INTRODUCTION
Recently new technologies have been integrated in the process of education. Higher education and teacher training have to adhere to the new trends in education. Teacher training nowadays combines different ways of giving future teachers competences and skills: flipped classroom, active learning, project work and others. New trends have become even more valuable due to the pandemic of corona virus when people are no longer willing to contact but more preferably attend open courses on internet platforms. However, teaching foreign languages in teachers training universities can hardly be fulfilled only via internet. More research is being done on benefits of active learning in class community. Students must learn the basis of the language, methods of investigation, different approaches to language study not only through internet courses.

In our previous studies we investigated the influence of student-centered approach, particularly using studio-format during lectures on theoretical grammar. The result of the research showed growth of interest on the part of the students and wider usage of different strategies in learning English grammar (MUKHTAROVA, TSYGANOVA, 2018). Another our research showed that the use of socio-cultural approach also managed the use of strategies in learning a second foreign language (SINICHKINA, FAIZRAKHMANOVA, MUHTAROVA, 2021).

In this study we concentrate on raising the effectiveness of teaching part-time students’ grammar due to the using Just in Time Teaching (JITT).

MATERIALS AND METHODS
JITT is a kind of active learning pedagogy that can serve as a means of solving problems and misunderstandings that may appear after studying the material on your own via internet. JITT may serve as a links between work that students do prior to class with in-class activities (LIBERATORE, MORRIS, VESTA, 2017).

Using only online courses and open platforms does not give the students the feeling of community, they lack comfort and pleasure of real communication, the sense of connectedness. Researchers investigate the influence of teamwork on students’ perception of classroom community which showed that team-based learning promoted more sense of connectedness and community than just online learning (PARRISH, GUFFEY, WILLIAMS, 2021). However using multimedia and computer-based courses does not prevent from creating teamwork according to many other opinions (ASHTON, 2014). The necessity of online courses that form the basis of further study is stressed in many other works (QUINN, KENNEDY-CLARC, 2015; HEEP, 2017).

However designers of online courses cannot but promote their courses describing their advantages. The general opinion of our students is that online courses help economize time when collecting data on some particular topic, however they are not a substitute for real face-to-face learning of the language. This article is written on the basis of survey. Third year part-time students were suggested two surveys: the first on their personal preferences concerning the subject of online-courses and active learning inside the class (face-to-face) combined and the second based on questionnaire by Oxford, which shows the influence of using JITT on the students’ strategies of learning the English language. Also we have compared the
Positive effect of using just-in-time teaching with part time students in a pedagogical university

Laplage em Revista (International), vol.7, n. 3C, Sept. - Dec. 2021, p.535-542
ISSN: 2446-6220

achievements of the students of the previous year of study (2019) - all 42 students who received the course of study in traditional format and the current students (2020-2021 year) who received their JITT course of grammar.

JITT can be defined as unity of active learning pedagogies (SIMKINS et al., 2009; NOVAK, 1999). It helps students to be better prepared for class activities (GARVIN, 2010). It helps blend active learning with web technology (NOVAK, 1999). It is considered to be two components that work together to provide feedback thus enhancing understanding of material based on homework and involves discussion and other active forms of work during the class.

All in all JITT is supposed to have the major advantage of raising the level of awareness thanks to preparatory work and increasing cognitive thinking and emotional feedback. Before applying JITT students must collect information and we must measure how well they understand it (LIBERATORE, 2011; STEIF, DOLLAR, 2009). Information on grammar is usually set of rules, tables of grammar models, concept questions and sets of tests. Online homework provides the preliminary assessment of this (SIMKINS, MAIER, 2004).

RESULTS AND DISCUSSIONS

So we claim that JITT helps construct cognitive and metacognitive thinking and employ social and affective strategies that facilitate the process of learning a second language, grammar in particular. Our aim is to check the effectiveness of this method on the basis of survey and testing performed on part-time students in Naberezhnye Chelny State Pedagogical University in 2020-2021 Academic Year. We had a group of 42 third-year students who fulfilled their course of grammar with JITT. They had a Moodle course of Grammar with lectures and Practical tasks online and active learning classes in the University. In comparison the 44 students of the previous 2019-2020 Academic Year had only 36 hours of in-class work in traditional format (lectures and practical tasks only). The experiment is described in detail further on.

We have compared the results of the students of two groups, the first that received traditional course – lecture and practical classes (grammar exercises only) in 2019 and the second in 2020-2021 with JITT.

Table 1. Students’ achievement in grammar

| Criterion                        | The first group with traditional teaching | The second group with JITT |
|----------------------------------|------------------------------------------|----------------------------|
| Average grade in the group of students (max 5) | 4,1                                      | 4,4                        |
| Skill to use grammar models (max 10)  | 6                                        | 8                          |
| Skill to analyze grammar constructions (max 10) | 6                                        | 9                          |
| Skill to correct grammar mistakes (max 10)  | 5                                        | 7                          |
| Skill to interact in group work (max 5)  | 2                                        | 4                          |
| Skill to ask questions (max 5)  | 3                                        | 4                          |
| Skill to answer questions (max 5)  | 4                                        | 4                          |

Source: Search data.

Before the experimental group received JITT classes they had a Moodle course. The experimental group of the 2020-2021 Academic Year had 6 blocks of material to study (The Noun and the Article, English Tenses, Passive voice, Means of expressing unreality, i.e. Subjunctive Mood and Modal verbs Non-finite forms of the verb, Sentence structure) followed by a test (to check their understanding) and 6 practical tasks which contained exercises (fill in the blanks, make up a sentence, paraphrase using a grammar construction and texts to give a thorough grammatical analysis. When they came to the university the work they had done before, test results, and practical tasks served as a basis for in-class activities. According to test results after online course students had problems with Passive Voice (45%), Making up questions (68%), Using articles (34%). Also students had difficulties when paraphrasing sentences to use non-finite forms of the verb (67%) and when analyzing texts with non-finite forms of the verb (46%) Use of JITT was aimed at filling in the gaps of knowledge and raising
their ability to find out more information and build metacognitive skills to improve grammar and not only that. We assume that an intending teacher must be successful in communication.

The second stage of our experiment was the step of using JITT in practice. So students had 6 double classes of Grammar organized in the form of student-centered format which was a combination of such well-known technologies like flipped classroom, studio-format, case study and other forms of active learning. Let us describe these 8 double classes.

The first was discussion where students were to work in groups and draw up a scale of the most difficult questions they had during the online course. They had 15 minutes to discuss the problems in groups of 4 students and presented their lists of most difficult issues putting them in the order of increasing difficulty. After the discussion each group had a speaker who was to explain what was particularly difficult. The second task was to make up sets of tasks for the other group to fulfill on the most problematic topics. The groups had 40 minutes to fulfill that task on a separate sheet of paper. After finishing the groups exchanged the tasks in clockwise order. The groups did the tasks together for 10 minutes, then exchanged the sheets clockwise again. After doing all the tasks the group leader was to read the correct variant of his task to all the students for them to check. Doing this type of group work helps to clear up the misconceptions of the students and also trains future teachers to make up tasks. The tasks can be considered like miniprojects of a test paper, it encourages students to perceive the result of their group work.

The second class was also organized in studio format. Each group delegated one member to the other group to explain to them some particular topic, which they had previously written on the board. The group discussed the topic, found out more information, they had 40 minutes to clear up the topic they were going to explain. After that the delegate went to the group and tried to explain the topic. He could use tables, schemes but he had to try to explain the topic in his own words.

The third and the fourth classes were a case study. The students worked on their own and were to solve the cases in the cards for 15 minutes and go to the board to explain their solution. The others should listen and ask questions if they have some difficulty in understanding the material. Others may suggest their own variant after they have heard the speaker. Each student has his own card. Here are some examples of the cards with a case:

‘You have lost your keys and can’t remember where you put them. You are trying to recollect the events and find possible way out’.

‘You are expecting a friend of yours to come. She is in the habit of keeping the others waiting. You are losing your patience’.

The fifth class was working in groups of 4. The group must make up a story making grammar mistakes. They have 40 minutes to make up a story. After that they exchange the sheets of paper clockwise. To correct the mistakes the group has 10 minutes. The groups can do this work in their own note-books and continue sharing sheets of paper with other groups.

The sixth class was a discussion. The teacher enumerated the topics they had covered and the students were to discuss in English if they still had problems with the topics. If a certain student had some problems, volunteers raised their hands to help the problem student clear up some things. They went to the back part of the classroom and were free to work with text-books, tables, schemes etc. In the experimental group 6 students still had problems with article and Non-finite forms of the verb.

Use of JITT showed increase of different skills like using grammar models (by 20%), to analyze grammar models (by 30%), to correct grammar mistakes (by 20%), to interact (by 20%), to ask questions (by 10%), the ability to answer questions hasn’t changed as the traditional approach teaches to answer questions none the worse.

They had 40 minutes to fulfill a test paper. The skills were checked on the basis of a standard test work given after the course, which contained the following tasks:

1. open the brackets using appropriate grammar models;
2. correct mistakes in the given text;
I. Use the appropriate form of the gerund of the verb in brackets:
   (1) I don't mind (to leave) for the Crimea right away.
   (2) I strongly suspect John of (to know) about it beforehand, though he swears he didn’t.
   (3) I remember (to take) to Vienna when I was a small boy.
   (4) You may be free after (to fulfill) the task.
   (5) Will you forgive me for (to lie) to you?
   (6) She denied (to see) me that day though I recognized her.

II. Analyze the mistakes in the given extract:
"I was, I think, well educated for standard of my day. My sister and I had German governess – a Fraulein. The very sentimental creature. She taught us a language of flowers - the forgotten study nowadays, but the most charming. The yellow tulip means 'The Hopeless Love', while the China aster means 'I die of the Jealousy at Your Feet'. That letter was sighed as Georgina which I seem to remember as dahlia in the German, and that of course made a whole thing perfectly clear. I wish I could remember meaning of dahlia, but alas, that eludes me" (ENGLISH STORY, 2004).

III. Analyze the grammar forms in the given sentences.

IV. Ask questions to the sentences.

V. Discuss the text in groups so that to define tasks that you would make to check the grammar material of the text.

VI. Answer the questions:
   (1) What is being constructed in your town now?
   (2) Who was the book ‘Idiot’ written by?
   (3) When will the new road be built?
   (4) Who is the control work done by?
   (5) What has been just said?

The average mark (max 5 points) was put to the students according to the following criteria:
(1) The student demonstrates skills to use, analyze grammar models, can use them in his speech, can put and answer questions, interact in the group without making mistakes – 5 points (excellent)

(2) The student demonstrates skills to use, analyze grammar models, can use them in his speech, can put and answer questions, interact in the group but makes 1-2 slight mistakes – 4 points (good)

(3) The student demonstrates skills to use, analyze grammar models, can use them in his speech, can put and answer questions, interact in the group but makes 1-2 rude mistakes – 3 points (satisfactory)

(4) The student has difficulty with grammar constructions, cannot use and analyze them, cannot interact in a group, makes more than 3 mistakes – 1-2 points (unsatisfactory)

(5) Also as in our previous studies we have done a survey checking the interdependence of the new method and the strategies of education.

According to Oxford learning requires specific actions which help to make this process easier (OXFORD 1990, p. 8). Most teachers seek new methods and approaches to eliminate all difficulties in learning new languages and new phenomena. The actions that help most in learning a second language are called learning strategies. In our study we put under analysis metacognitive, affective and social strategies. They facilitate language learning without directly changing the language learned itself. They are used as an instrument in learning the basic language skills (TILFARLIOGLU, 2005).

Metacognitive strategies help the learner to regulate the process of acquiring knowledge using his own ability to organize this by overseeing and self-control of the process.

Affective strategies help the learner to regulate his emotional state by putting down his nervousness, anger and suchlike feelings, reinforcing your positive state of mind thus making the process of learning more productive. Psychology is universally known to be one the main factors of success.

Social strategies is a mode of social behavior and interaction. Learning a foreign language is especially beneficial among people, in communication. Social strategies are grouped into three units: asking questions, mixing with others and encouraging others (TILFARLIOGLU, 2005).

So before and after the experiment our part-time students underwent testing of strategies. We had 42 students getting the course of grammar with JITTT in 2020-2021 year of studies.

42 students fulfilled the Test, and a Likert-scale Grammar learning strategies questionnaire (OXFORD, 1990). Descriptive statistics, survey data showed that before the experiment students use cognitive strategies most preferably, the second most used strategy is affective strategy, then comes the metacognitive strategy. After the course of grammar with JITTT the results of the test and survey showed the growth of affective and metacognitive, social strategies by 1.2%, 2.7% and 1.1% respectively. The experiment shows that using JITTT raises the use of other than cognitive strategies rather significantly and turns out to be rather beneficial. Let us analyze the descriptive statistics in detail.

The Grammar Learning Strategy Questionnaire contains 43 items, questions on the learning strategies mostly used by the learners. The aim of the survey was to find out the following:

(1) 1) The interdependence of the grammar learning strategies and the JITTT method used at grammar classes;

(2) 2) Grammar learning strategies are used before and after the experiment;

(3) 3) The difference between male and female students;

We assume the tools to collect the data, to analyze the ability and competence of the students to be valid and reliable.

The students had 15 minutes to fulfill the questionnaire assessing their level of agreement with the question according to the scale from the lowest mark of frequency 1 (never) to the highest
The average degree of using strategies was calculated to show what strategy was preferably used by the students.

**Table 2. Using learning strategies before and after the experiment with JITT.**

| The answer of the students that used the strategies | Before the experiment with JITT | After the experiment with JITT |
|----------------------------------------------------|--------------------------------|--------------------------------|
| Always                                             | 2                              | 21                             |
| Sometimes                                          | 5                              | 6                              |
| Seldom                                             | 30                             | 9                              |
| Never used                                         | 4                              | 6                              |

**Source:** Search data.

Descriptive statistics, proves that the level of using learning strategies to achieve good results in grammar learning is not high, they resort to strategies seldom as they consider grammar just a part of everyday learning routine. The most frequently used strategies are cognitive ones, as for social and affective strategies students do not use them on purpose. Let us analyze the use of particular strategies before and after the experiment.

**Table 3. Using cognitive, metacognitive, affective and social strategies before and after the experiment.**

| Strategy             | Mean before the experiment | Mean after the experiment |
|----------------------|----------------------------|---------------------------|
| Total                | 2.817                      | 3.123                     |
| Cognitive            | 3.416                      | 3.484                     |
| Meta-cognitive       | 3.081                      | 3.122                     |
| Social               | 1.985                      | 2.865                     |
| Affective            | 0.968                      | 2.997                     |

**Source:** Search data.

Before the experiment students resort mostly to cognitive strategies trying to remember or associate, they remember general rules and can analyze and correct grammar mistakes according to the material they received before, but they cannot use strategies to oversee their results, to regulate their preparation work, to make the process of learning encouraging yourself by teamwork or collaboration. Only few make use of psychological mechanisms to reach particular aims in language acquisition. Thanks to JITT students learn to switch on hidden mechanisms and find inner abilities to learn better.

Our observations as in our other experiments also showed that female students used affective and social strategies approximately twice more often than male students who are more independent in their thinking and preparatory work. The number of male students in part-time department was only 3 students, that is why we did not measure the results of the survey separately. There is no other division in this group like nationality which could serve to judge the difference, all students were of nearly the same age, nationality and sex.

Also the students were suggested doing a survey which checked the general impact of JITT on the students. The questions were as follows:

1. Did you like classes arranged in JITT format?
2. Was online work helpful/enough/difficult?
3. Does active learning boost your understanding of grammar?
4. What did you learn to do better after JITT, underline: ask questions, answer questions, analyze grammar, correct mistakes, interact with your peers, solve grammar problems (if other suggest your variant)?

The results proved the results of the test paper (Table 1) and reflected the positive emotional impact of JITT on the students.

**CONCLUSION**

So the use of the JITT proved to be quite effective. The experimental group of part-time students had better results in Grammar test paper after working in JITT format. In comparison with the group of the previous Academic Year that has not received JITT and didn’t show such good results. Especially evident is the improvement of such abilities like asking questions,
correcting mistakes, working in interaction and analyzing grammar material. In average the results are by 20% better.

Also using JITT helped to built such strategies of learning a foreign language like metacognitive (2.7% growth), affective (1.2% growth), social (1.1% growth). The growth was evident after collecting the data of the survey. Part-time students learn to apply different new mechanisms in learning a foreign language, learn to use their short time given for in-class work to succeed in their language acquisition.

REFERENCES

ASHTON, J. Using multimedia to build a sense of community with online distance learners. Journal of Instructional Research, 2014, 3, p. 97. Available at: <https://files.eric.ed.gov/fulltext/EJ1127644.pdf> Accessed: 25 July 2021.

ENGLISH STORY. Publishing: MANAGER, 2004.

GARVIN, A. Just in time teaching, 2010. Available at: <https://journals.iupui.edu/index.php/muj/article/download/20284/19877/28125> Accessed: 15 July 2021.

HEAP, T. Benefits of studying online, 2017. Available at: <http://online.illinois.edu/articles/online-learning/item/2017/06/05/5-benefits-of-studying-online-(vs.-face-to-face-classroom)> Accessed: 12 May 2021.

LIBERATORE, M. W. Improved student achievement using personalized online homework for a course in material and energy balances. Chemical Engineering Education, 2011, 45, p. 184-190. Available at: <https://www.learntechlib.org/p/109379/> Accessed: 28 April 2021.

LIBERATORE, M. W.; MORRIS, R. M.; VESTA, CH. R. Effectiveness of just in time teaching on student achievement in an introductory thermodynamics course effectiveness of just in time teaching on student achievement in an introductory thermodynamics course. Advances in Engineering Education, 2017, 6 (1), p. 1-15. Available at: <https://advances.asee.org/wp-content/uploads/vol06/issue01/Papers/AEE-20-Liberatore.pdf> Accessed: 18 April 2021.

MUKHTAROVA, R.; TSYGANOVA, E. Benefits of student-centered methods in teaching theoretical grammar. Modern Journal of Language Teaching Methods, 2018, 8 (12), p. 846-855. Available at: <https://kpfu.ru/staff_files/F546191514/mjltm_v8n9p1_en.pdf> Accessed: 18 April 2021.

NOVAK, G. et al. Just-in-time teaching: blending active learning with web technology. Addison-Wesley Professional; 1st edition, 1999.

OXFORD, R. Language learning strategies: what every teacher should know. New York: Newbury House Publishers, 1990.

PARRISH, Ch.; GUFFEY, S.; WILLIAMS, D. The impact of team-based learning on students’ perceptions of classroom community, Active Learning in Higher Education, 2021. https://doi.org/10.1177/14697874211035078.

QUINN, M.; KENNEDY-CLARC, S. Adopting online lecturing for improved learning: A case study from teacher education. Journal of University Teaching & Learning Practice, 2015, 12 (3/9). DOI: 10.53761/1.12.3.9

SINICHKINA, A.; FAIZRAKHMANOVA, L.; MUHTAROVA, R. Linguocultural approach as means of managing learning strategies when teaching a foreign language. SHS Web of Conferences. 2021, 97, p. 345, 01041. Available at: <https://www.shs-conferences.org/articles/shsconf/pdf/2021/08/shsconf_teduvis2020_01041.pdf > Accessed: 12 April 2021.
SIMKINS, S., MAIER, M. Using just-in-time teaching techniques in the principles of economics course. Social Science Computer Review, 2004, 22 (4), p. 444-456. Available at: <https://doi.org/10.1177/0894439304268643> Accessed: 10 June 2021.

SIMKINS, S. et al. Just in time teaching: across the disciplines, and across the academy (new pedagogies and practices for teaching in higher education). Stylus Publishing; 1st edition, 2009.

STEIF, P.; DOLLAR, A. Study of usage patterns and learning gains in a web-based interactive static course. Journal of Engineering Education, 2009, 98 (4), p. 321-333.

TILFARLOGLU, Y. An analysis of the relationship between the use of grammar learning strategies and student achievement at english preparatory classes. Journal of Language and Linguistic Studies, 2005, 1 (2), p. 157-164.

Positive effect of using just-in-time teaching with part time students in a pedagogical university

Este artículo se centra en el problema de usar el aprendizaje activo y los ejercicios en casa como una segunda lengua. Just in Time Teaching (JITT) se considera la combinación de aprendizaje activo y ejercicios en línea que demuestra su eficacia. Los autores se expalan sobre las ventajas de JITT con el fin de dar el curso más informativo en el menor período de tiempo posible. JITT facilita que los estudiantes involucren más estrategias de aprendizaje y ejercicios en casa para lograr los mejores resultados y la adquisición del lenguaje. Para conocer los datos se realizó la investigación en la universidad. Incluyó una encuesta que se llevó a cabo antes y después del experimento con JITT. Los resultados del estudio mostraron un gran crecimiento en los logros de los estudiantes y el interés por el tema.

Keywords: Grammar classes. Active learning. Just in Time Teaching. Learning strategies. New technologies.

Resumen

Este artículo se centra en el problema de usar el aprendizaje activo y los ejercicios en casa como una segunda lengua. Just in Time Teaching (JITT) se considera la combinación de aprendizaje activo y ejercicios en línea que demuestra su eficacia. Los autores se expalan sobre las ventajas de JITT con el fin de dar el curso más informativo en el menor período de tiempo posible. JITT facilita que los estudiantes involucren más estrategias de aprendizaje y ejercicios en casa para lograr los mejores resultados y la adquisición del lenguaje. Para conocer los datos se realizó la investigación en la universidad. Incluyó una encuesta que se llevó a cabo antes y después del experimento con JITT. Los resultados del estudio mostraron un gran crecimiento en los logros de los estudiantes y el interés por el tema.

Keywords: Clases de gramática. Aprendizaje activo. Enseñanza Justo a tiempo. Estrategias de aprendizaje. Nuevas tecnologías.

Palavras-chave: Aulas de gramática. Aprendizagem ativa. Apenas no tempo de ensino. Estratégias de aprendizagem. Novas tecnologias.

Resumen

Este artículo se centra en el problema de usar el aprendizaje activo y los ejercicios en casa como una segunda lengua. Just in Time Teaching (JITT) se considera la combinación de aprendizaje activo y ejercicios en línea que demuestra su eficacia. Los autores se expalan sobre las ventajas de JITT con el fin de dar el curso más informativo en el menor período de tiempo posible. JITT facilita que los estudiantes involucren más estrategias de aprendizaje y ejercicios en casa para lograr los mejores resultados y la adquisición del lenguaje. Para conocer los datos se realizó la investigación en la universidad. Incluyó una encuesta que se llevó a cabo antes y después del experimento con JITT. Los resultados del estudio mostraron un gran crecimiento en los logros de los estudiantes y el interés por el tema.

Keywords: Clases de gramática. Aprendizaje activo. Enseñanza Justo a tiempo. Estrategias de aprendizaje. Nuevas tecnologías.

Palavras-chave: Aulas de gramática. Aprendizagem ativa. Apenas no tempo de ensino. Estratégias de aprendizagem. Novas tecnologias.