

The Applying of Superstar Learning Platform in College English Flipped Classroom

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Abstract: With the development of mobile technology, education methods have undergone great changes, and the epidemic has also promoted the application and development of distance education technology. We have applied Superstar Learning Platform, a distance education software, to the flipped classroom of college English, which is a complete subversion of the traditional classroom teaching structure and teaching process. It has triggered a series of changes in teachers' roles and curriculum models. Through empirical research, it is proved that this method has achieved good teaching effect, students' interest in learning is improved, their learning motivation is enhanced, their creativity and critical thinking are exercised, and their satisfaction with the classroom and course is improved.

1. Introduction

With the development of science and technology, the way of education has also undergone a huge development. China's Internet is developing rapidly. The "China Internet Development Report 2021" pointed out that the scale of China's digital economy reached 39.2 trillion yuan in 2020, accounting for 38.6% of GDP, maintaining a high growth rate of 9.7%, and becoming a key driving force for stable economic growth. The report pointed out that in the field of online education, the size of our country's online education market has grown significantly and reached 485.8 billion yuan in 2020[1]. This is an exciting development in education, and various distance education methods are developing rapidly, such as MOOC, mobile learning and so on. Especially since the outbreak of the Covid-19 in 2020, many places in China have implemented lockdown policies, schools have not reopened, teachers and students have to take online classes at home. Therefore, for teachers, the experience of distance education started actively or passively. The online course software widely used in China mainly includes Superstar Learning Platform, Rain Classroom, Chinese University MOOC learning resources, E-learning, etc. The teachers in a university in central China where the author is located mainly take the first three online courses. Superstar Learning Platform has won many teachers and users because of its stable system, rich content and easy operation. We will introduce this software in details below. Meanwhile, according to the questionnaire, we found that a lot of teachers used Superstar Learning Platform software during online teaching.

With the reform of educational methods, many new educational and teaching methods have emerged one after another, such as the flipped classroom, which has been widely praised in teaching practice. The flipped classroom teaching model inverts the traditional learning process and reconstructs a new learning process: “Knowledge is imparted before class, and knowledge is internalized in class.” The pioneers of flipped classroom Jonathan Bergman and Aaron Sam believe that the core of the flipped classroom is flipped learning, which has four pillars, including “a flexible teaching environment, a culture of independent learning, well-designed course content and professional educators.” It is a novel teaching form and effectively promotes the reform of curriculum teaching [2,3,4,5,6,7].

We try to apply Superstar Learning Platform, a new distance learning software, to the flipped classroom of college English, and investigate the teaching effect. Through empirical research, we found that the combination of the two can significantly stimulate the learning interest of college students, broaden their knowledge, stimulate their creativity and critical thinking, extend classroom learning to extracurriculars, and improve teaching efficiency. This is a useful reform and exploration, which provides us experience that can be used for reference in our future teaching reform of college English.

2. Flipped classroom

In 2000, Maureen Lage, Glenn Platt and Michael Treglia of the United States introduced the “flipped teaching” model when they taught “Introduction to Economics” at the University of Miami in the paper “Inverting the Classroom: A Gateway to Creating an Inclusive Learning Environment”, and the results achieved[8]. But they did not come up with the term “flipped classroom” or “flipped teaching”. In 2000, J.Wesley Baker published the paper “The classroom flip: using web course management tools to become the guide by the side” at the 11th International Conference on College Teaching and Learning [9].

Jonathan Bergmann and Aaron Sams, teachers at Woodland Park High School in the Rocky Mountains of Colorado, USA, were the first to introduce flipped teaching into the classroom, which promoted the development of American middle and primary education reform[5].

The online video lessons that Salman Khan taught to relatives’ children began quickly spread around, and entered the school from the family, and was even “flipping the classroom”, which was considered to be opening the dawn of “future education”. In order to achieve the purpose of personalized education, Khan began to make tutorial videos for science, computer and other related subjects. In 2007, Khan established the non-profit “Khan Academy” website, which used videos to explain the content of different subjects and answer questions from netizens. In addition to video lectures, Khan Academy also offered learning tools such as online practice, self-assessment and progress tracking. Khan emphasized the importance of a student-centered flipped classroom [10,11].

The “flipped classroom” has the following distinctive features:

2.1 Short and concise teaching videos

Whether Salman Khan’s math tutorial videos or Jonathan Berman and Aaron Sams’ chemistry teaching videos, one thing in common is that they are short and concise. Most of the videos are only a few minutes long, and the longer ones are only ten minutes. Each video is aimed at a specific problem, has strong pertinence, and is more convenient to find. The length of the video is controlled within the time range that students can concentrate on, which is in line with the characteristics of students’ physical and mental development. Published through the internet video with multiple functions such as pause and playback, it can be self-controlled, which is conducive to students’ independent learning [5,10].

2.2 Clear teaching information

In Salman Khan's own words: "This way doesn't seem like I'm standing on the podium giving you a lecture, it feels intimate, like we're sitting at the same table and studying together, and writing the content on a piece of paper." This is the difference between the "flipped classroom" teaching video and the traditional teaching video. The teacher's avatar in the video, as well as various objects in the classroom, will distract students' attention, especially when students study independently.

2.3 Reconstructing the learning process

Typically, students' learning process consists of two stages: the first stage is "information transfer", which is achieved through the interaction between teachers and students, and students and students. The second stage is "absorption internalization", which is completed by the students themselves after class. Due to the lack of teacher support and peer help, the "absorption internalization" stage often makes students feel frustrated and lose their motivation and sense of achievement. "Flipped Classroom" reconstructs the learning process of students. "Information transfer" is carried out by students before class. Teachers provide not only videos, but also online tutoring. "Absorbing internalization" is done through interaction in class. Teachers can understand students' learning difficulties in advance. Effective tutoring in the classroom and mutual communication among classmates are more helpful to promote the process of students' knowledge absorption and internalization.

2.4 Convenient and quick to review and test

After watching the teaching video, the several questions immediately following the video can help students to detect and judge their own learning situation in time. If a few questions are found to be poorly answered, students can go back and read them again and think carefully about what went wrong. Students' answers to questions can be aggregated and processed through the cloud platform in a timely manner, helping teachers understand students' learning situation. Another advantage of teaching video is that it is convenient for students to review and consolidate after a period of learning. The follow-up of evaluation technology enables students to obtain empirical data in relevant links of learning, which is beneficial for teachers to truly understand students [7].

In the flipped classroom teaching mode, teachers no longer dominate the classroom in a "monologue" style, but effectively organize and guide students to complete project-based learning tasks. The teaching process of flipped classroom should include three steps: firstly, teachers clarify learning tasks and learning objectives, attach relevant guiding questions, and guide students to think and understand new knowledge. Then, let students watch learning videos or read materials with questions, initially internalize new knowledge, and sort out questionable knowledge points. Finally, teachers organize students to solve problems in class. The teacher is no longer the lecturer who is "the only one in the play", but the coordinator and participant of the discussion in the class. By flipping the roles of teachers and students, the flipped classroom allows students to actively seek knowledge, ask questions and solve problems in order to achieve the purpose of internalizing knowledge [12, 13].

3. Superstar Learning Platform

Although the teachers of our school have used many teaching software before and finished a lot of resource sharing courses, most of them are used for teaching competitions or research projects, and very few are actually used in the classroom. This epidemic has accelerated the pace of

education informatization. Online classrooms are no longer the task of individual teachers, but a skill that every teacher must learn. They must quickly learn the teaching work of online classrooms in a short period of time. The task is arduous. At this time, a teaching software with stable performance and easy operation is urgently needed as an auxiliary.

According to our survey results, 96% of students prefer to use mobile phones to study. Mobile phones have always been a stumbling block for students to learn, but the rapid development of information technology has made everyone inseparable from mobile phones [14, 15]. We use the APP that students are interested in to turn this stumbling block into a learning tool. College students around the age of 20 have a strong ability to accept new things, and they can proficiently use a new APP in a while. They can use the fragmented time to learn, which increases the students' learning time in disguise. Due to the support for students to use mobile phones, students' learning enthusiasm, learning progress and learning efficiency have also been greatly improved. Of course, this also puts forward higher requirements for teachers. Teachers need to prepare richer course resources so that students can fully diversify their networks of learning [16].

In a word, the emergence of mobile application Superstar Learning Platform facilitates the communication between teachers and students and between students and students, and changes the way teachers teach and students learn.

4. An empirical study on applying Superstar Learning Platform to the flipped classroom of college English

4.1 Research objects

We selected a comprehensive university (Anqing Normal University) in the central province of China as the sampling area, and the research objects were 164 freshmen who had received nearly 9 years of English courses in primary and secondary schools. The majors of the students cover arts and sciences, including 38 majors in social work, 45 majors in materials chemistry, 30 majors in food science and engineering, and 51 majors in computer science. There are 84 boys and 80 girls. The specific distribution is shown in Figure 1.

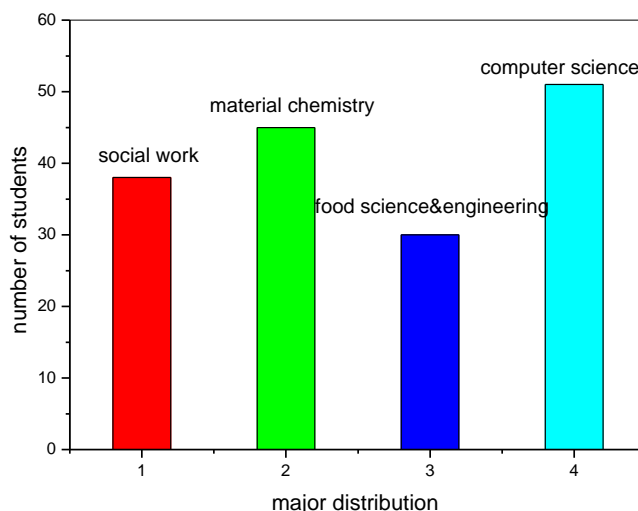


Figure 1: Major distribution of the students

4.2 Research methods

The research methods include the comparison of English proficiency test before and after,

questionnaire and interview. The questionnaire survey involves the following two aspects: one is about enthusiasm and interest in learning English, the other is about satisfaction with college English classrooms and teacher.

4.3 Research process

We divided the students into three groups, two were the experimental groups and one was the control group. Group 1 contains 68 students, group 2 contains 45, and group 3 contains 51. The students in experimental group 1 adopted the teaching method combining Superstar Learning Platform and flipped classroom, combining online and offline. We select video clips, articles and other materials related to the course on the Superstar Learning Platform, set up tasks to facilitate the grasp of students' learning situation, arrange pre-class tasks, and allow students to prepare in advance. The offline teaching also adopts the Superstar Learning Platform, with rich classroom activities, refined and quantitative assessment, and timely feedback (Figure 2).

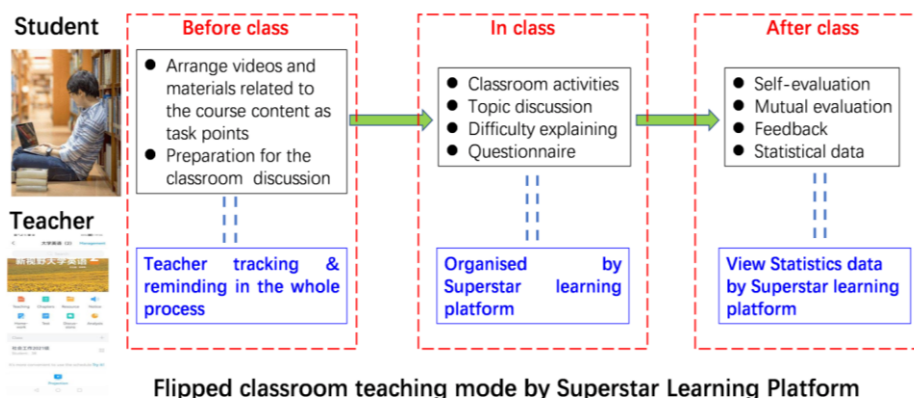


Figure 2: Flipped classroom teaching mode by Superstar Learning Platform

The students in experimental group 2 adopted the flipped classroom teaching method, but did not use the Superstar Learning Platform. The pre-class tasks and materials assigned to the students were conveyed by sending links and in-class notifications. Students were organized in groups to discuss in class, and teachers answered questions and give verbal feedback on classroom performance.

Students in the control group adopted traditional classroom teaching methods. That is, the teacher gives the students a clear learning goal and content in the classroom, explains the key points and difficulties of the knowledge in the classroom, and then assigns corresponding tasks to the students, so that the students can complete them after class and give feedback in the next class.

4.4 Results and Discussion

In order to ensure the scientificity and validity of the experimental results, the objects of this empirical study took a college English proficiency test before grouping, and were divided into three groups according to their test scores, taking into account the balance of majors and gender.

4.4.1 English proficiency test scores

The three groups of English proficiency test scores before and after the experiment are shown in Figure 3.

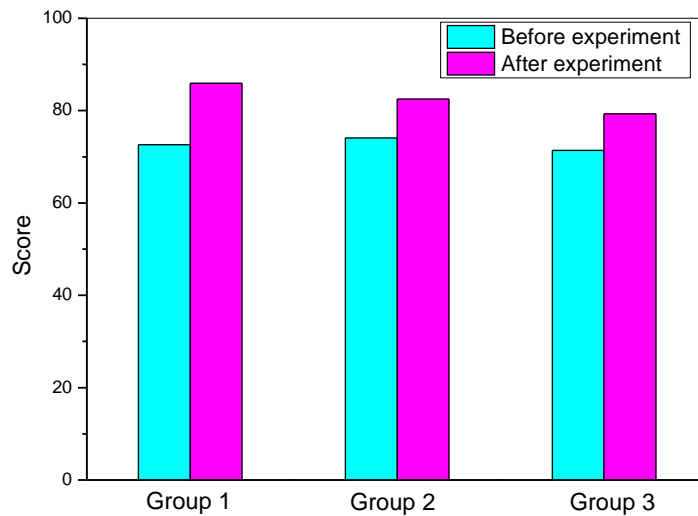


Figure 3: English proficiency test scores before and after the experiment

From this, we can see that the English proficiency of the three groups before the experiment is equivalent, and there is no obvious difference. The average test score of group 1 is 72.6, group 2 is 74.1 and group 3 is 71.4. But after a semester of experiment, their English proficiency test achievements have obvious differences. The average test score of group 1 is 85.9, group 2 is 82.5, group 3 is 79.3.

4.4.2 Enthusiasm and interest in learning English

At the end of the semester, we conducted a questionnaire survey on the enthusiasm and interest in learning English among the three groups. A total of 164 questionnaires were issued and 162 were retrieved, with a rate of 98.78%. The specific questions and data are as follows in table 1. From this table, we can see the trend. After a year of teaching experiment, the students in group 1 have the highest enthusiasm and interest in English learning, followed by the students in group 2, and the students in group 3 are the poorest.

Table 1: Enthusiasm and interest in learning English

A Question	B C D Strongly agree			E F G Agree			H I J General			K L M Disagree			N O P Strongly disagree		
	Group1	Group2	Group3	Group1	Group2	Group3	Group1	Group2	Group3	Group1	Group2	Group3	Group1	Group2	Group3
1. You think your major requires high English ability	28/68=41.17%	17/45=37.77%	15/51=29.41%	28/68=41.17%	20/45=44.44%	27/51=52.94%	10/68=14.70%	6/45=13.33%	3/51=5.88%	1/68=1.47%	1/45=2.22%	3/51=5.88%	1/68=1.47%	1/45=2.22%	3/51=5.88%
2. You think you are highly motivated to learn English	30/68=44.11%	19/45=42.22%	18/51=35.29%	27/68=39.70%	16/45=35.55%	23/51=45.09%	10/68=14.70%	6/45=13.33%	4/51=7.84%	1/68=1.47%	3/45=6.66%	4/51=7.84%	0/68=0%	1/45=2.22%	3/51=5.88%
3. You are willing to take the initiative to complete English learning tasks other than those arranged by the teacher	27/68=39.70%	16/45=35.55%	11/51=21.56%	30/68=44.11%	18/45=40.00%	27/51=52.94%	8/68=11.76%	8/45=17.77%	6/51=11.76%	2/68=2.94%	3/45=6.66%	5/51=9.80%	1/68=1.47%	0%	2/51=3.92%
4. In English class, You often take the initiative to speak and participate in the interactive activities organized by the teacher	40/68=58.82%	23/45=51.11%	17/51=33.33%	22/68=32.35%	15/45=33.33%	20/51=39.21%	5/68=7.35%	4/45=8.88%	6/51=11.76%	0%	2/45=4.44%	3/51=5.88%	1/68=1.47%	1/45=2.22%	5/51=9.80%
5. Your English grades will affect your motivation to study.	33/68=48.52%	20/45=44.44%	14/51=27.45%	29/68=42.64%	18/45=40.00%	18/51=35.29%	3/68=4.41%	3/45=6.66%	10/51=19.60%	2/68=2.94%	2/45=4.44%	4/51=7.84%	1/68=1.47%	2/45=4.44%	5/51=9.80%
The average	46.46%	42.22%	29.41%	39.99%	38.66%	45.09%	10.58%	11.99%	11.37%	1.76%	4.88%	7.43%	1.18%	2.22%	7.06%

4.4.3 Satisfaction with college English classroom and teacher

At the end of the semester, we conducted a survey of students' satisfaction with the college English classroom and teacher in the three groups at the same time. The questionnaire includes a

total of 20 questions. The full score for each question is 5, and the total score is 100. The higher the score, the higher the satisfaction. The specific questions are as follows in table 2.

Table 2: Questions about the satisfaction

Content	Main observation point
1. Teaching philosophy	1. Meet the requirements of curriculum reform and follow the professional development rules of discipline. 2. It can reflect the “student-centered” teaching philosophy.
2. Teaching attitude	3. Dignified manners, full of energy, and contagious lectures. 4. Fully prepare lessons and have a strong sense of responsibility; abide by teaching discipline, and classroom management is effective.
3. Teaching content	5. The teaching objectives are clear; the teaching design is scientific and feasible; the lecture point of view is correct, and the elaboration is closely related to the theme. 6. The content is refined, substantial and scientific, combining theory with practice, which not only meets the requirements of the syllabus, but also reflects the frontier of the subject.
4. Teaching process	7. Be able to rationally use the smart teaching platform and adopt innovative methods such as flipped classroom and blended teaching to realize the reform of classroom. 8. Pay attention to the interaction between teachers and students, which can effectively mobilize students’ active thinking; timely discover students’ problems and carry out targeted teaching activities.
5. Teaching effect	9. Class lectures are attractive, so students are active in thinking. The classroom atmosphere is warm, and the expected teaching goals can be achieved. 10. Students’ self-learning ability, innovation consciousness and ability are enhanced.

The results of the questionnaire are shown in figure 4. The satisfaction of group 1 is the highest with an average score of 95.58, group 2 is the second with an average score of 89.08, and group 3 is the lowest with an average score of 83.86.

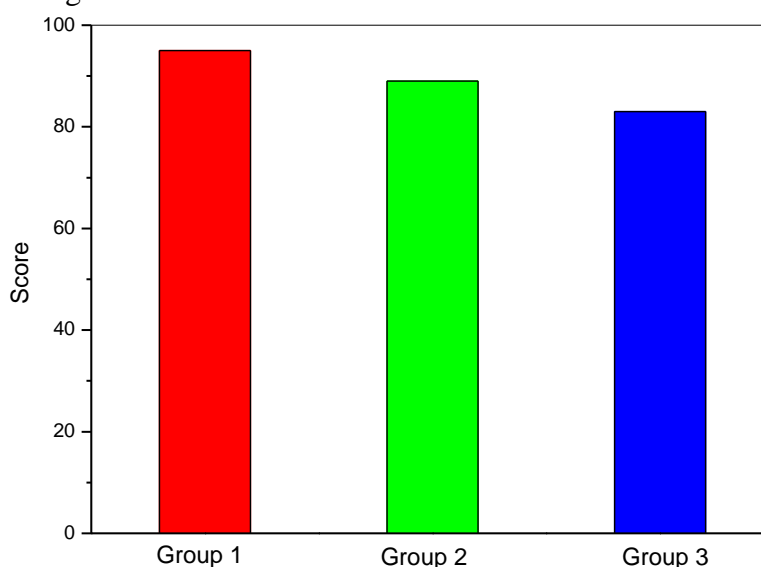


Figure 4: The results of satisfaction questionnaire

4.4.4 Interview results of individual students

In addition, we also conducted interviews with individual students, and some of the students' feedback are as follows:

"I feel that the classroom has become much more interesting after using Superstar Learning Platform. The teacher uploaded many videos to it in advance, so that we can see before the discussions in the class, I can get well-prepared. This way is suitable for people like me who are not good at English. Because if I don't have enough time to prepare, I may not be able to react in time in class."

"I like the flipped classroom, especially the flipped classroom with Superstar Learning Platform, the college English class becomes interesting and fun. I especially like the 'Whoa' of my classmates and teacher after my presentation!"

By collecting the interview results, we can see that the students are curious about the novel class form of applying Superstar Learning Platform in College English Flipped Classroom, which will arouse their interest in exploring. After mastering the operation of the application, they will continue to be attracted by the rich contents. For challenging tasks, after their active preparation, they are willing to share in the classroom, and consequently acquire a sense of satisfaction and achievement.

5. Conclusion

Through a semester-long experiment, we found that whether the satisfaction of college English classroom and teachers, or the improvement of students' interest in learning and the enhancement of learning motivation, to the final English academic proficiency test, the performance of the experimental groups' student is better than control group. This shows that the application of Superstar Learning Platform to college English flipped classroom can achieve better teaching effect, and can organically combine pre-class tasks, classroom tasks, and after-class tasks, fully mobilize the enthusiasm and initiative of students, and really achieve student-centered flipped classroom.

In special pandemic times, educators should make good use of modern information technology to serve students. In order to improve students' learning efficiency, teachers firstly need to update their teaching concepts, learn advanced information technology and apply them to the classroom. Secondly, teachers must play a guiding role. Only the classroom is lively and interesting, can it attract students' attention and mobilize students' enthusiasm for learning. The student-centered flipped classroom with Superstar Learning Platform can guide students from being addicted to the Internet to using the Internet platform to learn, enhance their interest in learning, and improve learning efficiency. In addition, teachers should strengthen guidance for students at all times, so that students can master internet learning methods and applications skills, formulate a reasonable study plan and strictly implement it.

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References

- [1] China Internet Network Information Center (CNNIC). <https://www.cnnic.com.cn/index.htm>
- [2] Abeysekera L., & Dawson P. (2014). Motivation and cognitive load in the flipped classroom: definition, rationale and a call for research. *Higher Education Research & Development*, 34:1–14. <https://doi.org/10.1080/07294360>.

2014.934336

- [3] Bergmann J., Overmyer J., & Wilie B. (2011). *The flipped class: Myths vs. reality. The Daily Riff.* <http://www.thedailyriff.com/articles/the-flipped-class-conversation-689.php>
- [4] Bergmann J. (2017). *Solving the homework problem by flipping the learning.* ASCD.
- [5] Bergmann J., & Sams A. (2012). *Flip your classroom: Reach every student in every class every day.* International Society for Technology in Education.
- [6] Bergmann J., & Sams A. (2014). *Flipped learning: Maximizing face time.* T&D, 68(2):28–31. https://www.researchgate.net/publication/291849738_Flipped_learning_Maximizing_face_time
- [7] Burke A., & Fedorek B. (2017). Does “flipping” promote engagement? A comparison of a traditional, online and flipped class. *Active Learning in Higher Education*, 18 (1):11-24. <https://doi.org/10.1177/1469787417693487>
- [8] Lage M. J., Platt G. J. & Treglia M. (2000). Inverting the classroom: A gateway to creating an inclusive learning environment. *Journal of Economic Education*, 31(1): 30-43. <https://doi.org/10.2307/1183338>
- [9] Wesley Baker J. (2000). *The classroom flip: using web course management tools to become the guide by the side.* Selected Papers from the 11th International Conference on College Teaching and Learning, 15:9-17. https://digitalcommons.cedarville.edu/media_and_applied_communications_publications/15
- [10] Khan Academy. <https://www.khanacademy.org/>
- [11] Greenhalgh-Spencer H. (2014). Salman Khan, *The one world schoolhouse: education reimaged.* *Educational Theory*, 64(4). <https://doi.org/10.1111/edth.12072>
- [12] Cai J., Yang H.H., Gong D. et al. (2019). *Understanding the continued use of flipped classroom instruction: a personal beliefs model in Chinese higher education.* *Journal of Computing in Higher Education*, 31:137–155. <https://doi.org/10.1007/s12528-018-9196-y>
- [13] Chang M.M., Lan S.W. (2021). *Flipping an EFL classroom with the LINE application: students’ performance and perceptions.* *J. Comput. Educ.*, 8(2):267–287 <https://doi.org/10.1007/s40692-020-00179-0>
- [14] Orlando J., Attard C. (2016). *Digital natives come of age: the reality of today’s early career teachers using mobile devices to teach mathematics.* *Math Ed. Res. J.*, 28:107–121. <https://doi.org/10.1007/s13394-015-0159-6>
- [15] Chang C.C., Liang C., Yan C.F. et al. (2013). *The impact of college students’ intrinsic and extrinsic motivation on continuance intention to use English mobile learning systems.* *Asia-Pacific Edu. Res.*, 22: 181-192. <https://doi.org/10.1007/s40299-012-0011-7>
- [16] Alsanosi A., Aharbi A., Alhebaishi S. (2019). *Smart device usage frequency and usage level for learning English.* *ijET*, 14(19): 49-64. <https://doi.org/10.3991/ijet.v14i19.10003>