The Empirical Investigation and Study of College Students’ Autonomous English Learning and Learning Method Under the Environment of Multimedia and Network

Kexin Liu¹,*

¹Department of foreign languages, Bohai University, Jinzhou City, Liaoning Province, China
*1562434865@qq.com

Key words: internet, autonomous English learning, learning method

Abstract: In recent years, most investigation studies on the autonomous-learning mode based on multimedia and network are practiced in many universities of China. Based on the analysis on account of the differences of the college students' autonomous learning attitude and learning environment and apply different learning methods. This research project was conducted in Bohai University, Jinzhou City of LiaoNing Province, this study lasts from July 2017 to January 2018, the research participants are made up of 90 college students from different majors and three classes from the same professional class of the same grade, They are respectively class A, B, C, the number of classes are 28, 29, 33 people respectively. This study aimed at college students using the Internet platform to learn autonomously English, the above participants were carried on the detailed investigation, and the data from the study was analyzed in detail and appropriately. This research adopts research journal and the questionnaire and investigates the situation of students' autonomous learning from the view of the college students' learning styles. Research results show that under the multimedia network environment, students can learn different ways to reinforce learning motivation and improve personal ability of autonomous learning. These findings are hoped to improve students’ and teachers’ awareness of autonomous learning on the Internet. The shortcomings, suggestions and influence are also stated in the paper.

1. Introduction
In the first decade of the 21st century, rapid technological development led to social change. As computer technology develops to the age of the Internet, it brings enormous convenience and efficiency. The Internet is playing an irreplaceable role in the social life, and continually affects people’s work and life. The appearance of the Internet provides college students' English learning with a more convenient and efficient channel. Students can learn independently English anytime and anywhere. After the guidance of teachers in the classroom, students can undertake online English autonomous learning to consolidate the old knowledge and to further preview the new knowledge. According to personal needs, students can ask for help when meeting difficulty, and communicate with millions of students in order to common progress.

1.1. The Background of the Research
In the early 1980s, Holec⁵ introduced the concept of autonomous learning into the foreign language teaching. He claims that autonomous learning is the ability learners themselves are responsible for managing language learning. That is to say, learners are able to decide on their own learning goals, learning content and schedule, choose learning methods and skills, monitor acquisition process and the evaluation results of the self-learning. The power and right that the learner have to learn by themselves is regarded as a vital aspect for learner autonomy.⁶ Through this process, eventually, the autonomous learner establishes "a personal agenda for learning" ⁷ by setting up track in the planning, pacing, monitoring and evaluating the learning process. Since then, many language psychologists are on the way to the research of autonomous learning, and further enrich the theories of autonomous learning. Furthermore, research results on the autonomous learning are applied to the
teaching process. In the process of English learning at present, autonomy plays an inestimable role.

The concept of "Learner Autonomy" has long been a hot topic in the field of domestic and overseas linguistics. Substantial research about learner autonomy has hence been carried out and turned out to be fruitful.

In recent years, the rapid development of computer and network provides new environments, new ways and methods for autonomous learning. College English curriculum requirements (trial Line) [5] clearly put forward that universities should "make full use of Media and network technology, and adopt new teaching mode to improve the original and single classroom teaching mode". So learners also should use a new type of autonomous learning in order to improve their English learning abilities under the multimedia environment and the Internet.

One of the purposes of teaching model reform is to promote students' individualized learning methods and the formation and the development of students' autonomous learning ability.[6] How to improve the students’ competence of using the advanced network technology and the ability of autonomous learning by the rich network learning resource is becoming one of the hot topics the researchers and teachers focus on.

Network autonomous learning includes in-class autonomic learning under the guidance of the teacher and the lessons outside based on fully autonomous learning. People with language learning experience all know that learning language not only in the classroom, but stick to learning outside through many a lot new methods and tools, which is of vital importance for learning foreign language.

1.2. The Significance and Purpose of the Study
Under the multimedia environment, students can according to their understanding of language to choose the suitable network courses, This is a great solution to the traditional classroom’s disadvantages that can not pay attention on all students, and is not affected by racial, national, and regional limitations. With strength of our country opening to the world increasing unceasingly, English learning has long been tending towards diversification from pure language communication, and the demand for interdisciplinary talents mastering English is more and more huge. Nevertheless, the simple and traditional classroom teaching has been unable to meet the developmental needs.

At this point, the coming of the era of the Internet gives all the students of the world a unique chance and a platform of autonomous English learning. The purpose of this research is to make everyone consider the greatly importance and the benefits of the Internet in autonomous English learning.

From the above analysis, the use of the Internet can improve the abilities of the autonomous English learning and broaden the horizon of the college students. Nevertheless, under the background of new era, How is the situation of students extracurricular network autonomous learning? There are two primary research questions to discuss for the sake of proving the importance and purpose of this paper:

RQ1: Has the use of the computer and the Internet had effects on enhancing students’ motivation in autonomous English learning?

RQ2: How have the students’ basic language skills been improved by using the computer and the Internet outside class autonomously?

1.3. The Structure of This Paper
This paper is mainly divided into five sections. The first part mainly introduces the purpose, significance and the outline of this research. In the second part, the related literature is stated in detail. Firstly, the definition, the importance, and the status of autonomous learning at present are talked about. Secondly, the role of motivation in autonomous learning and their relationship are analyzed. Thirdly, the significance and the effective use of the Internet are discussed. Lastly, what is the autonomous learning under the network situations and how college students improve the autonomous learning ability are introduced. In the third part, the research methods, the research participants, the research problems are stated carefully. In the fourth part, the analysis of data and research findings
are discussed and part five summarizes the research and then gives some recommendations to the paper as well as some influence of the research.

In this context, this study aimed at the subject that “college students' autonomous learning English by the Internet”, hoping to play a certain guiding significance.

The analysis results show that under the network conditions students have more opportunities to access English, And the forms of personality are more likely to stimulate students interest in learning English, but also the application of different learning methods will constantly stimulate the motivation of students' autonomous English learning. These findings hopes to improve students and teachers’ awareness of autonomous learning on the Internet, can even be a good example for further research.

2. Literature Review
Since the 1960s, the western educational experts advocated to regard learners’ autonomous learning as one of the main goals of education reform. There are a large number of the experts and scholars, who devote themselves to interpreting, analyzing, summarizing and practicing the autonomous learning. McDevitt[7] held the view that cultivating independent learners is the final result of education. On the contrary, Holec [1] pointed out that the goal of foreign language teaching is both to help students acquire language and communication skills, and to help them to be autonomous, or learn to how to be an independent learner. Benson [8] hold the similar opinion that autonomy in theory is a kind of ability and freedom to manage one’s own affairs, which possess the right to make decisions, and autonomy requires one’s active involvement. There are various factors influencing the autonomy such as motivation. If learners feel themselves happy and ease in their learning process, they may be autonomous learners. The use of Internet and various learning methods also facilitate English learning with the advance of technology.

2.1. The Roles of Motivation and Autonomy in English Learning
Motivation is deemed to the principal element of success or failure in the research field of language learning[9]. The role of motivation in English as a Foreign Language has been researched in the aspect of its having a close bearing on language learning achievement.[10] However, autonomy and motivation as two elements that interact cyclically in the language learning process, little attention has been paid to the link between motivation and learning autonomy, even though for most English learners, autonomy intertwines their motivation and language learning success.

In that respect, Gardner indicates that motivation implies not only learners’ desire for learning language, but also a measure of personal attitude on the way to working and striving to achieve a learning objective. Thus, without self-discipline and autonomous effort, motivation itself would not be sufficient to produce desired language learning results in the long term.[11]

Autonomy is viewed by some scholars [12] as the result of motivation. They argue that only those who have an interest or motivation (extrinsic or intrinsic) to learn an L2 can have the necessary discipline to engage in hard work and devotion to learning the target language. However, other scholars, such as Dörnyei, and Csizér [13] suggest that motivation comes after autonomy. In fact, a history of debate emerged within the literature as to whether motivation is a cause or an effect of autonomy.[14]

Autonomous language learners become more highly motivated when they achieve their expected learning outcomes. On the contrary, learners who constantly experience failure in learning a language may end up having a negative attitude towards the target language, which in turn could result in a lack of interest to engage in the process autonomous activities.

More recently, in words of Dörnyei and Ushioda [10] the consensus is that motivation, autonomy and learning achievement are interrelated forming a cyclical process (see Figure 1)
From the above analysis, the motivation and autonomy truly exists a positive relationship, both intrinsic and extrinsic motivation can promote the learners’ autonomy authentically, moreover, autonomy can make learners more easily attain the achievement in EFL learning. Their great achievements in language learning must urge their learning motivation in EFL learning. As a result, these three elements will consist in a dynamic process in learning language and play a crucial role in EFL learning.

2.2. The English Learning under the Multimedia Internet Environment
Autonomous English learning under network situation refers to the dynamic process of learners’ adapting to multimedia network learning environment. In a recent study, Rahimi, Ebrahimi and Eskandari [15] investigated the effects of adopting a technology enhanced language learning framework on the students’ perceptions of their EFL classroom environment, and they found that a technology-enhanced language learning environment proved to be more efficient, learner-centered and facilitative for English learning. Also in a recent study conducted by Rahimi & Bigdeli [16] which investigated the effectiveness of using ICT (Information Communication Technology including internet, email, blogs, Skype, and PowerPoint) in developing students’ self-regulation, it was found that using these soft wares had a significant effect of learner’s self-regulation.

Nevertheless, there are some potential problems. On the one side, college students are unfamiliar with the Internet environment. 3scholars studied the situation of the adaptation of college English teaching and learning under the network environment, the results showed that: China's online learners had the inadaptability for the Internet English learning resources These disadjustment caused the students to get lost in the network learning. On the other side, The time and resources of online learning had not been able to be made full of use, which bought about the waste of education investment and seriously reduced the effect of the network learning. [17] Xu & Peng [18] scholars studied more than one thousand students' autonomous English learning situation of 14 universities. Investigation results from the study indicated that the overall degree of college students' autonomous learning stays at a low level in our country.

From the above analysis, the adaptation of college students to the Internet environment is certain to be a problem. Thus the paper investigates the efficient learning methods college students are accustomed to use under the Internet environment with the purpose of improving English learning abilities. The analysis is hoped to help most college students to find the Internet learning ways that are suitable for themselves.
3. Research Methodology
3.1. Research Participants
RP1: There are 90 participants in this study and they are all college students from the same university, the research participants are made up of three classes from the same professional class of the same grade. The first class is class A, the second class is class B, the last class is class C. They are respectively class A, B, C, the number of classes are 28, 29, 33 people respectively.
RP2: There are 200 participants engaging in the questionnaire, they are all college students from different classes of the same grade in the same university.

3.2. Research Methods
This research program mainly employs the research journals and questionnaires. The content of research journals is a exposition about how to learn and improve English more effectively by the use of modern technology. And the instrument employed in the questionnaire is a five-point Likert response scale questionnaire, which is adapted from Spratt et al. The participants have to choose between 5 alternative answers from ‘1 = strongly disagree to ‘5= strongly agree’. The questionnaire includes a background information section to collect data with regard to participants’ academic program, English language level, gender and major; and three main sections, which are detailed as follows:
Section 1 contains participants’ basic information for English learning.
Section 2 contains the different extents of some ideas participants hold about the autonomous learning and the use of the Internet.
Section 3 provides the participants an opportunity to give some suggestions or advice on English learning, and looked into their present difficulties and shortcomings in autonomous learning

4. Data Analysis and Discussion
4.1. Analysis and Discussion of the Questionnaire
181 completed copies from 200 distributed questionnaires were obtained, with a response rate of 90%. The questionnaire on learner autonomy and the use of Internet in terms of English learning is proposed to measure the extent of learners autonomy, motivation and the influence of the frequency use of Internet.

Table 2 Themes addressed in questionnaires

| Themes addressed in questionnaires          | Statement Numbers in questionnaire |
|--------------------------------------------|-----------------------------------|
| The origin of motivation.                  | Questions 1-4                     |
| Learner autonomy.                          | Questions 5-7                     |
| The effective use of Internet.             | Questions 8-12                    |
| The influence of Internet on the listening, speaking, reading and writing abilities. | Questions 13-16                  |
| English learning methods.                  | Questions 17-19                   |
| The effect of Online resources on English learning methods. | Questions 20-23                   |

From Table 2, the analysis suggests that learner hold different extent purposes in English learning. A learner set his/her own goals in English learning with his/her strong or weak motivation and supervises himself/herself without others’ control to reach achievements in minds, With the development of Internet, more knowledge can be obtained after class. Internet can provide a lot of platforms and resources for English learning, which is a more convenient and effective method. Through the insufficient use of Internet, learners’ professional abilities have been enhanced. Furthermore, learners’ listening, speaking, reading and writing skills have been improved on the
basis of learning English autonomously by the Internet. Consequently, Internet has a significant effect on the autonomous English learning from the above statistics analysis.

Table 3 Examines motivation and autonomy and the use of the Internet

| Statements about the influence of autonomy and Internet on learning English: | Strongly disagree | Disagree | Unsure | Agree | Strongly agree |
|-----------------------------------------------------------|------------------|---------|--------|-------|---------------|
| 1. I think English learning is easy for me.                | 11.6%            | 31.5%   | 33.1%  | 17.1% | 2.8%          |
| 2. The reason of learning English is because of my interests in it. | 8.3%             | 24.9%   | 27.1%  | 28.7% | 5.5%          |
| 3. I study English in order to pass the examination of the course in the class. | 2.8%             | 14.4%   | 28.7%  | 43.1% | 6.1%          |
| 4. Learning English very well will be helpful in studying abroad such as in the UK and the USA. | 3.3%             | 8.8%    | 10.5%  | 44.2% | 23.8%         |
| 5. Autonomy plays a vital role in English learning.       | 0.6%             | 7.2%    | 32.6%  | 40.9% | 13.8%         |
| 6. I study English autonomously after class without the teachers’ guidance. | 3.9%             | 18.8%   | 34.3%  | 31.0% | 7.2%          |
| 7. The Internet will be helpful in autonomous English learning. | 1.7%             | 7.7%    | 10.0%  | 50.3% | 23.2%         |
| 8. The abundant learning resources on the Internet give me many advantages in English language learning. | 2.2%             | 3.9%    | 20.4%  | 51.4% | 17.7%         |
| 9. It is easier to learn English by using the Internet than by using books. | 4.4%             | 20.4%   | 32.0%  | 29.8% | 7.7%          |
| 10. It is more effective to learn English by using the Internet software than other ways, such as tape recorders. | 1.7%             | 14.4%   | 30.4%  | 38.7% | 10.0%         |
| 11. Reading authentic news and articles on English websites after class is more convenient. | 2.8%             | 5.5%    | 32.6%  | 46.4% | 7.2%          |
| 12. Practising listening on English language learning websites after class is effective. | 1.1%             | 6.1%    | 20.4%  | 56.4% | 11.1%         |
| 13. Reading English websites will develop reading ability more than reading English textbooks. | 2.8%             | 16.0%   | 39.1%  | 34.3% | 9.4%          |
| 14. Emailing in English on the Internet will enhance English writing proficiency. | 7.7%             | 12.7%   | 27.1%  | 45.3% | 8.8%          |
| 15. Practising spoken English in a dormitory or at an English conversation corner. | 0.6%             | 14.4%   | 23.2%  | 49.2% | 8.3%          |
| 16. Practising spoken English in a dormitory or at an English conversation corner. | 0.6%             | 14.4%   | 23.2%  | 49.2% | 8.3%          |
| 17. Using English websites is one of the most effective ways to learn English. | 2.8%             | 11.6%   | 25.4%  | 45.3% | 9.4%          |
| 18. Reading English books or journals after class is essential. | 2.2%             | 10.5%   | 28.2%  | 40.9% | 12.7%         |
| 19. Practising spoken English in a dormitory or at an English conversation corner. | 0.6%             | 14.4%   | 23.2%  | 49.2% | 8.3%          |
| 20. One of the most effective ways to autonomous English learning is to apply advanced Internet techniques. | 1.1%             | 8.3%    | 34.3%  | 43.7% | 8.3%          |
| 21. Online vocabulary or grammar practice after class is beneficial for English learning. | 0.6%             | 9.4%    | 29.8%  | 43.7% | 16.0%         |
| 22. Online dictionary is greatly helpful for searching and memorizing new words. | 1.7%             | 7.7%    | 17.7%  | 47.0% | 22.1%         |
| 23. Online video provides a more authentic communication environment for English learners. | 2.2%             | 11.1%   | 22.0%  | 41.4% | 21.0%         |

4.2. Analysis and Discussion of the Research Journals

The aim of the research journals is to study the current situation and the methods of the college students’ autonomous English learning. The research journal is used to make notes of each student. From analyzing the data, the places that are insufficient and need to be improved in language
learning can be easily seen. The research journal is sizable in instructing and it can assist instructors to discover the hassle in the college students timely. I complete the research journals by analyzing the compositions with the help of Doctor Liu.

On the basis of the Figure 4, the different learning methods on autonomously learning English are listed. From the phenomenon, quite a few methods are extra famous than others. And the share these leaning techniques indicates something.

Firstly, the chart shows that the percentage of using English APP is the highest, which occupies 33%, and the percentage of reading English book is the lowest, which occupies 9%. Many students claims that APP is more flexible and efficient in English learning such as looking up vocabulary and practicing listening. According to the comparison, the tools of autonomous English learning have been changed from traditional methods to advanced methods under the Internet environment. The tendency expresses that college students are more likely to use the modern technology to learn English autonomously and get better achievements simultaneously.

On the other hand, the percentage of watching English movies is 21% and the percentage of looking through English websites is 24%, the two learning methods are almost the same percentage. Learning English by watching English movies can create a relaxing and funny environment without the outside pressure. However, looking through English websites seems a little boring compared with the movies. Although some websites are very great, for some green hands, they are too complex too grasp it. Nevertheless, there is no denying that the websites are indeed an excellent choice for the college students to search for learning resource.

The last learning method is English spoken, the college students attempt to support their speaking capacities by communicating with others in English, on occasion they are native speakers or non-native speakers. Almost all of us know this, actually, there is a few person can do this successfully. English spoken practice is regarded as a hard way in a non-English language context. From the chart, the percentage is 13%, it is not high. Many college students are shy or afraid to communicate with others, which will interfere the interaction. So this kind of technique is not so frequent as the different methods in university students.

The proof represents that appropriate learning methods not only stimulus students’ interest, strengthen their motivation and improve the autonomy, additionally exert an effect on English learning improvement.

![Figure 4 The percentage of autonomous learning methods](image.png)

### 5. Conclusion

On the basis of the discussion and findings we have summarized above, it is clear that the autonomy and motivation are indispensable factors in English learning. Beyond that, Internet has also made a difference on autonomous English learning and the enhancement of English basic abilities with the advanced technology. This research gives some suggestions for the students, the teachers and the further researches. First and foremost, the students should concentrate on the fosterage autonomy, motivation and the employment of learning methods. Furthermore, the teachers should provide the
guidance for the students to improving the quality learning. Last but not in the least, the experts and scholars can raise the attention on the study of the relationship among the autonomy and the learning methods as well as use of the Internet in the process of this research. Some teachers may attach much importance to increasing the results of the English learning, which results in their ignorance of the significance of students’ learning methods and the Internet. The purpose of the research is mainly to remind the students to try to use outstanding learning methods during learning process. Only by this, can they raise the learning abilities. Despite the shortcomings and limitations in this research, it is expected to improve the quality of studying, increase the scores and to make a reference for the further studies.

References
[1] Holec H. (1981). *Autonomy and Foreign Language Learning*. Oxford: Pergamon.
[2] Smith, R.C. (2008). Learner autonomy (Key concepts in ELT). *ELT Journal*, 62(4), 395-397.
[3] Little, D.(1994). Learner autonomy: A theoretical construct and its practical application. *Die Neuere Sprache*, 93(5), 430-442.
[4] Chan, V. (2003). Autonomous Language Learning: the teachers’ perspectives. *Teaching In Higher Education*, 8(1), 33-54.
[5] College English Curriculum Requirement (trial line)(2004). Shanghai: Shanghai foreign language education publishing house.
[6] College English Curriculum Requirements. (2007). Department of Higher Education
[7] McDevitt, B. (1997) Learner autonomy and the need for learner training. *Language Learning Journal*, 16(1), 34-39.
[8] Benson, P. (2011). *Teaching and researching autonomy* (2nd ed.). Harlow, UK: Pearson Education.
[9] Dörnyei, Z. (2001). *Motivational Strategies in the Language Classroom*. Cambridge: Cambridge University Press.
[10] Dörnyei, Z., & Ushioda, E. (2013). *Teaching and researching: Motivation*. Routledge.
[11] Pickard, N. (1995). Out-of-class language learning strategies: three case studies. *Language Learning Journal*, 12, 35-37.
[12] Vandergrift, L. (2005). Relationships among motivation orientations, metacognitive awareness and proficiency in L2 listening. *Applied Linguistics*, 26(1), 70-89.
[13] Dörnyei, Z. & Csizér, K. (1998). Ten commandments for motivating language learners: results of an empirical study. *Language Teaching Research*, 2(3), 203-229.
[14] Spratt, M., Humphreys, G., & Chan, V. (2002). Autonomy and motivation: Which comes First? *Language Teaching Research*, 6(3), 245-266.
[15] Rahimi, A., Ebrahimi, N. A., & Eskandari, Z. (2013). The effects of using technology and the internet on some Iranian EFL students’ perceptions of their communication classroom environment. *Teaching English with Technology*, (1), 3-19.
[16] Rahimi, A. & Askari B, R. (2013). ICT and EFL Students’ Self-Regulation Mastery: Educational Meat or Poison? AsiaCALL Online Journal.
[17] Chen, X. S. (2002). A review of network education and learning adaptability. *China remote education*, (3), 6-8.
[18] Xu Jinfen & Peng Renzhong, (2004). The investigation and analysis of college students autonomous English learning ability of non-English majors. Foreign *Language Teaching and Research*, (1), 64-68.