# Students' computer-based workshops in mandatory classes of English for students majoring in psychology and linguistics: A comparative experimental study

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**Abstract.** This article addresses the issue of developing and using students' workshops in English. In the article, such workshops are defined as the fullest form of peer-teaching in which one or several students (workshop organizers) guide their group-mates in performing extra-linguistic learning activities conducted in the target language. The research describes workshops as one of the most efficient ways of involuntary (subconscious) target language acquisition achieved through extra-linguistic practical (experiential) activities performed by way of communication in the language to be learned. The article reports the results of a comparative experimental study in which students of a non-linguistic major (Psychology) and students majoring in English as a foreign language on which their career option (Applied Linguistics) is based were practicing workshops in English in their mandatory classes on that language. The results of the experimental study clearly demonstrate and prove that workshop practice was quite successful in both cases not only in what concerns the involuntary (subconscious) development of learners' target language communication skills. No less evident was the development of some of the students' psychological qualities (emotional intelligence) important for their further studies and professional careers.

**Keywords:** English as a foreign language, students' workshops, English communication abilities, emotional intelligence

## 1. Introduction

## 1.1. Problem statement and its topicality substantiation

In today's globalized world English has become the global, or planetary, language of communication whose adequate command is an absolute requirement to be met by every citizen of the

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https://duan.edu.ua/university-ukr/kafedry/15-pages/332-kafedra-pedahohiky-ta-psykholohii.html#volkova\_n (N.P. Volkova); https://duan.edu.ua/university-ukr/kafedry/15-pages/

<sup>336-</sup>kafedra-prykladnoi-linhvistyky-ta-metodyky-navchannia-inozemnykh-mov.html#tarnopolsky\_o (O.B. Tarnopolsky);

https://duan.edu.ua/university-ukr/kafedry/15-pages/332-kafedra-pedahohiky-ta-psykholohii.html#lebid\_o (O.V. Lebid); http://formathematics.com/uk/tyutori/vlasenko/ (K.V. Vlasenko)

society and whose lack of command is somewhat akin to illiteracy [10]. The most cutting-edge developments in English as a foreign language (EFL) teaching methods, designed to teach it more successfully and faster in accordance with the world's population's needs, include several most distinctive features.

The English language teaching/learning has become culture-oriented and culture-specific. People who learn English acquire not only the necessary language-system dependent communication skills but also culture-specific skills. It makes communication in English culturally adequate [3, 7].

That teaching/learning process has become autonomous [13], cooperative [18], and highly interactive meaning that learners are not so much taught as acquire the language themselves in their autonomous learning activities performed in cooperation with other students (pair and small group learning). Such an interaction embraces not only the other students but also the out-of-class environment where learners interact with the Internet sites in the target language collecting and processing the information that they need for doing their creative learning tasks ([4], [11, pp. 148-150], [17]). The teachers in these conditions become facilitators [23]. They promote students' autonomous and cooperative work on their tasks, guiding their attempts to solve learning issues, and overcome learning pitfalls.

EFL learning, especially at higher education institutions, is gradually being transformed into experiential one [19, 20, 28]. Experiential learning in EFL is implemented by way of modeling extra-linguistic activities in the classroom and organizing learners' communication. That communication is used as a means for achieving the goals of the extra-linguistic activities being done. In this process of doing such activities and using the target language as a means of achieving their goals the target language itself is acquired [19, 28]. Thanks to the introduction of experiential learning, foreign language classes are becoming more and more constructivist. It means that in the process of doing creative experiential learning activities students self-construct their EFL language skills and communication skills, such acquisition being mostly involuntary/subconscious because in target language communication the EFL skills serve as the means for learners' extra-linguistic performance [28].

EFL courses at higher education institutions have become content-based in their nature. Since the principal aim of those courses is preparing students for using the target language in their professional activities, the latest trend is to teach English through the content matter closely related to learners' majoring/professional disciplines – content-based instruction [2, 27]. The greatest advantage of content-based instruction is its most prominent feature. It is in making provisions for parallel acquisition of knowledge from certain non-linguistic disciplines together with acquisition of the target language and the skills of communicating in it.

Computerization and informatization of higher school EFL courses greatly enhance the learning outcomes [33, 34] making the learning process blended, i.e. organically blending in it the traditional in-class learning activities with on-line activities [14, 26].

All these five cutting-edge trends and features of EFL teaching methodology can be observed in their harmonious unity in one of the quite recent and innovative modalities of learning embodied in students' computer-based workshops in mandatory classes of English. The *aim* of this article is to discuss and analyze this modality of learning and supply experimental data proving its high efficiency and efficacy both for teaching English at universities and for students' personal development (their emotional intelligence development).

### 1.2. Peer-teaching in classes of English: the essence of the method

Tarnopolsky [30] pioneered the introduction of peer-teaching into the English language teaching practice of Ukrainian universities defined it as a specific way of instruction according to which students in their English language classroom play the roles of teachers (under the supervision of their regular teacher). In this role they organize and control the English language learning activities of their class-mates, help them, and monitor their learning efforts, give them explanations, correct their mistakes, and provide them with new information [30]. The author believes that peer-teaching is the supreme form of the already mentioned cooperative learning which most important function is to put learners in the conditions in which they help each other to learn by sharing their knowledge and skills, i.e. teaching one another and learning from one another. It is also quite clear that peer-teaching is a highly autonomous and interactive learning activity of the peer-teachers and their peer-students. It is autonomous because the regular teacher assumes only the supervising and facilitating functions. Its interactivity is provided by both peer-teaching and peer-learning and active and intensive students' intercourse among themselves.

Peer-teaching is indubitably based on blended learning since to hold a peer-teaching session on any topic (especially in the form of a workshop – see further), the peer-teacher is required to prepare himself/herself by collecting a lot of information. It is the task of the regular teacherfacilitator to supply the sources for finding such information, those sources compulsorily being in English and being located on Internet sites. When peer-teachers get used to that (and every student in every group is expected to play the role of a peer teacher as often as possible), they start to search for such Internet sites in English themselves. Moreover, they make their peer-students use those sites when doing some learning tasks, thus making the peer-teaching/learning as a whole predominantly blended [1, 25]. It should be mentioned that the computer/Internet constituent in peer-teaching is probably the central one for its success. Peer-teaching sessions are doomed to fail without the peer-teachers' search for the required information on the Internet. Moreover, peer-teaching sessions (workshops) conducted online are no less successful than those held in traditional classrooms. This enables us to speak about computer-based peer-teaching.

Peer-teaching/learning cannot avoid being experiential because it ensures students' practical experience in activities beyond the scope of their ordinary and customary classroom language learning. For peer-teachers their activities are extra-linguistic (teaching their group-mates) using the target language communication as a tool for performing those activities. And in the same way, when peer-teaching is initiated, the regular teacher always directs peer-teachers at giving their peer-students only the tasks that are experiential by their very nature – such as brainstorming, discussions, case studies, roleplaying, etc. [28, 30]. It means that, if we consider peer-teaching as the method of teaching and learning (in the sense ascribed to this term by Richards and Rodgers [22] – the design and procedure of learning activities), that method is always constructivist. Both peer-teachers and peer-students self-construct their knowledge and skills by way of using the language as the means for communication through which some extra-linguistic content matter is taught (peer-teachers) and learned (peer-students).

Finally, at its conception peer-teaching in classes of English was designed as culture-oriented and content-based [30]. Its primary purpose was to make students peer-teachers teach (in

English) their group-mates some culture-specific or professional content-specific information found on Internet sites in English (computer-based peer teaching) while preparing for their peer-teaching session. Such a session was designed as experiential, autonomous, interactive, and cooperative learning activities. Its objective was to help students acquire through the medium of the target language (English) and under the guidance of their peer-teachers some new knowledge related either to their future profession (content-based instruction), or the culture of English-speaking countries (culture-oriented language instruction), or both.

From everything said above it can be concluded that no other method does so organically combine all the five cutting-edge trends (see the Introduction) in today's methodology of teaching English as a foreign language in mandatory courses of it at Ukrainian universities. But there are different forms of peer-teaching already developed and discussed elsewhere [30]. In this article, we are going to analyze, both theoretically and experimentally, only one of them – students' workshops that we consider as the most sophisticated, efficient, and the fullest form of peer-teaching, embodying all its typical features and advantages.

# 2. Method

## 2.1. Students' workshops as the fullest embodiment of peer-teaching

Even though the method of holding workshops has already long been well-known in academic intercourse and even in courses of teaching a number of non-linguistic disciplines in tertiary education, Tarnopolsky and Kabanova [29] pioneered the introduction of students' workshops into mandatory courses of English at Ukrainian universities.

In the Longman exam dictionary, academic or educational workshops are defined as "a meeting at which people try to improve their skills by discussing their experiences and doing practical exercises" [21, p. 1775].

Just such workshops are now more and more frequently held at academic conferences and are often more popular and attract larger audiences than traditional conference talks. They have also entered the field of education in the form of short but always intensive teaching/learning programs that focus on skills in a particular field with 10–15 but not more than 20 people taking part in those workshops. Workshops conducted by students have already appeared at Ukrainian universities but they are not a frequent occurrence. Until quite recently, when we have introduced workshops in classes of English, they have been held only in courses of non-linguistic disciplines taught in students' mother tongue.

We introduced workshops in classes of English for students majoring in English Philology (a linguistic specialty) and those majoring in Psychology (a non-linguistic specialty) at the end of 2017. On a regular basis this method launched at the start of the 2018–2019 academic year. Such workshops, conducted in the target language by students themselves and not by their teachers, were defined as a specific form of learner's peer-teaching experience in which one or several students organize and guide some meaningful extra-linguistic activities of their group-mates, whose activities being done in the target language (in this way, students' workshops implicitly become language-learning oriented) [29]. The developed requirements and the procedure of conducting a workshop by students are as follows.

One workshop can be organized and conducted by one, two but not more than three studentsorganizers who were either volunteers (a very frequent occurrence after the students "got a taste" of conducting their own workshops). The students-organizers can also be appointed by the regular teacher (mostly only at the beginning of introducing that type of learning activity). The students are expected to conduct their workshops in a class of English a week after they received the task (one week for preparation).

The topic of the workshop is selected by the student(s)-organizer(s) themselves and never disclosed to their group-mates before the date of the workshop itself (the regular teacher can know it to be able to recommend to organizers some Internet sites in English necessary for preparation). There are only two requirements to the selected topic: a) it has to be contentbased, i.e. directly connected in content to the students' major, or culture-specific, or both; b) it absolutely has to be interesting and attractive to all the students in the group. The workshop, where the students attending it, have not become interested, as has been shown by their commenting on its outcomes (see further), does not receive a positive grade from the regular teacher.

The workshop has to be most thoroughly prepared informationally by way of organizer(s) working with numerous sites in English on the selected workshop topic so that they are able to answer the most diverse questions from the audience on that topic. The list of the processed sites is supposed to be shown to the teacher at the end of the workshop since the latter has to make sure that they are numerous enough and all in English. That list is also supposed to be given to the other students-participants at their request for their further references. This feature makes all the workshops computer-based.

Every workshop is expected to last for about 40 minutes (half of the standard class period). The workshop is obligatorily required to be accompanied by a PowerPoint multi-media presentation (pictures, short texts emphasizing the main points of the topic, etc.) prepared by the student(s)-organizer(s) for illustrating what is discussed and facilitating the comprehension and activities of the workshop participants.

A workshop should start with an oral presentation (accompanied by a PowerPoint presentation) by the student(s)-organizer(s) lasting from 5 minutes (minimum) to 10 minutes (maximum), in which the principal points of the topic are discussed and the task for the students-participants is formulated. The next step is doing that task individually, in pairs, or in small groups by students-participants under the supervision of student(s)-organizer(s) who circulate among the participants, take part in their discussions, put additional questions, give help and prompts. The final step is the whole-group discussion (again guided by the student(s)-organizer(s)) of the task completion results with drawing conclusions concerning the entire topic. This discussion is brought to a close with the general commentaries of the workshop organizer(s).

When the workshop is finished, at the request of the regular teacher, all the studentsparticipants comment on it sharing their impressions and evaluating (even grading) the work of student(s)-organizer(s).

Finally, the regular teacher comments on the work done, evaluating and grading the work of the student(s)-organizer(s), with fully taking into account the grades given by students-participants, as well as the work of those participants themselves.

To better illustrate what is said, the examples of two workshops organized by our students are given below.

One of them was held in the 2018/19 academic year in the second-year group of students majoring in Philology with a specialization in Applied Linguistics. The topic was culture-specific. It was the holidays in the USA (which are much less known to the students than the British holidays) as compared to the holiday in Ukraine. During the workshop, the two organizers started with giving an oral 10-minute presentation (accompanied by PowerPoint slides) on the most popular holidays in the USA. Then they divided the participants into pairs, allocated to every pair one of the American holidays just described, and gave them the task of discussing in English and deciding which of the holidays in Ukraine was the closest one in its essence to that American holiday. During the pair work, the students-organizers were circulating among the participants, taking part in their discussions, putting additional questions, giving help and prompts. After a 5-minute discussion, every pair was expected to deliver a 2-minute oral presentation on their conclusions. After finishing all the presentations, a whole-group discussion on the common features and differences of American and Ukrainian holidays was held. That discussion finalized with the closing comments of the students-organizers. The workshop evoked a lively interest and was highly appreciated both by the students-participants and the teacher.

Another interesting and highly appreciated workshop also given as an example below was the one held in the 2019/20 academic year by a second-year student majoring in Psychology. The workshop was profession-oriented, i.e. content-based. The student-organizer chose as its topic the psychological personality tests often published in popular magazines. The student started the workshop by giving a 7-minute presentation on such tests providing illustrative (PowerPoint) examples of them and suggested that the group-mates check whether such tests could be trusted. For doing that, the organizer divided the workshop participants into pairs giving each pair handouts with psychological personality tests collected by him from popular online magazines in English. The students in every pair were asked to complete their tests individually and then discuss the results coming to a conclusion whether they matched the tested persons' ideas of themselves and the ideas of them held by their partners in a pair. Again, like in the preceding case, the organizer was circulating among pairs providing commentaries, encouragement, help, and prompts. The pair discussion was followed by a whole-group one for making general conclusions as to the trustworthiness of psychological tests in popular magazines with final commentaries from the student-organizer.

From the above description and examples, it is absolutely clear that such workshops are: a) a peer-teaching activity (workshop organizers teach something to their fellow-students and organize their active learning of what is being taught); b) a content-based and/or cultureoriented activity because its content matter is always related to the content of future profession, or to cultural phenomena, or both; c) a computer-based activity because workshops themselves can quite successfully (and even more successfully than in offline classrooms) be held online, as has already been mentioned in this article and had been shown by our experience of organizing students' online workshops during the quarantine period in Ukraine [24] by way of using Zoom cloud platforms service; d) an autonomous (full autonomy of workshop organizers and autonomous work in workshops of the entire group of students with no interference from the regular teacher), cooperative, and interactive activity (all the students have to actively cooperate and interact for a workshop to be successful); e) an experiential activity (extralinguistic practical experience of students involved in the workshop, that experience obtained through target language communication used as a tool for doing the activity) leading to learners subconsciously self-constricting their knowledge and skills and making the entire learning process constructivist.

All this manifests the full embodiment of all the typical peer-teaching features in students' workshops, that is why they necessarily must be distinguished by all the advantages of such teaching. Hypothetically, students' workshops as described above possess a number of those advantages that are listed below.

## 2.2. The hypothetical advantages of students' workshops

Certainly, the first of such advantages is that the students have an opportunity for better and faster development of their English communication skills. We believed it to be the consequence of linguistic and non-linguistic tertiary students regularly (during not less than two academic years) acting as peer-teachers organizing and holding workshops in English in mandatory classes. Our hypothesis was that such an improvement (in comparison with the students of the same majors who did not practice workshops in English) would embrace the development of the three major English communication skills listed in table 1. These three skills whose intensified formation can serve as a kind of criteria testifying to the development of the general English communication ability are primarily related to English speaking but they also act (though to a lesser degree) in reading (when searching for information required for organizing a workshop), listening (when communicating in the process of holding a workshop), and writing (writing notes for holding a workshop).

#### Table 1

English communication skills whose development was hypothesized to be improved and intensified due to students practicing workshops in English.

Type of skills	Criteria of skill development
Language skills	Using relatively (mostly) correct and normative English pronunciation, grammar and vocabulary Demonstrating the variety of grammar and vocabulary in communication Demonstrating normative average rate/tempo of speaking
Interactive skills	Avoiding utterances that set barriers for communication Adequately presenting information orally to other people Maintaining logical coherence and cohesion in communication Maintaining and using feedback in communicative interaction
Information skills	Being able to find information fast and competently (particularly on the Internet) Being able to select properly (particularly on the Internet) the required volume and kinds of data and information for doing creative learning tasks

Another development that as we believed could result from the use of students' workshops in classes of English was the rapid growth of learners' *emotional intelligence*. The notion of emotional intelligence emerged in the framework of Gardner's [9] theory of multiple intelligences. Kagan and Kagan [16] when discussing the essence of the emotional intelligence divided it into two subtypes of intelligence: the *interpersonal* and *intrapersonal* ones.

The *interpersonal intelligence* manifests person's abilities to a) solving conflicts successfully, being empathic, tolerant, adequately expressing emotions non-verbally; b) befriending, i.e. establish interpersonal contacts and maintain good relationships with other people, control one's emotions while in contact with other people, realize their motives, and express sympathy; c) working in a team organizing its other members, collaborating with them, motivating them and encouraging their successful cognitive activities with the help of positive emotions; d) being sociable and communicative generating positive feelings in others, influencing them on the emotional and subconscious level (charisma), enjoying communication with other people, like them, and take care of them, being open to new experiences. The manifestations of these abilities in behavior may be considered as the criteria for interpersonal intelligence development. Thus, interpersonal intelligence ensures gaining command of a specific art of having positive attitudes towards others and efficiently governing one's own emotions that emerge when interacting with them.

The *intrapersonal intelligence* provides for developing the abilities of: a) metacognition, i.e. self-observation, realization of one's own emotions and feeling, self-reflection, regulating one's own emotional state in accordance with the behavioral and moral norms, choosing an appropriate form of behavior; b) self-evaluation, i.e. forming an adequate model of one's own "ego", respecting the uniqueness of the others in the process of interpersonal interaction; c) appropriate goal-setting, i.e. intuitive prognosticating of one's own actions outcomes, self-motivating, self-orientation, postponing the satisfaction of today's needs and desires for the sake of satisfying more significant remoter goals, realizing one's spiritual needs and the internal state; d) self-regulation, i.e. regulating one's own emotions, using the model of one's own "ego" for effective life functioning (setting priorities), manifesting in one's external behavior one's own independence of the immediate moment of existence where emotional reacting is taking place, the analysis of one's own motivation. The external manifestations of the above-listed properties of intrapersonal intelligence may be regarded as the criteria of the development of that intelligence in a particular person.

From the above description, the importance of the communication and intellectual features that students can acquire when practicing workshops in the target language in their course of English is quite clear. However, the fact that personal/intellectual development gets formed thanks to the use of students' workshops conducted in the target language needs to be proven experimentally. Obtaining the relevant proofs was the purpose of our experimental study.

## 3. Results

#### 3.1. Materials, method, and procedure of the experimental study

The study was conducted during two academic years beginning from September 2018 and until May 2020. It was organized at Alfred Nobel University in Dnipro, Ukraine. The students of two majors were involved: would-be psychologists (group PS-18 of 23 students, the 1st year of study in 2018/19 academic year and the 2nd year of study in 2019/20 academic year) and would-be philologists-applied linguists specializing in English (group FLpl-18 of 21 students, the 1st year of study in 2018/19 academic year and the 2nd year of study in 2019/20 academic year).

For mandatory classes of English, both groups were divided into two subgroups from 10 to

12 students in each of them. The group of would-be psychologists for the purposes of our study was randomly divided into one experimental group (EPS) of 11 students and one control group (CPS) of 12 students. Similarly, the group of would-be applied linguists for the purposes of the study was also randomly divided into one experimental group (EAL) of 10 students and one control group (CAL) of 11 students. The comparisons were to be made not between the students of different majors but between the students from the experimental and control group only in the same category of learners. Would-be philologists most certainly started in the experimental study with a substantially higher level of English than would-be psychologists and were supposed to finish it with a considerably higher level of it.

In the EAL and CAL groups 80-minute classes of English were held three times a week using absolutely identical teaching/learning materials and content, methods, procedures, and forms of teaching and learning (except the addition of workshops in the EAL group). The same approach was followed for the EPS and CPS groups where 80-minute classes of English were held two times a week – everything in the teaching/learning process was identical for both groups, except regular students' workshops in the EPS group. Even the teacher in all the experimental and control groups was the same.

We also did our best to equalize the students in the experimental and control groups. All the students were in the 18-19 years of age category, with approximately two thirds of females and one third of males in every group. Equalization was also achieved in what concerns the learners' initial – at the beginning of the English course – target language mastery (see the figures in the next section of the article). All the non-linguistic and linguistic students entering the first year of study at Alfred Nobel University in their first classes of English there take standard tests of their target language command. Such tests include a standard test of grammar and vocabulary, and also short tests of reading, writing, listening, and speaking. As the materials for the tests some abridged testing materials from Cambridge Preliminary English Examination (PET) [12] are used. PET is designed for ascertaining whether the examinees have reached the B1 level of English command according to the Common European Framework of Reference for Languages [6], i.e. the pre-intermediate level. Just this level of English is expected of Ukrainian school leavers when entering higher education institutions of that country. In our practice, if the first year students really demonstrate B1 level of English, they are considered to be at the high initial level for studying the language further. If the initial level is somewhat lower: higher than A1 [6] but not quite reaching B1, students are considered to be on the average (or sufficient) initial level, while if the initial level is lower than A1, it is believed to be low. When distributing the students who were taking part in our experimental study into groups, care was taken that the experimental and control groups included approximately equal numbers of students with high, average/sufficient, and low initial levels of their English mastery.

Thanks to this, the results of experimentally introducing the workshop method in the experimental groups in what concerns the development of learners' English communication skills could be justifiably compared to the results of such development in control groups where computer-based workshops were not conducted.

It should also be noted that at the beginning of their first year of university studies all our students from both the experimental and control groups were interviewed by professional psychologists (from the Department of Innovative Technologies in Pedagogy, Psychology and Social Work, Alfred Nobel University) who were determining the initial levels of their emotional

intelligence development. It was done for equalizing in this specific aspect as well the distribution of students (with the high, average/sufficient, and low levels of development of that intelligence) into the experimental and control groups – see the figures in the next section of the article.

To determine what levels of communicative development and the development of emotional intelligence were achieved by our students from the experimental and control groups by the end of the two-year-long experimental study, the following two methods of evaluating/assessing those levels (at the end of the study as compared to its beginning) were used:

- The first method is called the method of independent experts or judges when assessment (and grading) is done not by the teacher who has been teaching the students but by some other teachers who have never worked with them. What is more, at least two independent experts or judges do the assessment (and grading) absolutely independently of each other [31, p. 90]. This method was absolutely indispensable for our study because students' English communication skills development was assessed mostly through their speaking in English, and speaking skills can be assessed only subjectively by human assessors and not objectively by using objective tests. The same concerns assessing the level of development of learners' emotional intelligence. Assessment by independent experts, and not only by one but by several of them, allows to considerably decrease the level of subjectivity in both cases to a minimum ensuring much more accurate results of the experimental study [5, 31].
- The second method was the method of independent experts' assessment of learners' skills and personal features development. The experts used a number of pre-set criteria given to them before they started assessing. Those criteria outline the set of qualitative parameters that every assessor/independent expert is expected to take into account, so that they do their assessments on the basis of such criteria/parameters only [5, 8, 15, 32]. Moreover, a definite scale of points is supposed to be ascribed to every criterion, so that assessors/independent experts are not free in their grading either [5, 15]. Criteria and the scale of points attached to them give assessors/independent experts clear-cut guidelines as to the assessment and grading procedure [31, p. 90].

In the case of our study, the criteria given to independent experts for assessing the level of formation of learners' English communication skills were the nine criteria manifesting how well their English language skills, interactive skills, and information skills were developed. All those nine criteria (e.g., using relatively (mostly) correct and normative English pronunciation, grammar and vocabulary; maintaining logical coherence and cohesion in communication; being able to select properly (particularly on the Internet) the required volume and kinds of data and information for doing creative learning tasks and 6 others) are listed above in table 1. The criteria for assessing the formation of students' emotional intelligence were those eight characterizing the development of people's interpersonal and intrapersonal intelligences, also discussed above. Every assessor/independent expert was requested to take into account the external manifestations by every student of the eight separate emotional intelligence abilities which were reflected in those criteria. We were especially interested in the criteria of metacognition, ability of team work, sociability and communicative ability, as well as the ability of adequate goal-setting, since it is those four abilities that, theoretically, workshop activities are especially suitable for developing intensively. On the basis of just those four criteria, experts were supposed to

provide a generalized assessment of a particular student's emotional intelligence development at the time of assessment. Each of the criteria for assessing both the development of learners' English communication skills and their emotional intelligence could be graded by every expert using the following scale: the low level of development ("low") – from 1.9 to 1.0 points, the average/sufficient level of development ("sufficient") – from 2.4 to 2.0 points, the high level of development ("high") – from 3.0 to 2.5 points.

On the basis of the two above-discussed methods, the procedure of conducting the experimental study was elaborated. Five independent experts were selected: three specializing in Psychology and doing their teaching at the Department of Innovative Technologies in Pedagogy, Psychology and Social Work, Alfred Nobel University, and two teaching English at the Department of Applied Linguistics and Methods of Teaching Foreign Languages of the same university. The three professional psychologists were responsible for evaluating the level of development of learners' emotional intelligence. Both professional teachers of English were engaged in evaluating the development of students' English communication skills.

During the experimental study, the experts were requested to attend classes on English in all the experimental and control groups every two months completing, as the result of their observation, the current assessment data of students' progress in their English communication skills and emotional intelligence development. The same procedure was followed in the last assessment session at the very end of the experimental study, and only the results of that last assessment in comparison with the assessment results before the start of the experimental study will be analysed below in the article giving the mean figures for every group.

### 3.2. The results of the study: their computation

In the study, the results of experts' assessments of learners' level of English communication skills development were computed on the basis of the scale of points (3.0–2.5 for the high level, 2.4–2.0 for the sufficient level, and 1.9–1.0 for the low level) and using the formula of the arithmetic mean indicators.

If the sum of points given by the two independent experts-teachers of English evaluating one student's communication skills development equalled 6.0–5.0 that student was considered as having the high level of that development, 4.8–4 points meant the sufficient level, and 3.8-2 points – the low level. Then, the mean figures for the entire body of students in every experimental or control group were calculated, and, on that basis, the percentage of students in that group having high, sufficient, and low levels of communicative skills development was computed. Just those percentage figures are given in table 2 below. It should also be noted that the statistical significance of the difference in the figures in every two comparable experimental and control groups (EPS and CPS, on the one hand, and EAL and CAL, on the other hand) was also computed using the Pearson criterion for the number of degrees of freedom: v = 2.

$$\chi^2_{crit} = \begin{cases} 5.991, & p \le 0.05\\ 9.21, & p \le 0.01 \end{cases}$$

The results of this computation are given in the last lines of every separate section in table 2 and in figure 1.

#### Table 2

The results of the study (pre-experimental and post-experimental): the dynamics of students' English communication skills indicators development.

The level of skills	Group									
development (in	12 students in CPS and 11 in EPS 11 students in CAL and 10 in EAL									
percentage of the	The stage of the study									
number of students	Pre-experimental		Post-experimental		Pre-experimental		Post-experimental			
in a group)	CPS	EPS	CPS	EPS	CAL	EAL	CAL	EAL		
Language skills										
High	8.3%	9.1%	16.7%	54.5%	18.2%	20%	18.2%	50%		
Sufficient	33.3%	36.4%	41.7%	36.4%	36.4%	40%	54.5%	40%		
Low	58.4%	54.5%	41.6%	9.1%	45.4%	40%	27.3%	10%		
$\chi^2_{emp}$	0.308		41.262		0.596		25.076			
Interactive skills										
High	16.7%	8.3%	25%	54.5%	18.2%	20%	36.4%	60%		
Sufficient	33.3%	41.7%	41.7%	36.4%	45.5%	50%	36.4%	40%		
Low	50%	50%	33.3%	9.1%	36.3%	30%	27.2%	0%		
$\chi^2_{emp}$	3.762		25.118		0.894		33.148			
Information skills										
High	8.3%	9.1%	16.7%	45.5%	9.1%	20%	27.3%	60%		
Sufficient	41.7%	36.4%	50%	45.5%	45.5%	30%	45.5%	30%		
Low	50%	54.5%	33.3%	9%	45.4%	50%	27.2%	10%		
$\chi^2_{emp}$	0.59		27.508		7.486 (for $p \le 0.05$ )		23.382			

The first conclusion that can be drawn from the data in table 2 is the relative mathematical insignificance in the differences of pre-experimental results in CPS and EPS, on the one hand, and CAL and EAL, on the other hand. It shows that before the experimental study the students in the control and experimental groups were effectively equalized in what concerns their English communication skills development. On the contrary, after the experimental study, these differences became statistically significant. It means that the only variable in the study: the use or non-use of students' workshops in English did make a substantial and pronounced impact and effect on their English communication skills development.

According to the data in table 2, it can also be concluded that during the two years of the experimental study, there were some positive changes and shifts in the control groups. However, in those groups, the dynamics of approaching the high level of students' English communicative skills development was not very well pronounced. In the CPS (would-be psychologists) group the number of students who reached the high level of language skills development during the two years increased by only +8.4%, those who reached the high level of interactive skills command increased by +8.3%, while the increase to the high level of information skills development embraced +8.3% of students. Some positive changes were also observed in the number of students who were at a low level. In the CPS group by the end of the study there were -16.8%



**Figure 1:** Graphic representation of the results of the study (pre-experimental and post-experimental): the dynamics of students' English communication skills indicators development.

less of them in what concerns the level of language skills development, -16.2% less in the low level of interactive skills development, -16.2 less in the low level of development of information skills. The compatible, not very high, skills development improvement figures were obtained in the control group of would-be applied linguists (CAL). For instance, the decrease in the number of CAL group students who were at the low level of communicative skills commands reached only -18.1% in what concerns the development of their language skills, -9.1% in interactive skills, and -18.2% in information skills development.

Unlike that, the positive changes in both experimental groups were quite considerable. The number of students who reached the high levels of communicative skills development increased in EPS group (would-be psychologists) by +45.4% in their language skills development, by +46.2% (interactive skills), and by +36.4% (information skills). The relative indicators in EAL

group (would-be applied linguists) were +30.0%, +40.0%, and +40.0%. The figures for the same skills in what concerns the decrease in the number of students of the low level category were for the EPS group: -45.4%, -40.9%, -45.5%; for the EAL group they were -30.0%, -30.0%, -40.0%.

Therefore, it can be considered as proof that the workshop method effectively contributed to developing such of our learners' English communicative abilities as using relatively (mostly) correct and normative English pronunciation, grammar and vocabulary; demonstrating the variety of grammar and vocabulary in communication; demonstrating normative average rate/tempo of speaking; avoiding utterances that set barriers for communication; adequately presenting information orally to other people; maintaining logical coherence and cohesion in communication; maintaining and using feedback in communicative interaction; being able to find information fast and competently (particularly on the Internet), and being able to select properly (particularly on the Internet) the required volume and kinds of data and information for doing creative learning tasks.

The pre-experimental and post-experimental results of evaluating the development of students' emotional intelligence, computed in the same way as when computing the pre-experimental and post-experimental data concerning the learners' English communication skills development, are summarized in table 3 and figure 2 below.

The data in the table convincingly prove that the differences in the emotional intelligence development of the students in the comparable experimental and control groups were mathematically/statistically insignificant at the beginning of the study but became so at its end (see the  $\chi^2_{emp}$  indicators in table 3).

The figure 2 testify to the fact that experimental group students' workshop activities, their work in small groups, and doing group tasks contributed to developing their abilities to organize the activities of other people and motivating them with the help of positive emotions. Workshops teach them to plan joint activities, to collaborate, and foresee the results of future activities. As a result, the need to observe one's own emotions and feelings appears with the aim of regulating them, taking into account the uniqueness of other people in the process of interpersonal interaction. The abilities of regulating one's own emotional states in different kinds of communication became more manifested in experimental groups' students. It is shown by their increasing indicators of metacognition development followed by a sharp drop in the number of students from those groups who, at the beginning of the study, were considered as belonging to the low level of such development: -45.5% in EPS group and -50% in EAL group.

The indicators of experimental group students' teamwork abilities, as well as those of their sociable and communicative abilities and goal-setting abilities, have also grown substantially. For instance, in what concerns the teamwork abilities, in EPS group they have grown from 9.1% to 54.5% (+36.4 increase), and the low level of development dropped from 63.6% to 0% (-63.3). In EAL group the relevant figures were: from 10% to 70% (increase +60%) and from 63.6% to 0% (drop -63.6). The same can be said about all the other indicators for experimental groups students, while in the control groups those changes were not so much noticeable.

Therefore, it can be safely asserted that our experimental study has fully proven a very beneficial impact and effect of using the workshop method in classes of English on the development of tertiary students' (of both non-linguistic and linguistic majors) English communication skills and their emotional intelligence features.

## Table 3

The results of the study (pre-experimental and post-experimental): the dynamics of students' emotional intelligence indicators development.

The level of skills	Group									
development (in	12 students in CPS and 11 in EPS 11 students in CAL and 10 in EAL									
percentage of the	The stage of the study									
number of students	Pre-experimental		Post-experimental		Pre-experimental		Post-experimental			
in a group)	CPS	EPS	CPS	EPS	CAL	EAL	CAL	EAL		
Metacognition										
High	0%	9.1%	16.7%	45.5%	9.1%	10%	27.3%	60%		
Sufficient	25%	27.3%	33.3%	36.4%	27.3%	40%	54.5%	40%		
Low	75%	63.6%	50%	18.1%	63.6%	50%	18.2%	0%		
$\chi^2_{emp}$	1.	598	28	8.416	4.066		19	19.056		
Ability of team work										
High	8.3%	9.1%	25%	45.5%	9.1%	10%	18.2%	70%		
Sufficient	25%	27.3%	33.3%	54.5%	27.3%	30%	54.5%	30%		
Low	66.7%	63.6%	41.7%	0%	63.6%	60%	27.3%	0%		
$\chi^2_{emp}$	0.21		37.972		0.274		48.826			
Sociability and communicative ability										
High	16.7%	0%	33.3%	45.5%	9.1%	10%	36.4%	60%		
Sufficient	33.3%	36.4%	41.7%	45.5%	27.3%	40%	45.5%	40%		
Low	50%	63.6%	25%	9%	63.6%	50%	18.1%	0%		
$\chi^2_{emp}$	$\begin{array}{c} \textbf{7.128} \\ \textbf{(for } p \leq \textbf{0.05)} \end{array}$		9.584		4.066		11.568			
Ability of adequate goal-setting										
High	8.3%	9.1%	16.7%	54.5%	9.1%	20%	27.3%	60%		
Sufficient	41.7%	45.5%	50%	36.4%	54.5%	40%	54.5%	30%		
Low	50.3%	45.4%	33.3%	9.1%	36.4%	40%	18.2%	10%		
$\chi^2_{emp}$	0.454		36.02		$\begin{array}{c} \textbf{6.476} \\ \textbf{(for } p \leq \textbf{0.05)} \end{array}$		21.736			

## 4. Discussion and conclusion

This article above was discussing the use of students' computer-based workshops in English conducted by learners themselves in their mandatory classes on that language at the university. The workshops were defined as a supreme form of peer-teaching in which one or several students (workshop organizers) guide their group-mates in performing extra-linguistic learning activities conducted in the target language. The workshops are computer-based because organizing them requires extensive Internet searches by students-organizers and, as our experience shows, can be held both offline and online. The efficiency of conducting such workshops was researched in a two-year-long experimental study. It was postulated at the beginning of that study that if the students enter the university with their level of English higher than A1, workshops in



**Figure 2:** Graphic representations of the results of the study (pre-experimental and post-experimental): the dynamics of students' emotional intelligence indicators development.

English could be conducted from the very first year at university and they could be organized both by the learners who major in linguistics and by those of non-linguistic majors. This is why

the students of Psychology and of English Philology (Applied Linguistics) were involved in the experimental study. From the beginning of their first year until the end of their second year at university they were regularly practicing workshops in English in their mandatory classes on that discipline.

The experimental study fully and convincingly proved that computer-based workshops in English greatly and efficiently contributed to the development of students' (of both linguistic and non-linguistic major) English communication abilities, such as: using correct and normative English pronunciation, grammar and vocabulary; demonstrating the variety of grammar and vocabulary in communication; demonstrating normative average rate/tempo of speaking; avoiding utterances that set barriers for communication; adequately presenting information orally to other people; maintaining logical coherence and cohesion in communication; maintaining and using feedback in communicative interaction; being able to find information fast and competently (particularly on the Internet), and being able to select properly (particularly on the Internet) the required volume and kinds of data and information for doing creative learning tasks. Those workshops also effectively help in developing students' emotional intelligence, especially such abilities as metacognition, the abilities of teamwork, of being sociable and communicative, as well as the abilities of adequate goal-setting. Therefore, the general conclusion is: students' workshops in English held during their classes on that language at university can be considered as a highly effective means of enhancing learners' command of the target language and of developing their personality. Such a workshop should find much broader application in English teaching practice at Ukrainian tertiary schools and developing practical ways and means of spreading and improving that application can be considered as the prospects of further studies.

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