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PEER-TO-PEER LEARNING IN HIGHER EDUCATION IN SERBIA: EXPERIENCES AND PERSPECTIVES AT PHD STUDIES

Peer-to-peer learning and assessment have been recognized in recent years as approaches which stimulate students and encourage them to take an active role in the learning process as opposed to the traditionally passive role students had within classic lectures. The aim of this paper is to consider different facets of peer-to-peer learning on the PhD level and compare theoretical framework with experience of PhD students at the Faculty of Philology. We will present a qualitative analysis of various aspects of peer-to-peer learning the informants encountered during their postgraduate studies. The research takes in consideration the aforementioned experiences in peer-to-peer programs, with a particular emphasis on their experience in “Research Is Back” peer-to-peer workshop on academic writing and research tools. By comparing informants’ experiences and existing research on the topic, we wish to analyse the benefits of this approach and its potential for implementation in higher education in Serbia. We believe that offering more peer-to-peer workshops would allow students to gain not only relevant knowledge within their respective field, but also acquire new skills that they can use beyond the scope of traditional PhD studies.

Key words: peer-to-peer learning, academic writing, academic workshops, extracurricular activities

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Introduction

Peer-assisted learning (PAL) or peer-to-peer learning has been part of the teaching practice at higher education institutions (HEIs) since the early 1980s, to a varying degree. Stemming from Vygotsky's theory of social constructivism (1978), PAL is the contemporary form of "scaffolding" Vygotsky saw as a crucial element of learning activities that help an individual go through the gradual phases of learning. It started off as team work and peer assessment, but has since then evolved into active student engagement in the learning process, both pertaining to gaining knowledge and passing, or sharing, it with peers (Boud & Leed, 2005). HEIs have seen PAL as a mode of personal development in terms of future employability of students. Not only do students benefit in academic terms, but also with regard to non-academic transferable skills which are appreciated in the business world. These include the so-called "soft skills" such as communication, social, organisational and other skills (Topping, 2005). Additionally, PAL supports collaborative work in small groups or pairs in a structured manner which further supports strategic and critical thinking (Williamson & Paulsen-Becejac 2018: 9). Independence improves student performance, giving them a chance to take active part in problem-solving. Finally, PAL often helps to address the emotional needs of students who, in their learning difficulties, may feel lonely, vulnerable or even isolated (Zhao & Kuh, 2004).

This paper, thus, gives better insight into student feedback on PAL, with special emphasis on PhD students, so as to gauge the importance of this approach to the given sample of informants and promote further development of such practice at local HEIs. Its central part consists of quantitative and qualitative data gathered via survey from student informants who took part in "Research Is Back" workshops on academic writing organised at the Faculty of Philology, in accordance with PAL, *by* PhD students *for* students of all levels of studies. The main idea in the study was to compare their general feedback on peer-to-peer programmes and "Research Is Back" workshops in order to draw relevant conclusions on how PAL can be improved for further generations of PhD (and other) students. Structure-wise, this paper begins by laying out the theoretical framework of PAL. It gives an overview of the definitions and the benefits of PAL along with a set of conditions to be met for successful implementation of this approach. It also relies on previous research in the field so as to underline student demand for such programmes. In this way, it aims at providing not only general information about PAL, but also specific information on the study at hand, as well as research results pointing to the positive outcomes of PAL. In the results and discussion sections, the paper presents student responses to survey questions and confirms their need to have PAL activities or programmes integrated in the existing curricula given the fact that a significant number of students recognise its untapped potential.

Peer-to-peer learning

Viewed from different perspectives, peer-to-peer learning is denominated in various ways. Some researchers use the widespread term learning, referring to it as either peer-to-peer learning or peer-assisted learning. Others view it as peer mentoring/mentorship or tutoring (Preston et al. 2014: 54). Although these terms carry slight differences between them, whatever the term used, this way of learning implies a two-way learning activity (Elke 2010: 3) with the acquisition of knowledge and skill through active helping and supporting among status equals or matched companions (Zhang & Bayley 2019: 61). Unlike with the traditional learning context which sets the class dynamics through a master-apprentice relationship where the learner doesn't belong to the same community as the teacher (Lave & Wenger, 1991); (Elke 2010: 2), peer-learning marks a shift in the focus. Instead of providing a hands-on delivery of teaching, the teacher assumes the activities of training peer tutors and ensures the quality of the process, while leaving the rest to the students themselves (Cameron et al. 2015: 271). This means that all the participants in the learning process take an active role and share responsibility for the quality of the learning process.

Prerequisites

In order to set up a non-traditional learning context for a peer-to-peer approach, there are certain prerequisites that need to be met. Firstly, the institution needs to invest in the process itself which necessitates special training and planning (Cameron et al. 2015: 271), just as they would invest in classic learning. Consequently, peer-learning should not be used as compensation for lack of teaching staff (Cameron et al. 2015: 271), but rather as a way to provide a different context for learning with the same institutional aid when it comes to resources. If we take peer-learning on the PhD level as an example, these resources include having logistical and institutional help, having office space that enables peer interaction and investment into development of peer-to-peer learning (Preston et al. 2014: 63). Secondly, it is important that the mentors taking active part in peer-learning possess some personal characteristics that help build a successful relationship between a mentor and a mentee (Zhang & Bayley 2019: 70). As some researchers indicate, successful peer mentors are often resourceful and responsible, effective communicators, confident, adaptable, approachable (Cameron et al. 2015: 271), but also patient, punctual, responsible, knowledgeable, creative, and have great listening skills (Zhang & Bayley 2019: 70).

Benefits and issues

There are numerous benefits of introducing peer-learning in higher education institutions. For instance, this type of learning fosters a supportive

learning atmosphere and allows for a more relaxed and enjoyable learning experience (Cameron et al. 2015: 271). Furthermore, peer-learning often introduces a positive social setting as students perceive that they receive more emotional and esteem support when they manage to develop a better relationship with like-minded classmates in the process (Byl et al. 2016: 303). Taking part in peer-learning also means that the participants on all sides get the opportunity to develop their interpersonal and communication skills and expand qualities such as patience and compassion (Zhang & Bayley 2019: 63).

Despite numerous benefits of peer-learning, this approach can also present some challenges. For instance, this type of learning might lead to students becoming overly reliant on peer support and relinquishing their independence (Zhang & Bayley 2019: 70). Additionally, if the mentors are not properly trained, their lack of knowledge can lead to providing incorrect or misleading information (Zhang & Bayley 2019: 70). Lastly, peer-learning might require extra work and effort for the supervisor (Elke 2010: 8), which is not necessarily taken into consideration when it comes to their overall workload requirements.

Previous research

Based on evidence from previous research, there certainly are more advantages than disadvantages to peer-to-peer learning when all of the previously discussed prerequisites are met. In a study conducted by Cameron et al. (2015: 270), qualitative feedback from both peer tutors and students testifies about the positive experience of peer-assisted learning. Students believe that the lack of staff and large students makes it hard for individual students to get attention at times, which means that there is often little opportunity for student-teacher one-on-one interaction on an issue at hand. On the other hand, traditional teacher-based learning is characterised by what seems to be important to students - expertise and integrity. When teachers teach a class, they are very informative and go into depth about a topic in a structured manner, coming across as professional. This aspect may sometimes be lacking in peer-assisted learning if peer tutors have not gone through sufficient training or simply are not knowledgeable enough. Nevertheless, students feel more inclined towards peer-to-peer work because they enjoy the atmosphere better (which may also be an issue if students are too relaxed), they are consequently not afraid to ask questions and do not fear criticism from someone closer to their age. Similarly, comments from peer tutors participating in the study show that they enjoy providing feedback, being supportive, participating in hands-on activities with students, and, most importantly, teaching peers has inspired them to improve their own skills and think about which area to grow in, professionally.

As opposed to peer-assisted learning between junior and senior students (or graduates) described above, there are also examples of successful peer-to-

peer learning programmes when students are at the same level of studies, as is the case with PhD students, the main focus of our research as well. Preston et al. (2014: 62-63) explain in their study that peer mentorship can be much influenced by social interactions of participants in a PhD programme. The feeling of friendship, or comradeship, between the students enrolled in the PhD programme in their study was developed as a result of sharing most of the classes together and simply spending much time in physical proximity to each other in terms of working/learning space within the programme. As a result, all students had the freedom to mentor and be mentored as they saw fit, tailoring the mentoring process to each individual. Inspired by Cullingford (2006: 9) who stated that mentoring is the best when it is reciprocal, they worked interchangeably as mentors or mentees and fostered dynamic relations from which they could flourish academically, adapting the process to their own needs, interests and, relevant to most working PhD students with several life roles, ongoing personal/family circumstances.

Methods

In this article, we examine peer-to-peer learning through the analysis of opinions and experiences related to peer-to-peer workshops of PhD students from the Faculty of Philology, University of Belgrade as well as from feedback from participants of “Research is Back” workshops, held at the Faculty of Philology, University of Belgrade.

The first set of data analysed were collected via a Google form document asking students to choose values on a scale from 1 to 5 based on their opinion on different aspects of peer-to-peer workshops in general. The second set of data comes from a Google form feedback survey and combines multiple choice, scale and open questions regarding their participation in “Research is Back” peer-to-peer workshops. “Research is Back” is a series of peer-to-peer workshops on academic writing and research tools created through a project funded by the U.S. Embassy in Belgrade. The workshops were developed as a result of the project coordinators’ positive experiences with peer mentorship at universities abroad. The workshops are offered as an extracurricular activity to PhD students, MA students and final year BA students from the Faculty of Philology (but also other faculties from the field of humanities).

Peer-to-peer workshops general questionnaire

Sample

The questionnaire was filled out by 14 informants, all from PhD studies at the Faculty of Philology, University of Belgrade. The informants received the invitation via social media groups for PhD students to fill out the questionnaire

online using Google forms. The sample comprises 3 first-year students, 3 second-year students, 4 third-year students and 4 students who have been doing their PhD for over 3 years. The majority of the students are doing their PhD in foreign languages studies (9) or foreign literature studies (2) and culture studies (1) and only 2 informants are doing PhD in Serbian language and literature. When it comes to their professional experience, a vast majority of our informants work in education, whether it be in a university setting (4), school setting (2) or private educational centres (3). Exactly half of the informants have over 5 years of professional experience in the field of education. When it comes to participating in the “Research is Back” workshops, 8 informants were not participants of the program, while 6 have taken part in these workshops. It is interesting to note that the majority of informants (12) didn’t have any experience in peer-to-peer educations or workshops during their BA/MA studies. None of the informants have experience as mentors in a peer learning environment.

Results

In the questionnaire, informants were asked to rate statements related to peer-to-peer learning on a scale from 0 to 5. Most participants (8) indicated that they strongly agree with the statement that peer-to-peer workshops are useful, while some stated they mostly agree (3 informants) or moderately agree (3 informants). The majority of the participants (7) moderately agree that peer-to-peer workshops help them learn more than traditional lectures would, while 5 of them mostly agree with that and only 2 mostly disagree.

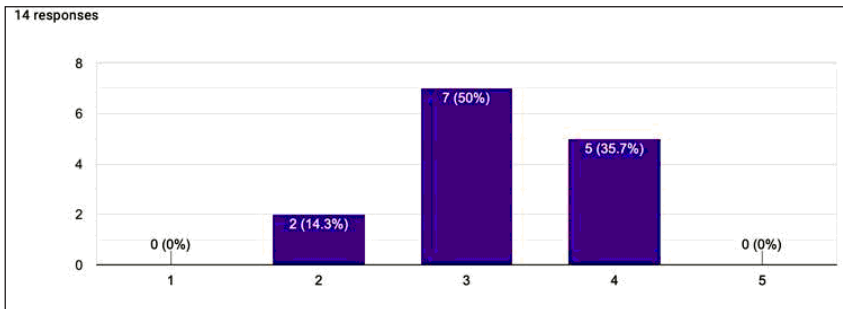


Figure 1. “I learn more in peer-to-peer learning than in classic lectures”

When it comes to including peer-to-peer workshops in the curriculum, a large portion of the informants (10) strongly agree that they should be integrated, 3 of them mostly agree and one informant moderately agrees with this statement. When asked whether they enjoy taking part in peer-to-peer workshops as an extracurricular activity, most participants (6) only moderately agreed with the statement, 4 participants mostly agreed, 2 of them strongly agreed while two skipped answering altogether.

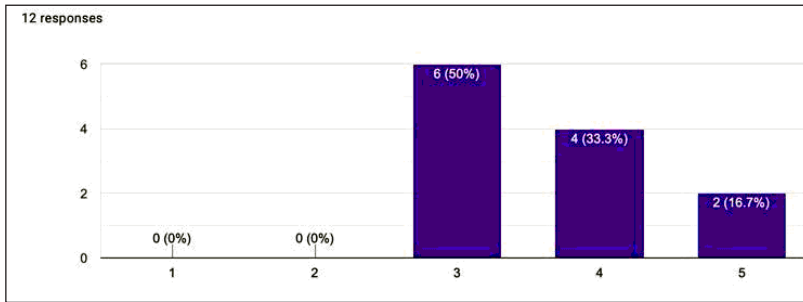


Figure 2. "I am happy to take part in peer-to-peer workshops"

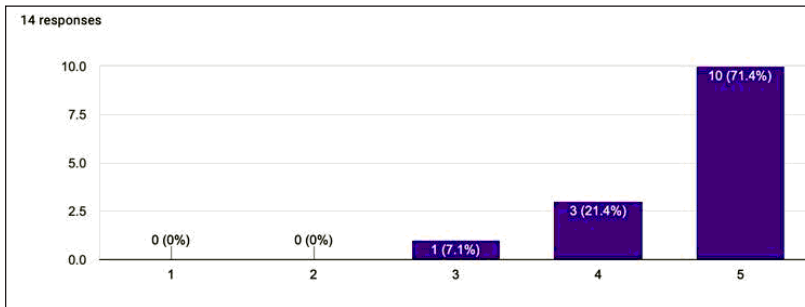


Figure 3. "Peer-to-peer workshops should be included in the curriculum."

Lastly, participants were asked about whether they believe there are enough opportunities for participating in peer-to-peer workshops. The same number of participants (4 each) moderately agree with the statement and mostly disagree respectively. Certain participants strongly disagree (3), while 2 mostly agree. One participant chose not to answer this question.

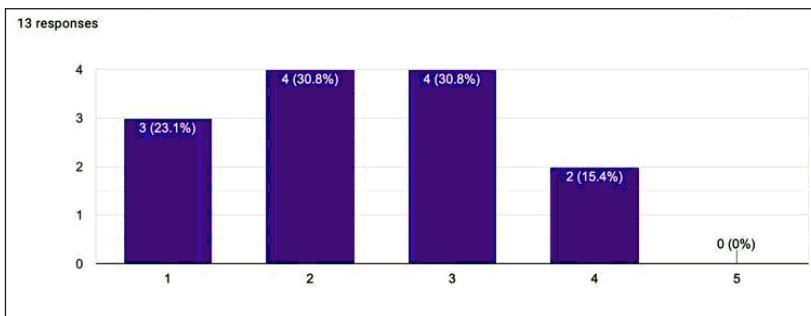


Figure 4. "There are enough opportunities for taking part in peer-to-peer workshops."

Research is Back feedback questionnaire

Sample

In order to take a more in-debt and experience-based look at peer-to-peer workshops, we analyzed feedbacks from 8 PhD participants of “Research is Back” project. In total, 8 participants filled in the questionnaire. The majority of participants (5) are year 1 and 2 PhD students, which means they still haven’t submitted their PhD topic proposal and are in the early stages of their study programs. Out of the remaining 3 participants, 2 have submitted their PhD topic proposal and 1 above year 2, but still without a topic.

Results

When asked to rate on a scale from 1 to 5 how useful the workshops were, 5 participants gave the highest mark, one gave 4 and 2 gave 2 and the majority of them would recommend workshops to their peers.

Furthermore, in the feedback questionnaire, workshop participants reflected on how their attitudes shifted thanks to the peer-to-peer workshops. In the following segment we will analyse their remarks.

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I see academic writing and research as easier process now as I feel well equipped with technical knowledge relating to the structure of the paper, references, etc.
For example, that I’ll start writing my articles in a different order, I opened my mind to try new things and be a little less panicky and more open to experiment (:
no
I got a better insight into the technical side but also the motivation for further work
I feel more assured seeing that we have all similar problems, and that we all agree that the PhD is about the constant process of learning and not having to be perfect.
I now understand that smaller steps are crucial and that our thesis is just an initial part of a lifelong academic journey. In addition, I found out that we should already consider ourselves experts in our fields and that what we do does not have to be perfect, but precise.
While it is stated that academic writing is individual work, which I’ve already known, these workshops showed me that we are a part of community where we can find ask for opinions and exchange ideas with our colleagues.

Table 1. *How has your attitude changed towards academic writing and research?
How do you see it differently now?*

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I plan to submit the paper on the upcoming conference and use the knowledge gained in the process of writing my PhD
Using the useful tools (websites, information, etc) and apply them to my future writing sessions.
In writing articles, PhD thesis, on conferences...
It will realz help me to go with my PHD
By a applying to a conference, and going through advices I got, trying to organize my paper and presentation accordingly
To write an abstract and apply for the conference in May at the Faculty of Philology.
I will use the advice and material provided to apply for conference and submit a paper.

Table 2. *How to you plan to implement the knowledge gained at the workshops?*

From the results listed, it is possible to notice that peer-to-peer workshops can lead to a shift in attitudes regarding doing research and writing articles on it. Through learning from their peers, participants got insights into the process of writing step by step, and more importantly, exchanged their own views and experiences with their peers. This sense of community is a particular value of peer-to-peer approach, as stated by our informants as well as existing research. Another important result is that the outcome of such workshops is a tangible one as the practical knowledge the participants gained will be put to use either by preparing for conferences or submitting articles to journals or by improving work on their PhD.

Discussion

The results of the general questionnaire indicate that, although most informants have professional experience or background in teaching, they haven't had a lot of opportunities to take an active role in peer-to-peer workshops. On the rare occasion when they did have such an opportunity, they took part in the "Research is Back" project analysed in the second part of the research. Even though their experiences are scarce, both as participants and as mentors, for the most part, they have a favourable view of taking part in such workshops and believe that peer-to-peer programs are of great value. The results also indicate that, according to informants' opinion, this approach can somewhat help individuals learn more than what would be the case in classic learning. This is particularly true when the informants discuss enhancing their existing skills in new ways, as is the case with learning how to structure an academic article for example. It is interesting to notice that numerous informants believe that peer-to-peer workshops should be integrated in the university curriculum,

but when they are offered as an extracurricular activity, to a lesser extent do they take part in such workshops. Based on the results of our research as well as the results of numerous other reported analyses, there is an obvious desire and need for providing students with more opportunities for peer learning.

When it comes to experiences of “Research Is Back” participants, and as seen from both existing literature on the topic and the results of our research, peer-to-peer workshops can be a useful tool in shifting attitudes in the learning process and facilitating knowledge transfer. Despite numerous benefits, such as going through a different learning experience and creating a bond and a sense of community among peers, peer-to-peer workshops remain an underused tool and students feel that there is a lack of opportunities in this regard. Even though peer-to-peer workshops are often conceived as an extracurricular activity, most of the participants from the research believe that it should also be included in the curriculum as a useful aid for PhD students. Including such learning in the curriculum would help bring the benefits of peer learning closer to students who might not have had prior experience with it and would not be comfortable taking the initiative to take part in it on their own. It is important to state that in any case, thanks to the numerous benefits of such an approach, peer-to-peer learning can be a valuable addition to both curricular and extracurricular activities and it should be in no way seen as an alternative to classic learning, rather as a complementary activity. This kind of activity can allow students to expand their knowledge on technical tools used in research, academic writing and organisation of articles, but also help them develop their personal and social skills in the process. Academic workshops such as “Research Is Back” provide a space for learning skills related to writing articles, conference presenting and, most importantly, building a community of peers. It is necessary to emphasise the importance of peer-to-peer approach as this under-utilised resource has great capacity to foster human and social capital within and between cohorts of graduate students (Preston et al. 2014: 63).

Conclusion

In conclusion, we believe it is important to emphasise that peer-to-peer learning in Serbia merits researchers’ attention and that a thorough study is needed in order to better understand the current benefits and challenges. While peer-to-peer learning could be included in university curriculum, it is of great use as well to offer it as a valuable extracurricular activity which helps improve students’ knowledge, develop their professional, but also personal and social skills. Peer-to-peer learning offers great potential for expanding knowledge in a different way and we believe that this resource should be used to a greater extent than it is currently the case. Peer-to-peer learning does require resources from the part of institutions or third-parties willing to invest in education excellence,

as is the case with the “Research is Back” workshops, but given its benefits, the investment would bring positive improvements in the learning process. There is still work to be done in promoting such learning and educating the potential stakeholders about its importance, but it is clear from those who have already taken part in it that peer-to-peer learning has the power to shift attitudes and help those involved discover new perspectives.

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**VRŠNJAČKO UČENJE U VISOKOM OBRAZOVANJU U SRBIJI:
ISKUSTVA I PERSPEKTIVE NA DOKTORSKIM STUDIJAMA**

S a ž e t a k

Vršnjačko učenje i evaluacija su prepoznati u savremenoj nastavi kao pristupi koji stimulišu studente i podstiču ih da zauzmu aktivnu ulogu u procesu učenja, nasuprot tradicionalno pasivnoj ulozi studenta u kontekstu klasične nastave. Benefiti ovog vida učenja su brojni i uključuju pozitivnu radnu atmosferu koja vodi ne samo do usvajanja novih znanja, već i do stvaranja zajednice i osnaživanja. Cilj ovog istraživanja je da se ispituju različiti aspekti vršnjačkog učenja na doktorskim studijama i da se uporede teoretski okvir i iskustva doktoranada sa Filološkog fakulteta. Kvalitativnom analizom iskustava doktoranada sa Filološkog fakulteta na opštem nivou i iskustava učesnika radionica "Nauka se vraća" na pojedinačnom nivou, može se uvideti da su iskustva dominantno pozitivna, ali da postoji značajan prostor za unapređenje dostupnosti vršnjačkih radionica i podsticanje studenata da u njima učestvuju. Iako većina ispitanika ima radno iskustvo u oblasti obrazovanja, mnogi nisu imali prilike da budu učesnici ove vrste radionica, a niko od ispitanih nije vodio takvu radionicu. Neki ispitanici smatraju da vršnjačko učenje pruža više sadržaja od klasičnih predavanja. Iako većina ispitanika smatra da bi vršnjačke radionice trebalo uvrstiti u nastavni plan i program, kada su one ponuđene kao vannastavna aktivnost, oni su neretko uzdržani kada treba učestvovati u njima. Takođe, istraživanje ukazuje da nema dovoljno prilika za učešće u vršnjačkim radionicama. Kada je reč o iskustvima sa radionicama "Nauka se vraća", polaznici radionica su ukazali na to da su se zahvaljujući ovom projektu bolje upoznali sa tehničkom stranom akademskog pisanja, ali i da su dobili dragocena konkretna znanja koja im pomažu da unaprede svoj naučni rad. Istaknuta je uloga zajednice koja se prilikom radionica stvara budući da je upravo ona plodonosno tle za dalje učenje i međusobnu podršku. Znanja stečena na ovim radionicama ohrabrila su učesnike da se prijave za učešće u konferencijama i pristupe izradi svojih disertacija. Verujemo da bi veći broj prilika za vršnjačke radionice omogućio da studenti dobiju relevantna znanja iz svojih oblasti, ali i razviju različite veštine. Kako bi se ovakvo učenje što bolje osmislilo, potrebno je sprovesti dodatna sveobuhvatna istraživanja u ovoj oblasti.

Cljučne reči: vršnjačko učenje, akademsko pisanje, akademske radionice, van-nastavne aktivnosti