teaching) is that learners take the role of the teacher for a certain time in class. This time period can be a whole lesson or only the time needed for a special activity. During this time period, the learners, who take the role of the teacher, may present a new subject to the other learners, lead discussions, help each other in solving learning tasks, and so on. Benefits: learners develop creativity and presentation skills, which are valuable at the modern workplace¹. Learning by teaching occurs when within a certain group,

students help each other in different subjects, contribute to teaching processes and support the solution of their problems. Benefits: students enhance their understanding; develop responsibility, communicative and leadership skills². In the field of pedagogy, learning by teaching is a method of teaching in which students are made to learn material, and prepare lessons to teach it to the other students. Benefits: acquisition of life skills along with the subject matter³.

According to the researchers, "learning to teach is better than learning by oneself" [3]. It was found out that students who learn for themselves were less successful than those who were asked to learn the material in order to later teach it to their peers [4]. The interesting thing is that the latter group did not actually teach what they had learnt, but were just expected to do it. Even better outcomes were received when students were asked to explain their new knowledge to their friends and classmates. It also turned out to be true with passive listeners (when students recorded their explanation on audio and video devices) [5]. Moreover, teaching something to an imaginary or real person is regarded as one of the most efficient memorisation techniques, especially for those who are to process a great amount of information to sit an important exam [6].

URL: https://www.teachmint.com/glossary/l/learning-by-teaching/.

¹ Learning by Teaching // Encyclopedia of the Sciences of Learning. New York: Springer, 2012. P. 1830–1832. URL: https://link.springer.com/referenceworkentry/10.1007/978-1-4419-1428-6 497.

² Tokmak A. Using Extrascholastic Learning Environments in Teaching History Topics to Students With Learning Difficulties // IGI Global. URL: https://www.igi-global.com/dictionary/peer-teaching/121019.

³ Learning by Teaching // Teachmint.

The most exciting and efficient results occur, however, when a would-be teacher collaborates with his or her students by answering questions, leading discussions, sharing experiences, providing new topics and adapted help. In this way, the process of gaining new knowledge (and education in general) shifts from being teacher-centered to becoming student-centered, making learners as responsible for their education as teachers are [7]. Besides, students become aware of other sources of learning apart from textbooks and teachers, such as their own experiences and other people.

The existing practices of learning by teaching are quite various and adaptable to different learning contexts and environments. The most common of them are the following. Learning by developing / creating educational materials (flashcards, crossword puzzles, video tutorials, etc.) [8]: in this way, students learn to choose appropriate information to be presented to the class, working as team with their teacher. Later on the materials can be altered, complemented, etc. and used to teach other groups or classes. Learning by substituting a real teacher: an individual, a pair or a group of students who have already learnt the material, or know it from their out-of-the classroom experience, present it to the rest of the class. It is a great way to assess the substitute's knowledge in the given area and to determine fields for improvement [9]. Learning by teaching peers: a stronger student helps his or her weaker mates to understand the materials or to analyse and correct the mistakes. In this approach, a tutor student deepens his or her understanding of the given topic by planning the tutorial and interacting with tutees. Weaker students get an opportunity to receive personalised assistance, and to perceive the topic from a different angle [10]. Learning by peer assessment and providing feedback: students check and assess each other's work (essays, reports, home assignments, presentations, etc.), according to the given rubric (it can be created by students themselves or with a teacher's help) and then provide constructive feedback justifying their decisions [11]. In this way, students can learn from each other's experiences and mistakes. This practice can also have a form of self-assessment, when students reflect on strong and weak points of their own work [12].

For our research we have adapted learning by substituting a real teacher practice to the peculiarities of our learning context (teaching in an outside context, rather than inside one's class or group). Despite the fact that a good level of English language knowledge is highly approved of and demanded in almost all professional areas, the majority of non-linguistic graduates fail to demonstrate it. The main obstacle to gaining a good language level for this category of learners, is, in our opinion, inability to do this in the classroom due to the lack of time (the more detailed explanation is presented below). However, students can become more frequently exposed to the language outside the classroom, as a part of their extracurriculum activities.

So, in our experiment, the participants (non-linguistic first-year university students) were supposed to teach outside their educational establishment. For a two-term period they were to help the local orphanage kids aged between 8 and 14 with their English language homework. It was organised as part of a volunteer movement, performed at

the university on a regular basis. The choice of the orphanage kids was determined by our need to find outside tutees for the participants and their need for individualised help with English, which cannot always be performed by the orphanage mentors. The experiment was aimed at finding out what kind of linguistic and extra-linguistic skills can be gained and developed by learning through the teaching approach. The major grounds for our choice are listed below:

- Due to a little amount of classes, and a very short period of the English language study in non-linguistic universities (1–2 terms maximum with just 2 academic hours per week), only a few students can have an opportunity to try out as teachers, with the majority remaining in their initial role of learners. Outside the classroom, on the contrary, each student can become a teacher on a regular basis (twice a week).
- A common practice employed in non-linguistic universities is to divide learners for their English language classes according to their major (IT, law, economics, management, etc.) rather than to their initial level of English [13]. This results in mixed-level groups, which, in its turn, means that only stronger students can act as instructors or presenters, leaving their weaker peers behind. In our case, each student can choose a person to teach fitting his or her level of English (from beginner to intermediate).
- Teaching individually rather than a group helps students feel more comfortable and confident, and build a better rapport with learners by having more opportunities to become aware of their learning styles, needs and interests, as well as of both academic and non-academic difficulties.
- An outside teaching setting provides more space for social and emotional learning (SEL), for both students and the kids they teach. According to the report of Durlak, Weissberg, Taylor, Dymnicki and Schellinger, "SEL teaches the skills we all need to handle ourselves, our relationships and our work, effectively and ethically" [14, p. 3]. Besides developing IT skills, communicative competences, creativity and flexibility, students are more prone to become more sympathetic, caring, tolerant and open-minded by being exposed to the outside-the-classroom world. These skills are essential not just for being good learners, but prepare students for their adult lives as community members, productive workers and future parents [15].
- Just spending more time on English (which the experiment naturally requires) is a great tool to improve it. Rather than having only one English class a week, students have to prepare lessons, find appropriate materials, create tasks and exercises, which is highly likely to consolidate their language knowledge and skills.
- Teaching outside one's classroom presents a life-like situation, which is essential for successful language acquisition. Inside teaching makes students only half-teachers, as there is always a real one to provide help and support if the need arises. The outside environment is surely more psychologically challenging, but at the same time more effective and rewarding. It makes students 100 per cent teachers as their teaching, as well as the results of it become their personal responsibility.

The aim of this work is finding out if and in what way an outside learning by teaching method promotes university students' academic (linguistic and transferrable) and life skills development.

METHODS

Research Sample

The outside learning by teaching experiment was organised on the basis of Nevinnomyssk Technological Institute (Northern Caucasus Federal University branch) as a part of the volunteer movement. The participants were 20 full-time first-year students majoring in chemical technology (18.03.01 – Chemical technology of inorganic substances), aged 17 and 20. Ten participants entered the university after school (17-year olds, 6 girls and 4 boys), and ten were colleges and vocational schools graduates (20-year-olds, 5 girls and 5 boys). All the participants enrolled in the university volunteering movement at the beginning of the academic year. Previously, only two girls had a volunteering experience: they used to help out at the shelter for stray and abandoned animals in their home town for three years. As for the teaching practice, five of the participants had younger siblings whom they helped with school homework and one co-worked with his coach during the summer holidays in the local swimming pool.

Research design

During the experiments the students worked in pairs to help the local orphanage kids with their English language homework. Pairing was supposed to provide for more psychological comfort, teamwork skills development, as well as for the substitution, in case one of the students falls ill or cannot be present due to other unforeseen circumstances. As a supervisor, the author let the participants choose a partner on the principle of a mutual agreement. In case of disagreements or incompatibility they were allowed to change partners, but such a need never arose.

Each pair was assigned up to 3 kids to work with. Students chose the kids' age and grade (from 8 to 14 years old, 2–8 grades) in accordance with their own level of English. The participants chose a number of tutees (one, two or three) taking into consideration the amount of time they were able and ready to devote to teaching. Only one pair chose three kids to tutor, four pairs had two and five pairs just one. So, all in all, there were 16 participants from the orphanage. The students were supposed to work with the same kids during the whole period of the experiment (two terms). In case of a conflict or an emergency a change was provided for, but it never came to this.

The participants were always able to consult their university English teacher on the issues of the materials to use, methodology to apply, and communication problems to solve. The teacher's role was one of a consultant and advisor mostly linked with the choice of learning materials (flashcards and other visual aids, exercises on grammar and vocabulary topics, online linguistic games, etc.).

Participants visited their students twice a week, and gave online consultations when it was necessary, having all the help and support they needed from the orphanage administration. Usually the students spent about an hour at a time with their tutees helping them with the English home assignments and making sure they understood the material. They were always supervised by an orphanage teacher on duty who did not interfere into the teaching process, but checked the homework. Sometimes the students stayed longer interacting with the kids. It was the case with primary school children who treated them not only as tutors but as their friends as well.

Data collection

We based our research method on the narrative interview rather than questionnaires requiring "yes"/"no" or "agree"/"disagree" answers. A narrative interview is a spoken or written summary of connected events, meaning asking questions that require participants to summarise their experiences of one or more phenomena (events) and tell this story to the researcher⁴.

In our research, narrative interview method is aimed at gathering stories relating to the participants' learning and teaching experience, allowing them to concentrate on the most relevant and significant items and events. It also encourages them to reflect and analyse their successes and failures, as well as to outline the benefits of the experiment from both academic and non-academic viewpoints.

It should be mentioned that while analyzing the narrative interviews, the author's attention was more focused on the content than to the language as the method is primarily aimed at interpreting the meaning (emotional, psychological, aesthetical, educational, etc.) of the events that happened to the narrator. In our study mastering the language is important, but not the only objective we wanted to reach, by means of this experiment.

Interview outline

In the framework of our experiment the narrative interview was conducted in the form of three questions concerning the participants' teaching experience. They were to write a short story as an answer to one of them.

- 1. What was the most difficult/exciting/unexpected episode of my teaching experience?
 - 2. What can you learn by teaching?
- 3. Why would I recommend / not recommend my friend to try out teaching?

We tried to make the prompts in such a way as to encourage the participants to share both their linguistic and non-linguistic experience and to reflect upon it.

RESULTS

Question 1. What was the most difficult / exciting / unexpected episode of my teaching experience?

Participants' replies (7 samples):

- 1) I taught a fifth-grade boy who was really bright. One day, however, his task was to retell a story from the textbook. I helped him shorten the story leaving only the most important sentences. There were only 10 left. He read them several times, but could not remember. I got really frustrated, but then read the story to him myself. Amazingly, he was able to retell it from the first time. I understood that he had an audio memory type. Now I think there are no people incapable of learning. Everyone just needs an individual approach.
- 2) My level of English is quite high, so I chose two eight-grade girls to tutor. But they could not understand me and kept making mistakes. I had to use different ways of explanation, and one day they both got "5". I was so happy and proud. They made me understand that having

⁴ What is a "narrative interview" // IB Psychology. URL: https://www.themantic-education.com/ibpsych/2018/03/09/what-is-a-narrative-interview/.

knowledge yourself is not always enough. You should also be able to convey knowledge to others.

- 3) I was not afraid of teaching as I always helped my younger sister with chemistry. The boy I was to help here, however, was hostile and even aggressive. It took my partner and me a lot of time and effort to find a "key" to him (it turned out he missed his best friend who was taken to a foster family). In the end it was so rewarding as he became very friendly, and his grades improved, too.
- 4) I taught two kids, a boy and a girl. They were both in the sixth form and their level of English was the same. I used flashcards to help them memorize vocabulary. It worked good with the girl, but did not seem to be helpful with the boy. So, one day I asked the girl to help her classmate, and she did! Now I see that it is really important for students to learn together. In this way they learn not only from a teacher, but from each other as well.
- 5) I tutored a nine-year-old boy and I was pretty sure in my knowledge and abilities. I was in for a big disappointment. I prepared for our classes thoroughly, we drilled and revised all the assignments, but my student's marks remained poor. It appeared that he forgot everything as soon as I left. One day he told me that he loved dogs very much and would like to have one. After this I tried to put dogs into every task we had to do. I also brought a fluffy toy dog to our lesson. Step by step, it worked. His marks began to improve. This experience made me see that people learn better if the material is somehow connected with their likes and interests.
- 6) My student was a teenage boy. He was smart, but very reserved and aloof. His marks got better and I was very proud, but he seemed indifferent both to his achievements and to me and this made me upset. One day his task was to describe a friend and he told me that he would like to describe me. I was really touched. I will always remember this episode when I feel bad or frustrated.
- 7) My partner and I taught three kids. They were of the same age, but very different, both personally and academically. The girls' marks started improving almost immediately. The boy, however, was very shy, and it was difficult for him to answer in front of the class. One day when he was doing a task with my partner I recorded his answers and then played them to him. It helped him become more confident and he even started volunteering to answer in class. I think that not only kids but adults, too, need emotional support to reveal their abilities and to learn better.

Question 2. What can you learn by teaching?

Participants' replies (7 samples):

- 1) The experiment has taught me to be more attentive, sympathetic and aware of the people around me. Orphanage kids are deprived of many things we take for granted our parents, our home, our presents and care we receive from other people. They made me see and value what I have, and be grateful to my family and friends.
- 2) I have become more patient, flexible and tolerant after the experiment. I have learnt teamwork skills working with my partner. I have also become a better time manager. Now I am able to much more during the same time period than before. I believe the experiment has taught me to be a more reliable and responsible person.
- 3) I was never interested in learning English. I did not want to spend my time on something I am very unlikely to

- need. I was sure that at least in our small town it will not do me any good. During the experiment, however, I met real kids who really needed my help. Their marks improved after our tutorials and now I feel proud and useful. I think English is worth learning, after all.
- 4) I taught two second grade kids. At this age children are very active and their span of concentration is not very long. So, I had to use flashcards, pictures, toys and other visual aids to keep them focused. By doing this regularly I discovered that I myself learn much better if the material is visually supported. Now I spend less time preparing for my classes in different university subjects and I enjoy the process of learning much more than I used to.
- 5) To make tutorials interesting I had to use lots of additional materials from the Internet pictures, songs, short stories, interactive exercises and so on. Now I am a smarter searcher and a more confident Internet user, which is great not only for English but for other subjects I have to learn, too.
- 6) I agreed to participate in the experiment because my best friend asked me to and I am glad that I did. I've got a quick temper and used to be selfish and ungrateful. Thanks to volunteering as a whole and teaching in particular I have become more patient and understanding with people around me. Now I have better relations with my parents and siblings.
- 7) Being a teacher has taught me to be a more attentive and active listener. This skill is really important regardless of the career you would like to pursue. Now I am much better at proving my point of view, giving feedback and communicating in general.

Question 3. Why would I recommend / not recommend my friend to try out teaching?

Participants' replies (6 samples):

- 1) Teaching makes you learn. You just cannot come unprepared to the kids who are waiting for your help. I am sure I will never forget what I have taught them. I have learnt a lot of new words and now I am much better at understanding grammar topics.
- 2) I would like to continue such experiments, not only in English, but in other subjects, too. Teaching helps you not just learn but understand as you have to explain this to others.
- 3) I think teaching is a universal skill. You will always need it in the family and at work. During the experiment I have found out that I can draw. It is my hobby now.
- 4) I would certainly recommend it to shy and reserved people like me. I found it very hard to make friends and even to start talking with somebody. During the experiment I had to communicate with my partner, discuss our plans and solve difficulties. I also had to talk with my tutees, not only about their English homework, but about their likes, dislikes, interests and so on. Now it is much easier for me to talk to other people and I also feel more confident at my classes in university.
- 5) I think everyone should learn how to teach. I am going to have a family of my own when I graduate. As a future parent I should teach my kids a lot of different things and it is really useful to know how to do it properly.
- 6) In my opinion teaching is the best way to assess your knowledge in this or that subject. It is even better than exams. If you convey your knowledge to others, you understand what you are talking about. In the process of tutor-

ing I have become a better psychologist, manager and researcher. Teaching helps you learn how to communicate effectively with different people and this skill is essential both in personal and professional areas.

Question-by-question replies analysis

The topic choice has turned out as follows: number 1 – seven students; number 2 – seven students; number 3 – six students. So, we can see that the story themes appeal to the participants on an even basis.

The first prompt was chosen by the participants with the highest initial level of English, whose answers revealed improving communicative skills ("You should also be able to convey them to others"; "It is really important for students to learn together"), patience ("I got really frustrated but then read the story to him myself"), flexibility ("Everyone just needs an individual approach"; "I had to use different ways of explanation"), open-mindedness ("There are no people incapable of learning"; "Having knowledge yourself is not enough"; "People learn better if the material is somehow connected with their likes and interests") and emotional side of a teaching experience ("I was really touched. I will always remember this episode when I feel bad or frustrated"; "In the end it was so rewarding as he became very friendly, and his grades improved, too"; "I think that not only kids but adults, too, need emotional support to reveal their abilities and to learn better").

As we can see from the participants' stories, they feel that teaching is a good tool to develop transferrable ("I have learnt teamwork skills working with my partner"; "I have become a better time manager"; "Now I am a smarter searcher and a more confident Internet user"; "I have become more patient, flexible and tolerant, more reliable and more responsible"; "I am much better at proving my point of view, giving feedback and communicating in general") and life skills ("More attentive, sympathetic and aware of people around me"; "I have become more patient and understanding with people around me"). Moreover, it promotes universal values ("Grateful to my family and friends") and motivates to learn ("I feel proud and useful. English is worth learning, after all"; "I spend less time preparing for my classes in different university subjects and I enjoy the process of learning much more than I used to").

There have been no negative answers to the third questions. All the participants have demonstrated a positive attitude to teaching as a skill. According to their stories, teaching helps learning ("I will never forget what I have taught them. I have learnt a lot of new words and now I am much better at understanding grammar topics"; "Teaching is the best way to assess your knowledge in this or that subject"; "Teaching helps you not just learn but understand"), develops creativity ("I have found out that I can draw"), boosts self-confidence and communicative skills ("Now it is much easier for me to talk to other people and I also feel more confident at my classes in university"; "Teaching helps you learn how to communicate effectively with different people") and it is useful in real life ("You will always need it in the family and at work"; "As a future parent I should teach my kids a lot of different things and it is really useful to know how to do it properly").

Overall replies analysis

It should also be mentioned that all the orphanage kids participating in the experiment, got better term marks, which gives both them and the students a sense of accomplishment, a stronger self-confidence and a great learning motivation, which, in their turn, provide for academic success.

After analysing and interpreting the participants' stories we can conclude that teaching helps them gain or develop three types of skills: linguistic, transferrable and life skills as well as promotes positive personality traits essential for becoming a full-fledged society member.

Although the English language skills improvement was not regarded as the only and primary objective of the experiment, the participants pointed out the increase of their both active and passive vocabulary and a deeper level of grammar comprehension. Despite the fact that only two linguistic skills mentioned by the participants, it should be noted that according to the university teachers they demonstrated a better grasp of the language in comparison with their fellow-students, who did not take part in the experiment.

The outside teaching by learning experience also promoted the acquisition and development of transferrable skills regarded as "skills used in one job or career that can also be used in another". According to the analysis of the participants' narrative interviews, their academic and interpersonal interaction with the tutees enabled them to become better at problem-solving, decision-making, critical thinking, time management, team working, data search and analysis and at communication as a whole. Moreover, the social and educational setting of the experiment provided for the real life situations requiring flexibility, technological literacy, adaptability and creativity.

The answers also revealed students' awareness of positive personality traits such as tolerance, responsibility, patience, kindness, caring for others, sympathy, self-control and social values of family, friendship and equality.

DISCUSSION

Experiment outcomes

The experiment outcomes indicate that outside learning by teaching method is an effective tool for boosting both linguistic and universal life skills, as far as non-linguistic university students are concerned. The above-mentioned skills develop simultaneously and are mutually influential.

The adaptation of the substituting a real teacher practice by moving teaching outside the classroom, was determined by the peculiarities of English teaching in non-linguistic universities. It is advantageous due to the following factors: it gives more opportunities to engage a greater number of students of different initial English level knowledge; it provides a greater exposure to the language by requiring its regular usage and implementation; it enables students to be more independent in the choice of whom to teach and how to teach; it provides more ground for transferrable life skills development by exposing learners to different communicative and social situations with people of different age, psychological and emotional background.

⁵ Transferable skills // Cambridge Dictionary. URL: <u>https://dictionary.cambridge.org/dictionary/english/transferable-skills</u>.

The method of narrative interview applied by the author has been successfully used both within organizations and in the academic world. It has become a long tradition to collect and interpret narratives (stories) in such fields as sociology and psychology [18]. Telling stories is one of the most important ways for people to express themselves, to share their experience and to convey their values. That is why it is recognized as a productive tool investigate and understand social life and cultural phenomena. Narrative interview enables researchers to see not only the outcomes but the features of the teaching and learning process, directs the participants to provide their personal experiences and helps determine the conditions either encouraging or discouraging students to be involved in the aimed activity [19]. We believe that narrative interview is an excellent way to reinforce personalized student-centered approach in education and to engage learners in reflective practice, which is important for further personal and professional development. The responses gained in the process of the participants' narrative interviews have demonstrated a highly positive attitude to teaching experience, which allows us to suggest that the method under discussion could be applied to teach and learn other subjects common in different educational establishments (mathematics, IT, chemistry, physics, etc.).

A number of transferrable skills gained and improved during the experiment along with linguistic ones make the participants better and more successful learners in general as they are necessary for the acquisition of any university subject as well as for any chosen career [20]. Life skills development is no less important than linguistic and transferrable ones. The aim of higher education is not only to convey academic knowledge and skills, but also to make graduates better citizens and simply better people. Life skills and values are necessary for students as would be parents, community members and professionals.

Challenges

Despite getting promising outcomes, it is necessary to mention that the practical application of the outside learning by teaching method is a very time and effort-consuming issue, which requires students, teachers and administration collaboration.

First, visiting an outside educational establishment (in our case, an orphanage) on a regular basis means covering a lot of legal issues on different levels (university administration, orphanage officials, town authorities), which takes time and can present certain bureaucratic obstacles.

Second, the participants may need some psychological preparation to work with kids (it can be done in the form of tutorials or observation). Besides, students may not be able to fit their schedules to the timetables of those they are supposed to teach.

Third, as a precaution, it might be necessary to have a professional psychologist to assist the participants, in case a conflict should arise.

Finally, for teaching in some educational establishments, the students may be asked to provide medical or legal papers, which they can feel reluctant to do.

CONCLUSIONS

The outcomes of our research seem as follows.

The outside learning by teaching method is an effective tool for developing non-linguistic university students' linguistic, transferrable and life skills, cultivating positive personal characteristics and conveying social values.

Teaching as a skill provides students with a better preparation for both personal and professional challenges.

To further prove the benefits of the given method, other subjects should be included into the experiment.

REFERENCES

- 1. Stholhans S. Learning by teaching: developing transferable skills. *Employability for languages: a handbook*. Dublin, Research publishing Publ., 2003, pp. 161–164.
- 2. Duran D. Learning-by-teaching. Evidence and implications as a pedagogical mechanism. *Innovations in Education and Teaching International*, 2016, vol. 54, no. 5, pp. 32–34. DOI: 10.1080/14703297.2016.1156011.
- 3. Koponen M., Asikainen M.A., Viholainen A., Hirvonen P.E. Using network analysis methods to investigate how future teachers conceptualize the links between the domains of teacher knowledge. *Teaching and Teacher Education*, 2019, vol. 79, no. 1, pp. 137–152. DOI: 10.1016/j.tate.2018.12.010.
- Findeisen S., Deutscher V.K., Seifried J. Fostering prospective teachers' explaining skills during university education – Evaluation of a training module. *Higher Education*, 2021, vol. 81, pp. 1097–1113. DOI: 10.1007/s10734-020-00601-7.
- Lachner A., Jacob L., Hoogerheide V. Learning by writing explanations: Is explaining to a fictitious student more effective than self-explaining? *Learning and Instruction*, 2021, vol. 74, article number 1011438. URL: 10.1016/j.learninstruc.2020.101438.
- 6. Antonacopoulou E.P., Gabriel Y. Emotion, Learning and Organization Change. *Journal of Organizational Change Management*, 2001, vol. 14, no. 5, pp. 435–451. DOI: 10.1108/EUM0000000005874.
- 7. Cortese C.G. Learning through teaching. *Management Learning*, 2005, vol. 36, no. 1, pp. 19–31. DOI: 10.1177/1350507605049905.
- Fiorella L., Kuhlmann S. Creating drawings enhances learning by teaching. *Journal of Educational Psychology*, 2020, vol. 112, no. 4, pp. 811–822. DOI: 10.1037/edu0000392.
- Lee I. Supporting greater autonomy in language learning. *ELT Journal*, 1998, vol. 52, no. 4, pp. 282–289. EDN: INYGIZ.
- 10. Lai Yi-Chen, Peng Li-Hsun. Effective teaching and activities of excellent teachers for the sustainable development of higher design education. *Sustainability*, 2020, vol. 12, no. 1, pp. 28–32. DOI: <u>10.3390/su12010028</u>.
- 11. Sheerin S. An exploration of the relationship between self-access and independent learning. *Autonomy and independence in language learning*. London, Longman Publ., 2007, pp. 54–65.
- 12. Grzega J., Schöner M. The didactic model LdL (Lernen durch Lehren) as a way of preparing students for communication in a knowledge society. *Journal of Education for Teaching: International research and pedagogy*, 2008, vol. 34, no. 3, pp. 167–175. DOI: 10.1080/02607470802212157.
- 13. Miller A. Word count vs Text count: an Alternative approach for ER students. *Academia letters*, 2021, article 437. DOI: 10.20935/AL437.

- 14. Pellitteri J., Smith B. Building academic success on social and emotional learning: What does the research say? edited by Joseph E. Zins et al. A Review of: "Roger P. Weissberg, Margaret C. Wang, and Herbert J. Walberg (2004), New York: Teacher College Press, 244 Pages. *Reading and Writing Quarterly*, 2007, vol. 23, no. 2, pp. 197–202. DOI: 10.1080/10573560600992837.
- 15. Jeon Hyeon Gyu, Lee Kun Chang. C. Emotional factors affecting knowledge sharing intentions in the context of competitive knowledge network. *Sustainability*, 2020, vol. 12, no. 4, article number 1510. DOI: https://doi.org/10.3390/su12041510.
- 16. Pentland B.T. Building Process Theory with Narrative: From Description to Explanation. *Academy of Management Review*, 1999, vol. 24, pp. 711–724. DOI: 10.5465/amr.1999.2553249.
- 17. Moenandar S.-J., Basten F., Taran G., Panagoulia A., Coughlan G., Duarte J. The structured narrative interview. Narrative Inquiry. *Narrative Inquiry*, 2024, vol. 4, pp. 1–28. DOI: 10.1075/ni.23079.moe.
- 18. Roelle J., Nickles M. Generative learning versus retrieval practice in learning from text: The cohesion and elaboration of the text matters. *Journal of Educational Psychology*, 2019, vol. 111, no. 8, pp. 1341–1361. URL: 10.1037/edu0000345.
- 19. Moenandar S.-J., Huisman K. Storytelling as a tool for student career counseling. *Storytelling in arts, culture and identity Formation*, 2019, pp. 105–114.
- 20. Sharan Y. Cooperative learning for academic and social gains: Valued pedagogy, problematic practice. *European Journal of Education*, 2010, vol. 45, no. 2, pp. 300–313. DOI: 10.1111/j.1465-3435.2010.01430.x.

СПИСОК ЛИТЕРАТУРЫ

- Stholhans S. Learning by teaching: developing transferable skills // Employability for languages: a handbook. Dublin: Research publishing, 2003. P. 161–164.
- 2. Duran D. Learning-by-teaching. Evidence and implications as a pedagogical mechanism // Innovations in Education and Teaching International. 2016. Vol. 54. № 5. P. 32–34. DOI: 10.1080/14703297.2016.1156011.
- 3. Koponen M., Asikainen M.A., Viholainen A., Hirvonen P.E. Using network analysis methods to investigate how future teachers conceptualize the links between the domains of teacher knowledge // Teaching and Teacher Education. 2019. Vol. 79. № 1. P. 137–152. DOI: 10.1016/j.tate.2018.12.010.
- Findeisen S., Deutscher V.K., Seifried J. Fostering prospective teachers' explaining skills during university education – Evaluation of a training module // Higher Education. 2021. Vol. 81. P. 1097–1113. DOI: 10.1007/s10734-020-00601-7.
- Lachner A., Jacob L., Hoogerheide V. Learning by writing explanations: Is explaining to a fictitious student more effective than self-explaining? // Learning and Instruction. 2021. Vol. 74. Article number 1011438. URL: 10.1016/j.learninstruc.2020.101438.
- 6. Antonacopoulou E.P., Gabriel Y. Emotion, Learning and Organization Change // Journal of Organizational

- Change Management. 2001. Vol. 14. № 5. P. 435–451. DOI: 10.1108/EUM000000005874.
- 7. Cortese C.G. Learning through teaching // Management Learning. 2005. Vol. 36. № 1. P. 19–31. DOI: 10.1177/1350507605049905.
- 8. Fiorella L., Kuhlmann S. Creating drawings enhances learning by teaching // Journal of Educational Psychology. 2020. Vol. 112. № 4. P. 811–822. DOI: 10.1037/edu0000392.
- Lee I. Supporting greater autonomy in language learning // ELT Journal. 1998. Vol. 52. № 4. P. 282–289. EDN: INYGIZ.
- 10. Lai Yi-Chen, Peng Li-Hsun. Effective teaching and activities of excellent teachers for the sustainable development of higher design education // Sustainability. 2020. Vol. 12. № 1. P. 28–32. DOI: 10.3390/su12010028.
- Sheerin S. An exploration of the relationship between self-access and independent learning // Autonomy and independence in language learning. London: Longman, 2007. P. 54–65.
- 12. Grzega J., Schöner M. The didactic model LdL (Lernen durch Lehren) as a way of preparing students for communication in a knowledge society // Journal of Education for Teaching: International research and pedagogy. 2008. Vol. 34. № 3. P. 167–175. DOI: 10.1080/02607470802212157.
- 13. Miller A. Word count vs Text count: an Alternative approach for ER students // Academia letters. 2021. Article 437. DOI: 10.20935/AL437.
- 14. Pellitteri J., Smith B. Building academic success on social and emotional learning: What does the research say? edited by Joseph E. Zins et al. A Review of: "Roger P. Weissberg, Margaret C. Wang, and Herbert J. Walberg (2004), New York: Teacher College Press, 244 Pages // Reading and Writing Quarterly. 2007. Vol. 23. № 2. P. 197–202. DOI: 10.1080/10573560600992837.
- 15. Jeon Hyeon Gyu, Lee Kun Chang. C. Emotional factors affecting knowledge sharing intentions in the context of competitive knowledge network // Sustainability. 2020. Vol. 12. № 4. Article number 1510. DOI: https://doi.org/10.3390/su12041510.
- Pentland B.T. Building Process Theory with Narrative: From Description to Explanation // Academy of Management Review. 1999. Vol. 24. P. 711–724. DOI: 10.5465/amr.1999.2553249.
- 17. Moenandar S.-J., Basten F., Taran G., Panagoulia A., Coughlan G., Duarte J. The structured narrative interview. Narrative Inquiry // Narrative Inquiry. 2024. Vol. 4. P. 1–28. DOI: 10.1075/ni.23079.moe.
- 18. Roelle J., Nickles M. Generative learning versus retrieval practice in learning from text: The cohesion and elaboration of the text matters // Journal of Educational Psychology. 2019. Vol. 111. № 8. P. 1341–1361. URL: 10.1037/edu0000345.
- 19. Moenandar S.-J., Huisman K. Storytelling as a tool for student career counseling // Storytelling in arts, culture and identity Formation. 2019. P. 105–114.
- 20. Sharan Y. Cooperative learning for academic and social gains: Valued pedagogy, problematic practice // European Journal of Education. 2010. Vol. 45. № 2. P. 300–313. DOI: 10.1111/j.1465-3435.2010.01430.x.

Обучение через преподавание: внеаудиторный подход

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Поступила в редакцию 06.05.2024

Принята к публикации 18.06.2024

Аннотация: Статья посвящена вопросу применения метода обучения через преподавание за рамками аудиторных занятий как эффективному инструменту формирования академических (лингвистических и переносимых) и жизненных навыков, положительных личностных характеристик и пропаганде социально значимых ценностей у студентов неязыковых направлений подготовки. В основе исследования лежит эксперимент, участниками которого стали 20 студентов первого курса Невинномысского технологического института, обучающихся по специальности «Химическая технология неорганических веществ». Эксперимент проводился под руководством автора статьи. В процессе эксперимента, который длился два академических семестра (с сентября по декабрь 2023 г.), участники помогали с выполнением домашних заданий воспитанникам (в возрасте от 8 до 14 лет) местного интерната для детей-сирот и детей, оставшихся без попечения родителей. Целью исследования было выявление академических и неакадемических навыков, которые могут быть приобретены и усовершенствованы посредством преподавательской практики. Результаты эксперимента были собраны и обработаны с помощью метода нарративного интервью (обмен опытом через ответ на поставленный вопрос) и показали присутствие как академических, так и универсальных навыков. Благодаря внеаудиторной обстановке (условиям жизни и обучения в интернате) участники погрузились в среду социально-эмоционального обучения и отметили преимущества данного опыта как для будущей профессиональной деятельности, так и для повседневной жизни. Несмотря на определенные трудности академического и неакадемического характера, с которыми участники и организаторы столкнулись в процессе практического применения этого метода, он оказался продуктивным, и автор рекомендует его к использованию для изучения и преподавания других учебных дисциплин.

Ключевые слова: обучение через преподавание; академические навыки; переносимые навыки; жизненные навыки; социально значимые ценности; личностные характеристики; внеаудиторная обстановка.

Для цитирования: Голодная В.Н. Обучение через преподавание: внеаудиторный подход // Доказательная педагогика и психология. 2024. № 2. С. 19-26. DOI: 10.18323/3034-2996-2024-2-19-26.