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ОБ ЭКСПЕРИМЕНТАЛЬНОМ ПРОЕКТНОМ ОБУЧЕНИИ АНГЛИЙСКОМУ ПИСЬМУ И КОМПОЗИЦИИ С ИСПОЛЬЗОВАНИЕМ ИНТЕРАКТИВНЫХ ТЕХНОЛОГИЙ

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АННОТАЦИЯ

В этой статье рассматриваются различные вопросы, связанные с применением экспериментальной проектной методики при обучении английскому письму и композиции в высшей школе. Авторы описывают свои впечатления, полученные от совместного экспериментального исследования, проводившегося в течение трех семестров с несколькими группами учащихся в государственном университете Ball State University (г. Манси, штат Индиана, США) с осени 2012 г. в рамках многоэтапного проекта ILS (Интерактивное обучающее пространство). В этой связи затрагиваются такие наиболее проблемные аспекты, как: специфика обучения письму и композиции в интерактивной среде; возможности использования различных форм и видов проектной деятельности; основные преимущества и сложности внедрения в образовательную практику групповых проектов; практическая разработка учебных, тестовых заданий, нацеленных на активное, индивидуальное, личностно ориентированное обучение студентов; применение новейших видов современного компьютерного оборудования, в том числе цифровой техники и т. д. Детальный статистический обзор результатов экспериментальной работы в данной статье подтверждает эффективность применения исследовательских проектных методов при обучению письму и композиции в высшей школе. На основе всестороннего анализа представленного в исследовании обширного теоретического и практического материала авторы приходят к вполне обоснованному выводу, что общая интенсификация учебного процесса за счет массового внедрения новейших интерактивных технологий на всех уровнях современной системы образования обеспечивает несомненную успешность, высокую результативность и хорошие перспективы преподавания гуманитарных и других учебных дисциплин в целом, равно как и практического обучения тем или иным их аспектам в частности.

Ключевые слова: интерактивные технологии, проектный метод, экспериментальное исследование, философия конструктивизма, групповая работа.

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ABOUT EXPERIMENTAL PROJECT TEACHING OF ENGLISH WRITING AND COMPOSITION WITH THE USE OF THE ACTIVE TECHNOLOGY-ENHANCED ENVIRONMENT

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ABSTRACT

This paper deals with an experimental project method applying in teaching English writing and composition in an American higher school. The authors describe their impressions of a joint research, started in the autumn of 2012 and having been carried out in Ball State University (Muncie, Indiana, USA) with several groups of scholars within three terms in the frame of ILS (Interactive Learning Space) multi-stage project. In this connection they touch upon such most problematic aspects as: interactive environment-enhanced writing and composition teaching specific aspects; project activity different forms and types using possibilities; collaborative projects implementing into educational practice advantages and problems; working out assignments, tasks and tests specially aimed at active, individual, personally oriented students' learning; modern computer equipment and digital devices, in particular, newest types applying, etc. The detailed statistical review of experiment project work results given in the article proves the effectiveness of research project methods use in teaching writing and composition in higher schools. Basing on the multi-aspect analysis of vast theoretical and practical material presented in the research the authors come to a well founded conclusion that teaching process general intensifying by means of newest interactive technologies mass introducing on all levels of modern education system can doubtlessly provide success, high results and good prospects of humanities and other subjects teaching on the whole, as well as their particular aspects practical learning.

Key words: interactive technologies, project method, experimental research, constructivist philosophy, collaborative work.

Introduction. As far as it is known, the theoretical concept of active learning originated in the constructivist philosophy on education. It postulates that new ideas take root in the prior knowledge of learners; therefore, the best educational projects are those that require the use of students' personal interests and experiences [Fosnot, p. 67]. Another tenet of this philosophy is that learners construct their own new knowledge, as they interact with reality or other students with different perspectives [Dornisch, p. 219]. Under this framework the teacher's task is to help students personal interest in class assignments, require them to conduct hands-on, experiential research, and encourage collaboration. Students' activity is stimulated by interactive methods of teaching such as: discussions, team work and participating in projects, aimed at attaining real goals [Fosnot, p. 72], as well as scholar tasks compiled in such a way as to make students independently research the material, carry out field work, use original sources etc. [Brown, p.89]. Of course, students' active role in teaching process also presumes their constant use of various digital technical devices which become at present more and more indispensable in their every-day life and help to get new information. Of course, this increasing emphasis on student autonomy, i.e. self-directed studies inevitably moves the centre of gravity away from the teacher with scholars expected to take more responsibility for their own learning. So, one can state that in the frame of (inter)active learning students become the subject of education process and obtain knowledge in course of research and experiments. At the same time, any teacher can play the role of a

learning facilitator, mainly mentor or adviser, student assessor and not a source of ready to use information [Dornish, p. 221].

As a matter of fact, the theoretical foundations of (inter)active learning were built primarily in the 1990s in connection with the massive introduction of computer-based technology in western education, in particular through the world-wide web (www), e-mail, forums and internet guiding systems (SmartBoard, Blackboard etc.). The emergence of multiple mobile and ubiquitous technologies in the 2000s gave a new impulse to using in education practice and theories of social nets and digital learning favoring learning-in-context scenarios. Worldwide, frameworks are recently being developed for the acquisition of digital competences, including the National Educational Technology Standards (ISTE) and the Framework for 21st Century Learning (P21) in the United States, which "set a standard of excellence and best practices in learning, teaching and leading with technology in education" [Florman, p. 145]. The extensive research on technology-assisted active learning has yielded generally favorable results. Quantitative research concludes that in active-learning classrooms teachers are becoming facilitators who supervise students to learn new ideas and practices [Brown, p. 92]. At the same time, teachers promote student autonomy, self-determination and choice [Dodge, p. 138]. In their turn, students are increasingly demanding excellence in teaching [Brown, p. 93], seeking class environments where they can apply their knowledge and develop expertise. These two conditions considered, the benefits of learning in an active environment, which is also technology-rich, seem to be obvious [Auster, p. 168]. However, it has been suggested that technology in the classroom works best when it is "both pervasive and minimalist" [Jaworski, p. 69], that is, provides many options, but is simple to use and not overwhelmingly present. Moreover, for classroom technology to be used to its full advantage, faculty should be provided with quality hands-on training, theoretical support, and a clear link between teaching in interactive classrooms and their individual learning, research, and career interests.

Aims setting. Qualitative research on teaching with technology expressed some concerns. One of them is the divide between the digital haves and have nots, or between those learners who use or have access to telecommunications and information technologies and those who do not [Dori, p. 91]. Another concern is the generational divide, which is similar to the digital one, but in regards of the age rather than income. The third obstacle to proliferation of educational technology is insufficient teachers' training, which makes tutors feel as perpetual novices having the need to catch up with the ever-changing devices [Brown, p. 94]. Under the circumstances, "...a disconnect exists between students' comfort with using technology for learning and teachers' comfort in using technology for teaching.

Students report the desire for more engaging technology-based assignments. Teachers cite multiple reasons for their hesitancy to use technology in their teaching practice" [Dori, p. 82]. However, all three of the obstacles have never been considered insurmountable. As mandated by the American Recovery and Reinvestment Act (ARRA), on March 16, 2010, the Federal Communications Commission (FCC) publically released its report, Connecting America: The National Broad Band Plan. It seeks to "create a high-performance America," which FCC defines as "a more productive, creative, efficient America in which affordable broadband is available everywhere and everyone has the means and skills to use valuable broadband applications" [Steff, Gale, p. 169]. The specific tasks leading to universal affordable access to broadband service are planned to be fulfilled by 2020 [Steff, Gale, p. 172].

Beginning in the mid 1990s, American universities started launching projects on active, technology-assisted learning. The pioneering project was SCALE-UP (Student-Centered Active Learning Environment for Undergraduate Physics, later changed to Undergraduate Programs) in the North Carolina State University. The basic idea is that students are given something interesting to investigate. While they work in teams on these ''tangibles'' (hands-on measurements or observations) and ''ponderables'' (interesting, complex problems), the instructor is free to roam around the classroom—asking questions, sending one team to help another, or asking why someone else got a different answer [Steff, Gale, p. 174]. A similar project TEAL (Technology-enabled Active Leaning) was started in 2001 at Massachusetts Institute of Technology. It merges lectures, simulations, and hands-on desktop experiments to create a rich collaborative learning experience in physics classes ("TEAL"). Another such project is TILE (Transform, Integrate, Learn, Engage) at the University of Iowa. A particular strength of the TILE Initiative is, first, its reach beyond the natural sciences to include social studies and humanities, and, second, its focus on providing training to the participating faculty.

Experiment research course. A modern active learning project of 3-term duration launched in the fall of 2012 at Ball State University in four student groups, including one control and three experimental ones, was ILS (Interactive Learning Space). The total amount of students in experimental groups was 65, each group filled with no more than 20 persons. The experimental project was carried out in two classrooms of the University Teachers' College, newly remodeled and equipped, – the node chair and the media-scape ones. The node chair classroom has twenty-four chairs on wheels with writing surfaces attached and a well for books and backpacks underneath. It also features three interactive Eno-boards and three portable huddle boards, besides the traditional dry board and a teacher's lap top station (Fig. 1).

Fig. 1. The node chair classroom

On one side is a nook with two armchairs, a traditional table and chairs, and a projector screen on the wall in the front. The other room is media-scape, which has four oval-shaped tables with six chairs around each of them, and a screen attached to one end. Besides, there is a teacher's lap top station, a large screen attached to the wall, and a traditional dry board (Fig. 2). The screens can be operated from the teacher's station or from individual students' laptops.

Fig. 2. The media-scape classroom

As a matter of fact, we started teaching English Composition 104, Composing Research, in the node chair classroom of Ball State University's ILS (Interactive Learning Space) in the fall of 2012 in a control group, consisting of 17 persons. The initial students' reaction to the classroom configuration was unfavorable; the chairs arrangement seemed disorganized and not conducive to any serious learning. Our own reaction was somewhat similar; we spent more effort on trying to navigate around the chairs than delivering the class material. After several weeks, however, a nice solution was found by asking my students to form a large circle and sitting in the circle with them ourselves. By the end of the first semester in ILS, we got the results of a survey conducted by the ILS administration. One comment stood out: "I like it [the classroom] but I do not think this class is the right one for it", and we could see the point. To us, writing was taught as a heavily structured activity, done alone over many hours of rigorous work, and to start teaching it interactively, collaboratively, and on top of that with the use of the state-of-art technology, was going against our ingrained expectations. One more obstacle probably encountered when teaching English composition in a transparent interactive environment can concern the mental processes involved in writing. This can be best demonstrated on a writing sample, undoubtedly not typical, taken from a junior student's essay on the topic "Englishmen: what are they like":

«Most people *believe Englishmen as mostly reserved persons,* fully closed to strangers. They are surely *not inclined* to contacting with unknown people in the street or elsewhere. They never invite anyone *to their homes*, *living there* privately. The British *probably dislike* queues and noise in public places. Smoking in public *is not in their habits* either. There are even special smoking rooms in most English cafes, bars and restaurants...».

Of course, this citation (errors are marked in italics) clearly shows some gaps in a scholar's knowledge that can be rather easily filled in by referring to specific syntax and style norms in writing. Any possible teacher's comments on it can't be clear enough for one reason: one can't know for sure what is going on here. The writer's mental processes become to us quite opaque. Since we don't know what made the student come up with this or that sentence, we can't be thus sure how to lead him through the process of revising, let alone organize this process in such a manner that it is active, collaborative and technology-effective. Just for these reasons, even before we started the project implementing several preliminary (pre-test) strategies were developed to teach writing in an active, student-centered environment. First, we started making assignments which were conducive to active learning, asking students to select topics that were relatable to them, preferably based on their previous knowledge and experience; besides, most of assignments required fieldwork. Second, we started giving students frequent feedback on their multiple drafts (or, more commonly, sample paragraphs). Over two or three semesters of using these two strategies, one could see a significant increase in the quality of the final projects we were getting, which was an indication that these strategies worked. About the effectiveness of two other strategies having been used we are not so sure. One is collaborative writing projects. As a rule, we like them because they save time and effort; instead of commenting on, for example, twenty five individual projects, one has to deal with twelve or fewer. However, our students more than once expressed their dislike towards collaboration in class, primarily because of team loafers and having to pick up their shares in order to get a decent grade. Another, more substantial reason why we were not and are still not sure about the benefits of collaboration in writing is that so far one has been unable to supervise the team work in classes effectively. A recent example is a group project on writing a literature review on "Steroids in Sports: Recent Discoveries and Sanctions". The three students working on the project came up with three subsections of the review, each written individually, and failed to edit the final paper for a unified voice and style; as a result, the paper turned out to be three individual efforts instead of one collaborative. We, from our side, were unable to detect the problem in time or successfully reverse the process.

Another challenge is the ILS technology, the Eno-boards and media-scape. So far, we have not found a way to use these devices in a manner that would be

integral to our pedagogy, engaging for students, and personally satisfactory to us. One feels that the Microsoft Office with its built-in tools of dictionary, thesaurus, bibliography, and so on fits the purpose of writing, revising, and editing better than the interactive equipment we have in our classrooms. However, we did make other discoveries in the pedagogical use of technology. Thus, one seldom stands at the teacher's lap top station anymore; instead, we sit in a large circle at the same eye level with the students and either guide them through the materials prepared for a particular class or ask them to explore the web on their own with the help of their own digital devices with access to the internet. For example, in our discussion about visual rhetoric we asked them to log into the home page of New York Museum of Modern Art and navigate through its collection, directing them to particular pieces for discussion. Alternatively, we asked them to find certain information on the web using sets of key words. In this way our instructions seemed to be once student-centered (active) and technology-enhanced. Therefore, gradually the students were getting used to a so called collaborative (team) writing. While working at the project we have also discovered, that our instructions and guiding actions alone turned out to be not sufficient; one should also pay attention to the psychological factor, that is considering the students' personal character, temperament features. It's quite necessary in order to eliminate arguing, conflicts, quarrels, possibly emerging in such a context. In this connection we tried to use the so called Leadership Compass — a special guide elaborated for collaborative work on the base of North American Indians' practice of keeping healthy relations in a tribe [Florman, p. 152]. Therefore, just at the first project studies the scholars were to guess what personal type they can relate themselves to: the northern type — warrior, the southern type — quack, the western type — a teacher or the eastern type — a prophet. After that we lead a discussion on the point: what features of this or that personal type should be taken into consideration while working in a team. All over the period of project learning, the students were also offered to fulfill the following tasks: to estimate their own contribution into the whole work, to express their wishes towards other group members and to analyze the results of collaborative efforts.

Results obtained. At the final stage of our 3-semester experimental project activity we could clearly see a considerable improving of students' English language quality and speech habits, in particular, of their writing and composing skills. The total statistical report of experimental project work practical results is given in the tables 1—4 below.

It's quite evident that in all the four groups: 1) the total errors number has considerably decreased at the third experiment stage in comparison with the first and second stages; 2) the number of students committing errors of different types has finally decreased too; 3) one can easily observe the same regularity in correlation of different types errors numbers at all three experiment stages. This positive dynamics evidently proves a rather high effectiveness of using experimental

Table 1

The project work results in the control group (17 students)

Experiment stage	Total errors number	Errors classification			
		Style errors	Grammar errors	Lexical errors	Orthography errors
I semester	230	126	76	18	10
II semester	119	69	36	9	5
III semester	34	16	14	3	1

Table 2

The project work results in the first experimental group (20 students)

Experiment stage	Total errors number	Errors classification			
		Style errors	Grammar errors	Lexical errors	Orthography errors
I semester	244	129	80	20	15
II semester	126	70	38	10	8
III semester	40	18	16	4	2

Table 3

The project work results in the second experimental group (15 students)

Experiment stage	Total errors number	Errors classification			
		Style errors	Grammar errors	Lexical errors	Orthography errors
I semester	207	122	74	14	7
II semester	65	64	30	6	5
III semester	31	18	11	2	0

Table 4

The project work results in the third experimental group (13 students)

Experiment stage	Total errors number	Errors classification			
		Style errors	Grammar errors	Lexical errors	Orthography errors
I semester	205	118	71	11	5
II semester	92	59	26	4	3
III semester	23	14	9	0	0

PLM (project learning method), presenting a so called starting ground for applying various teaching technologies, and this is provided primarily by its basic person-tended approach, making a student an active subject of learning process.

Summary. On the whole, (inter)active student-centered learning, based on the concepts of apprenticeship and entrepreneurship (critical thinking and problem-solving) and embraced by progressive teachers long before it became the leading philosophy in education [Brown, p.106] presents a real modern technology which can be broadly viewed as an array of tools. In this understanding, it can encompass not only computers and other digital devices, but also methods, approaches, and techniques. The Greek ''techne'' means ''craft'' or ''art'', so the concept of educational technology may be extended to include any techniques an educator uses for the advancement of knowledge in his or her class.

Thus, it is quite obvious that the teaching process intensifying by means of interactive technologies and methods mass introducing as the result of learning process orientation towards the subject himself provides its effectiveness and success not only in the American education system, but in the whole European and world space. In particular, in Russian modern education context interactive project activity is also used rather widely as well as business and role games, case − methods, Euristic conversations, brain attacks, discussions etc., most adequately corresponding to the main tasks of key competences forming. In this connection the highest value is attained by higher schools practical projects claiming the necessity of systematic and multi-aspect problematic research and getting a real result − the education product. In the course of such projects (pair, team, individual) realizing students also gain necessary habits of effective using scholar, methodical, scientific and reference literature.

All in all, experimental project methods can be considered as one of personally oriented modern technologies, based on the idea of developing learners' cognitive skills and competences, creative abilities, habits of independent thinking, making prognoses, finding and solving problems, estimating the results of personal activity, adapting to rapidly changing conditions of every-day life. Any teacher, working in the interactive environment has to know the bases of constructivist theory in education and resulting pedagogical conceptions. But even more important is a close communication with colleagues − practitioners while discussing various problems constantly emerging in teaching practice and searching for appropriate ways of their solving. All this will surely contribute to the learning quality rate increase, what stimulates in its turn students· interest not only for the subjects or programs in question, but also for higher school education system in general.

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