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University Students' Peer Assessment in the Language Environment: From Rote to Meaningful Learning

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ABSTRACT

The study presents the research on how the shift to student-centered approach drastically changed the educational environment. Greater flexibility both in the content and teaching methods is the greatest challenge for educational community. The paper describes results of the experiment aimed to prove the effectiveness of peer assessment method to form meaningful learning. The experiment outcome convinced that contradiction between students' perception of learning and teaching practices of educators is eliminated by the paradigm shift from direct form of teaching to a more collaborative one. The purpose of the research was to examine both learners' performance and evaluators' assumptions regarding that performance cooperatively at each stage. To achieve this objective, we conducted the experiment where students' focus group was exposed to peer-assessment practice throughout the course while training of others was based on traditional method. The results proved the efficiency of peer assessment method in meaningful learning formation by observing students' final project presentation. The experiment showed viability and prospects of meaningful learning. To create continuity lessons and the whole curriculum should be based on meaningful learning. We state meaningful learning to have crucial value both for Bachelor and Master students' success in mastering the English language and maintaining learners' continued engagement in the process of acquiring linguistic competence.

KEYWORDS
Education; student; language training; rote learning; meaningful learning; peer assessment

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Introduction

Urgency of the problem

The system of higher education in Russia has been under considerable reorganization during the last ten years. Trends in teaching process world-wide influence the way Russian educators organize their work. In 2014 the New Educational Standard was introduced. It led to a further dialogue about traditional teaching methods effectiveness. The shift to student-centered

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approach radically changed the educational environment that was previously marked by rigid teaching methods. We consider the change of the Russian mentality towards greater flexibility both in the content and teaching methods to be the greatest challenge educational community faces nowadays.

The Standard is based on general cultural competence and professional competence paradigm. The discussed shift stimulates teachers to reflect on the students' foreign language ability to guarantee professional communication (Ismagilova & Polyakova, 2014) and to review traditional methods of teaching in favor of innovative ones. Encouraging students' meaningful learning has become a new objective for foreign language teachers.

Problem statement

From the historic perspective Russia is the country that used rigid teaching methods for a long period of time. Students were not encouraged to question the material presented and learning techniques. As a result of such practice it became problematic for educators to change students' perception of education process form a fully guided process to a more independent one. To enhance the quality of teaching in ESL classroom it is crucial to model situations in a language implying a holistic view and study of the situation as a multidimensional structure (Valeev, Valeeva & Sirazeeva, 2015). Meaningful learning is considered to be vital to achieve that. "It requires that instruction goes beyond simple presentation of factual knowledge and that assessment tasks require more of students than simply recalling or recognizing factual knowledge" (Bransford, Brown, & Cocking, 1999; Lambert & McCombs, 1998). Education process assumes that students acquire knowledge. Learning process implies "how to teach—such as presenting information to learners in books and lectures—and how to assess—such as testing to see how much of the presented material students can remember" (Mayer, 2001). According to R.E. Mayer (1995), in meaningful learning students seek to make sense of their experiences and mentally integrate incoming information with existing knowledge, whereas in rote learning "students seek to add new information to their memories". Novak et al. outline three vital conditions for meaningful learning: (1) the learner must have relevant prior knowledge; (2) the material to be learned must be clear and presented with language relatable to the learner's prior knowledge; and (3) the learner must choose to learn meaningfully (Novak & Cañas, 2006). The student's willingness to learn in a meaningful manner is something that teachers mostly overlook. To facilitate meaningful learning teachers can apply instructional and evaluation strategies that promote meaningful learning such as using active learning and team-based tasks and reducing the amount of haec verba facts tested on exams. The system of assessment adopted by teaching corpus influences greatly the way students achieve learning goals. K. J. Topping et al. (2000) consider peer assessment to be the tool providing necessary feedback about the subject and encouraging critical thinking and reflection on both the content and the assessment mechanism. Moreover, it is essential to use peer assessment as an integral part of course assignments while planning the syllabus. It will provide better understanding of the course objectives and thus will help reflect critically on learning performance. According to D. Boud & N. Falchikov (1989), (the ability to assess and evaluate their own performance and the work of others in the class is one mostly required by students. Techniques for effective self- and peer-assessment are called upon to encourage "student

autonomy in learning and student responsibility for critical evaluation of their own work" (Boud & Falchikov, 1989). This process can generate interesting lessons and more reflection by, and involvement of, the students. Besides, successful peer-assessment can reduce the burden of marking. According to E. O. Zalyaeva & I. M. Solodkova (2014), peer-assessment during EFL classes "acts as an incentive for students to complete tasks properly, encourages and motivates them for further progress". Among numerous peer-assessment benefits defined by A. M. Langan & C. P. Wheater (2003) we consider the following ones to be the most valuable for the shift to meaningful learning:

- It helps develop learner's ability to self-evaluate and reflect on his or her performance.
- It empowers the learner in the learning environment.
- It suggests clear, open system of providing marks.
- It creates an ability to be objective and unbiased for assessing purposes.

Research questions

Since conventional learning is based on students' low involvement, they do not challenge the content and teaching methods. The traditional approach is characterized by competitiveness among learners rather than their collaboration (Orsmond, Merry & Reiling, 1996). Peer assessment facilitates the process of cooperative learning via evaluating the result of the work by the group members.

The main questions set by researchers are threefold:

- How valid and realistic is peer-assessment from the point of view of learning objectives?
- How does it correlate with the assessment made by tutors?
- How does peer-assessment benefit students' motivation and goals achievement?

Materials and Methods

To prove the validity of the research questions there was implemented a complex variety of methods, complementing each other: theoretical (analysis of psychological and pedagogical literature on the research; study and generalization of innovative teaching experience) and empirical (participants observation, stating and forming experiment, survey, testing, interviews, discussions, study of the results of students' academic activities, statistical treatment of data; interpretation and evaluation of the results of experimental work).

Results

In accordance with the research questions we designed the model that was used as the framework for the procedures conducted throughout the experiment. 85 first-year students took part in the experiment. They were divided into focus and non-focus groups.

The pilot project on peer-assessment was implemented in the academic year of 2013-2014. The course covered 4 semesters, each of 18 weeks' duration. The summative assessment of the course was held in the form of the research project presentation evaluated by the tutor. The peer-assessment experiment procedure was designed in the following way:

• Each semester contained 3 modules to be studied.

• At the end of each module students had to complete an assignment. The type of it varied depending on the module but was one of the following: essay or presentation of project results.

• Essays were assessed randomly and anonymously by 3 other students, whereas project presentations were assessed by all group members.

• In total, each student had to assess about 50 essays and 70 presentations.

The assessment criteria for essay contained 9 rubrics (relevance; understanding of the topic; evidence of appropriate material usage; organization of material into a coherent structure; clear style, including accurate spelling; clear sentence construction; references; language; grammar).

The project presentation peer-assessment sheet contained the following questions:

1. Subject. Was the presentation informative? Did it have a clear focus?
2. Organization / Clarity. Was it easy to follow? Was there a clear introduction and conclusion?
3. Preparation. Had the speaker rehearsed? Was she/he in control of the sequence, pacing and flow of the presentation? Did she/he make effective use of notes, without relying on them too heavily?
4. Sensitivity to audience. Did the speaker maintain eye contact with all members of the class? Did she/he make effective use of pauses, gestures, change in pace and pitch?
5. Visual aids. Did the speaker make effective use of hand-outs and overheads?
6. Language accuracy. Did the speaker use vocabulary to the point? Were there grammar mistakes preventing understanding? Were the sentences constructed properly?
7. What were the speaker's main weaknesses?
8. What were the speaker's main strengths?

The results of the experiment proved validity of the research questions put forward by the authors. The survey conducted before the course started and after the course finished showed significant improvement in the level of cognitive, value-meaningful and activity-based indicators of students' willingness to achieve learning objectives among students in focus group and non-focus groups. The results of the surveys are shown in Table 1.

Functions and organizational conditions of social partnership between college and company

The main functions of production and pedagogical management are focused on providing of the most effective students' vocational training at minimal cost and time and include:

1) providing of labor market with the required quantities of competitive, mobile, highly skilled workers and mid-level professionals,

2) promotion to the successful socialization of the individual of the student, in order to achieve the student's self-determination, active life activities, quick adaptation to innovations of modern high-tech industry.

Table 1 shows the basic conditions for social partnership between college and company and the parties' activities.

Table 1. Students' learning objectives perception (by number of students)

Indicators/ Levels	Cognitive		Value-meaningful		Activity-based	
	Before	After	Before	After	Before	After
Low	7	0	8	0	2	0
Below low	12	2	9	3	7	1
Average	7	8	6	12	11	5
Above average	3	12	5	10	5	13
High	1	8	2	5	5	11

On the contrary, students not involved in the experiment showed only slight improvements in these indicators (see Table 2).

Table 2. Students' learning objectives perception (by number of students)

Indicators/ Levels	Cognitive		Value-meaningful		Activity-based	
	Before	After	Before	After	Before	After
Low	10	7	12	7	4	3
Below low	18	16	22	20	15	14
Average	21	24	14	18	24	23
Above average	5	6	5	6	7	9
High	1	2	2	4	5	6

The system of peer-assessment adopted by the researchers in the focus group proved its effectiveness by making the gap between students' perception of their work and teacher assessment of the result less significant than it was at the beginning of the course. At the beginning of the course students tended to overestimate the performance of their group-mates and lacked objectivism. Hence, marks given by students and professors differed greatly (Figure 3). At the end of the course the assessment results were practically identical with slight divergence (Figure 4).

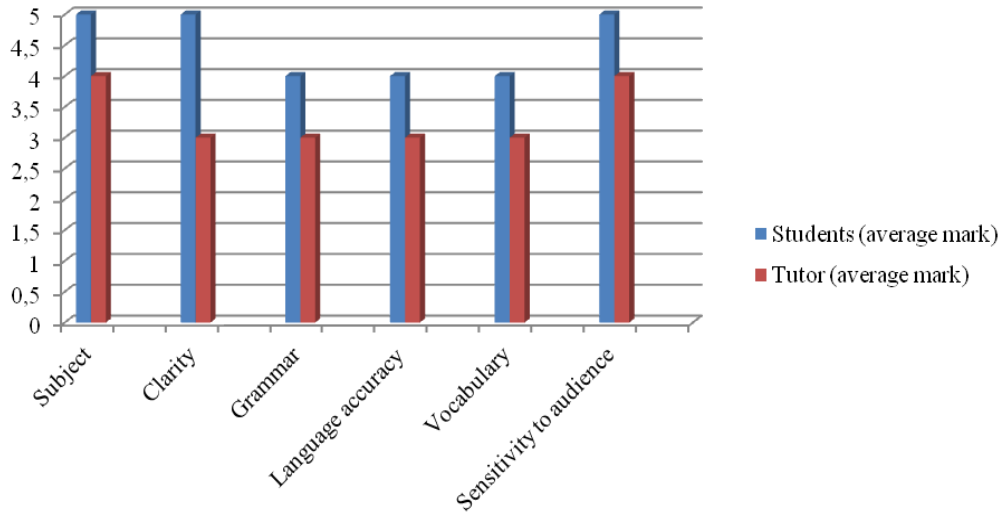

Figure 3. Assessment results

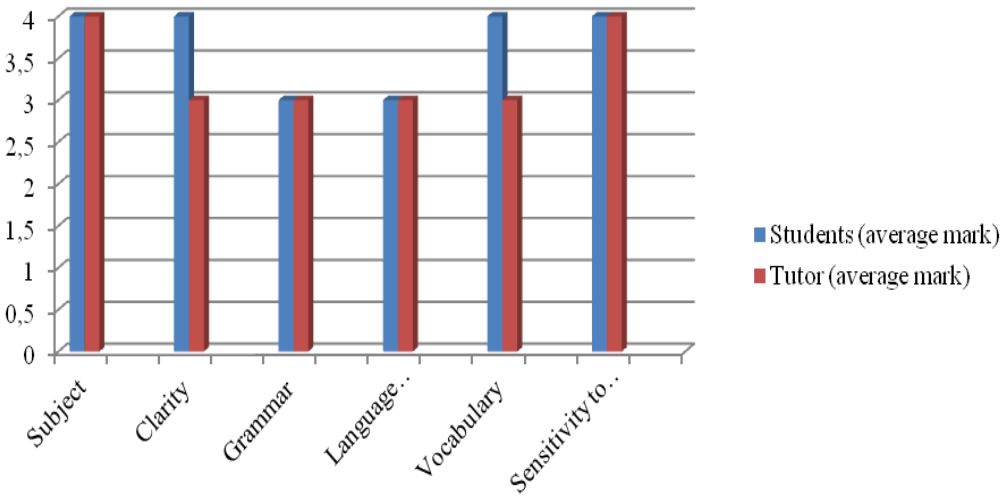

Figure 4. Assessment results

The examination of learners' assessment and evaluators' assumptions with regard to students' performance showed positive changes in education process perception both by instructors and listeners. We reckon students' involvement in the process of learning results evaluation to be essential thus motivating to take full responsibility for future learning. The results proved the efficiency of peer assessment method in meaningful learning formation by observing students' final project presentation.

Discussions and conclusion

Students' autonomy in choosing their way to build education and career prospects is vital to promote lifelong learning practice, which is considered to be an essential skill for their professional promotion. New approaches to assess knowledge are required to build such independence of mind. Authors reckon peer assessment to be one of the tools to stimulate meaningful learning process.

The experiment outcome convinced that contradiction between students' perception of learning and teaching practices of educators is eliminated by the paradigm shift from direct form of teaching to a more collaborative one. The experiment has implications for teaching and assessing. The findings of the research are of direct practical relevance. We state meaningful learning to have crucial value both for Bachelor and Master students' success in mastering the English language and maintaining learners' continued engagement in the process of acquiring linguistic competence.

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Disclosure statement

No potential conflict of interest was reported by the authors.

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