The Effect of Classroom Environments on University Students' Autonomous EFL Learning

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Abstract

This paper focuses on the effect of the two important classroom environment factors on the autonomous EFL learning of Chinese university students of non-English majors. 461 university students participated in the investigation. Multiple regression analysis indicated that in the classroom environments both teachers' teaching and students' learning produced positive effect on students' autonomous EFL learning. In addition, the latter exerted greater influence than the former and the combination of the two could produce more effect upon university students' autonomous EFL learning. There are five implications for the results.

Key words: Classroom teaching environments; College EFL teaching; Autonomous EFL learning

INTRODUCTION

Since the concept "learner autonomy" was introduced into EFL teaching, students' autonomous EFL learning has attracted great attention from researchers and practitioners. The Chinese Ministry of Education issued *College English Curriculum Requirements* which clearly pointed out that the objective of college English is to develop students' ability to use English in an all-round way so that in their future work and social interactions they will be able to exchange information effectively through both spoken and written channels, and at the same time they will be able to enhance their ability to study independently and improve their cultural quality so as to meet the needs of China's social development and international exchanges (Higher Education Department of Chinese Educational Ministry, 2007). Since the publication of the *College English Curriculum Requirements*, university students' autonomous EFL learning has been a steady research and practice focus for Chinese EFL academic scholars. Nevertheless, how to improve students' autonomous EFL learning ability and promote their development remains a serious and hard problem to be solved by each researcher and practitioner. Through literature review, the author of this paper has found out that in the classroom environments "teachers' teaching and students' learning" has been closely associated with learner autonomy. Hence this research intends to examine the relationship between the two factors and autonomous EFL learning in Chinese university students of non-English majors.

1. LITERATURE REVIEW

1.1 Classroom Environment Factor

The so-called classroom environment factors are generally composed of the three factors which affect the classroom teaching, and are respectively independent but closely associated with each other. To be more exact, the classroom environments include the material elements which consist of subject course and learning tasks, the social elements which are made up of the relationship between the teachers and the students and their interactivity, and also the cultural elements that consist of

educational concept, social norms and expectations (Li & Yin, 2010). Sun (2010) also believed that classroom environments generally included physical environments and humanistic environments. The latter refers to the social psychological environments in the classroom and is created by both teachers and students.

In view of the coverage of the classroom environments, the author of this research mainly aims to investigate the social psychological elements of the classroom environments since the response and feeling of the classroom participators towards the classroom environments usually produce significant effect on individual and collective behaviors (Fraser, 1998). The classroom environments in this paper refer to the social element that is composed of the social relationship between the teachers and the students and their interactivities. The author of this paper observes that the classroom environment is not only the teachers' teaching, but also the learning environments provided by the teachers for the students, such as "fair teaching" and "teacher's authority", etc. while students' learning not only includes classroom learning behaviors, but also the learning environments that are related to them, such as partnership. It is expected that the relationship between students' autonomous EFL learning and teachers' teaching and also students' learning can be found out and clarified.

1.2 Autonomous Learning

Outside China, the phrase "learner autonomy" firstly appeared in "distance education". This concept was introduced into language teaching in the 1980s, referring to learners' ability of their own (Holec, 1981). Later on, based on Holec's concept of learner autonomy, Nunan (1997) proposed that autonomous learning consisted of five models with progressive levels. In other words, learners' autonomous learning has to undergo five stages such as awareness, involvement, intervention, creation and transcendence. Little & Ridley (2002) further suggested that during the autonomous learning of foreign languages, there was a need to integrate self-evaluation, planning, reflection and monitoring. Reinders (2010) created a concept frame of students' autonomous learning in the English classroom. The specific elements included requirements definition, purpose fixation, planning, resource choice, strategy use, practice exercise, self-monitoring and self-evaluation.

Scholars within China began to introduce researches concerning autonomous EFL learning into China in the 1990s and discussed about the significance and means of improving students' autonomous learning ability in the context of foreign language teaching (He, 2003). The topic has gradually become the first focus of the steady research field. The reasons might be that *College English Curriculum Requirements* issued by the Chinese Ministry of Education clearly defines that one of the important

objectives of college English teaching is to improve students' autonomous learning ability, which has stimulated the domestic researches on the hot topic. At the same time since the beginning of this century, the Chinese Ministry of Education has emphasized that multi-media ought to be introduced into the college English classroom. With the change of the teaching mode, not only the necessity but also the practicality of autonomous learning has become the focus of the academic field. All in all the Chinese university students' autonomous EFL learning proves to be both a strategy guide and a direction to practice reform.

Via literature review, it has been found that the domestic researches with respect to the factors that affect autonomous learning were mostly made from psychological perspective (Hu, 2009; Li & Yu, 2008; Lei, 2005; Yue & Shi, 2009; Zhang, 2005; Yin, 2014). The author of this paper suggests that too much emphasis has been laid on the topic might result in the temporary decline of the discussion about the topic. As we know, "language+teaching+learning" turn out to be the three essential elements in foreign language teaching (Xia & Feng, 2006). This research intends to make an exploration into how and at what degree "teachers' teaching" and "students' learning" affect the autonomous EFL learning of the Chinese university students of non-English majors from the perspective of environment factors. In the classroom teaching, teachers' choice and ability of their own teaching ability, teaching freedom and responsibilities may affect students' autonomous learning through dialogues with pedagogical meaning (Benson, 2013). Teachers' support for students' learning via various means also produce significant positive effect upon students' autonomous learning. In addition, of the classroom environments, what affect students' autonomous EFL learning is not merely teachers' teaching. The partnership, student cooperation and how students participate in the classroom teaching might affect it more (Benson, 2007; Reinders, 2010). Students' learning orientation, namely whether students' learning is task orientation or achievement orientation, at what degree students' are willing to shoulder the responsibilities of learning of their own accord also produced significant positive effect on students' autonomy (Pintrich, 2004; Porto, 2007).

Although classroom teaching can produce significant effect on the creation of autonomous learning atmosphere and the improvement of students' autonomous learning ability (Greene & Azevedo, 2007), sufficient attention and researches have not been aroused. Most of the previous relevant researches focused on students' autonomous learning itself, and few of them discussed about the effect of classroom environments on it. Li and Yin (2010) attempted to examine the relationship between the impressions/perception of the classroom environments and the motivations and strategies of autonomous learning

with middle-school and primary students in Hongkong as participants and it failed to aim at language learning. Based on the analysis of the relevant literature at home and abroad, This paper intends to list the factors that compose teachers' teaching and students' learning in the college English classroom environments, make a detailed analysis of it and find out how the two factors affect the autonomous EFL learning of the students' of non-English majors via multiple-analysis.

2. RESEARCH DESIGN

2.1 Research Questions

In order to find out how the teachers' teaching and students' learning affect the autonomous EFL learning of the Chinese university students' of non-English majors, this paper aims to answer the following three questions: (a) How do the specific elements of teachers' teaching affect the autonomous EFL learning of the students' of non-English majors? (b) How do the specific elements of students' learning affect the autonomous EFL learning of the students' of non-English majors? (c) How do the interaction between teachers' teaching and students' learning affects the autonomous EFL learning of the students' of non-English majors?

2.2 Participants

The participants in this research were 461 second year students of non-English majors from a university in Hubei province, China, who was globally sampled at the same level. Questionnaires were distributed to the students in the classroom in December, 2014 and returned on the spot. Of the 461 questionnaires, 444 were valid with 59.3% for females, 40.7% for males, 57.2% for students of liberal arts and 42.8% for students of science.

2.3 Instruments

The measurement instrument used in this research was based on Xu et al.'s (2004) "Questionnaire on Undergraduates' Autonomous EFL Learning" which consists of 32 items, covering five aspects of university students' autonomous EFL learning, namely clear requirements, plan making, strategy usage, self-monitoring and self-evaluation. Likert scale with five point scoring was used for items from "not clear" (one point) to very much clear (five points) or from "bad" (one point) to "very good" (five points). As for the measurement of the specific elements for teachers' teaching and students' learning, it was based on Sun's (2010) "Evaluation Scale for College English Classroom Environments" and designed revised according to the current classic measurement scales for classroom environments and the Chinese specific characteristics, including nine dimensions such as teachers' support, students' cooperation, students' responsibilities and 70 items in all. The questionnaire also used Likert scale with

five point scoring, from "never" (one point) to "always" (five points). In view of the literature review and the three questions to be answered, the researcher had the two questionnaires a pretest before the distribution to the participants and then revised them according to the pretest results. The revised "Questionnaire on Undergraduates' Autonomous EFL Learning" was composed of 29 items and "Evaluation Scale for College English Classroom Environments" of 62 items.

2.4 Data Analysis and Procedures

Firstly, the researcher used explorative factor analysis to analyze the factor structure of the questionnaires so as to validate its construction validity. And at the same time she also calculated the Cronbach's Alpha of each factor in the questionnaires. According to the questions to be answered in this research, the researcher employed multiple regression analysis. In order to answer the first and the second questions, the researcher took teachers' teaching and students' learning as independent variables and students' autonomous EFL learning results as dependent variables to examine the effect of teachers' teaching and students' learning on students' autonomous EFL learning via regression analysis. To answer the third question, the researcher took teachers' teaching and students' learning as independent variables in the same regression model and autonomous EFL learning as dependent variable to find out the effect of interaction between teaching and learning on autonomous learning. In addition, this research employed SPSS 19.0 as statistic analysis instrument and all the significant levels for inductive statistics were at $P<.05$.

3. RESULTS AND DISCUSSION

3.1 The Validity and Reliability of the Questionnaires

Before the explorative factor analysis of the questionnaires, the researcher firstly validated the normal distribution of each item in the two questionnaires. Results indicated that the questionnaires accorded with the requirements of single variable normal distribution (both skewness value and peak value were between ±2, Field, 2009). Secondly, the researcher validated the KMO of the two questionnaires (classroom environments: 0.954; autonomous learning: 0.943) and Bartlett's test of sphericity (classroom environments: x^2=17726.54, df=1891, $p<.001$; autonomous learning: x^2=7044.09, df=406, $p<.001$). From "Evaluation Scale for College English Classroom Environments" four factors of teachers' teaching were extracted, namely teachers'

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[1] "Teachers' support" refers to the degree of teachers' aid and concern for students' learning.
[2] "Fair teaching" refers to the degree at which teachers fairly treat the students. For example, the teacher helps me the same as she helps others.

Table 1
Participants' Interpretation Problems

Regression model one for teachers' teaching			Regression model two for students' learning		
	Standard coefficient	Standard error		Standard coefficient	Standard error
Constant variables	62.644***	4.958	Constant variables	42.333***	5.674
Female	.147**	1.522	Female	.104**	1.429
Science	-.013	1.522	Science	-.046	1.379
Fair teaching	.087	.183	Students cooperation	-.021	.19
Teachers' guidance	-.174**	.23	Partner relationship	-.128**	.198
Creative teaching	.156**	.204	Classroom participation	.422***	.182
Teachers' support	.342***	.154	Task orientation	.107*	.251
			Learning responsibility	.218***	.292
F	18.011***			32.011***	
R^2	.199			.341	

Note. *$p < .05$; **$p < .01$;***$p < .001$; females vs males; science vs liberal arts.

support[1] ($\alpha = 0.920$), fair teaching[2] ($\alpha = 0.913$), teachers' guidance[3] ($\alpha = 0.903$) and creative teaching[4] ($\alpha = 0.876$). And five factors of students' learning were extracted, namely partner relationship[5] ($\alpha = 0.861$), students cooperation[6] ($\alpha = 0.895$), task orientation[7] ($\alpha = 0.804$), classroom participation[8] ($\alpha = 0.885$) and learning responsibility[9] ($\alpha = 0.662$), which in all explained 58.3% of the total differences. From "Questionnaires on Undergraduates' Autonomous EFL Learning", five autonomous learning factors were extracted, namely strategy usage ($\alpha = 0.912$), plan making ($\alpha = 0.889$), self-evaluation ($\alpha = 0.779$), self-monitoring ($\alpha = 0.746$) and clear requirements ($\alpha = 0.787$), which in all explained 60.25% of the total differences. Tabachnick and Fidell (2007) proposed that when factor load was more than or equal to .71, or when the factor might explain 50% of the variation of the observation value, it was almost perfect. The above analysis revealed that both of the two questionnaires were fit for factor analysis.

3.2 The Effect of Teachers' Teaching on Students' Autonomous EFL Learning

The researcher took students' autonomous learning (taken from all the items that were added together in "Questionnaire on Undergraduates' Autonomous EFL

Learning") as dependent variables, and the four essential elements for teachers' teaching (fair teaching, teachers' guidance, creative teaching and teachers' support) as independent variables, controlled the virtual variables such as the subject and students' sex and made multiple-regression analysis. As for the results, see table one. Analysis of variance indicated that the significant probability value for the regression model was less than .001 ($F = 14.078$, $df = 6$), refusing the hypothesis that the regression coefficients were all zeros, which indicated that teachers' teaching was fit for the regression model and data of students' autonomous learning. Results of collinearity diagnostics revealed that there was no collinearity between the four independent variables. From the judgment coefficient or the adjusted R2, it could be seen that the regression model for teachers' teaching could explain 19.9% of the variation for autonomous learning. From the standardized regression coefficient it could be seen that the variable "subject" had no significant effect on students' autonomous EFL learning or there were no significant differences between the students who majored in different subjects with regards to autonomous EFL learning. The subject "sex" had significant effect on students' autonomous EFL learning and the female students did significantly better than the male ones (.147). Seen from standardized regression coefficient value of the four essential elements for teachers' teaching, it could be concluded that only "fair teaching" produced significant effect on students' autonomous EFL learning. The reason might be that college students proved to be psychologically mature at certain degree so that whether teacher were fair to them in teaching was not as important as it used to be when they were primary or middle-school students. In addition, teachers' guidance had a significant negative effect upon the autonomous EFL learning of college students of non-English majors ($\beta = -.074$, $p < .01$). According to the previous definition of teachers' guidance, there might be a probability that in the classroom teachers' performance of

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[3] "Teachers' guidance" refers to the degree at which how she presents her teaching ability, freedom and authority, etc. in the classroom. For example, the teacher is enthusiastic in her lectures.
[4] "Creative teaching" reflects the degree of the originality and creativeness for the teaching design.
[5] "Partnership" refers to the degree at which students understand and help each other. For example, in the EFL classroom I help those who need help.
[6] "Students cooperation" refers to the degree at which students cooperate but not compete with each other. For example, I cooperate with other students to finish the task assigned by the teacher.
[7] "Task orientation" refers to students' task-oriented learning orientation in the course of learning. For example, I will finish the learning task that I intend to.
[8] "Classroom participation" refers to the degree at which students' actively participate in the activities such as classroom discussion. For example, I express my ideas during the classroom discussion.
[9] "Learning responsibilities" refers to the degree at which students are responsible for their own classroom activities. For example, I have to be responsible for my own learning.

their teaching ability, freedom and authority failed to produce the dialogue effect on students in a pedagogical sense, and instead it had a sort of authority effect of teacher control and guidance. Teachers' support and creative teaching had a significant positive effect on the autonomous EFL learning of college students of non-English majors. And the effect of teachers' support (β=.342, p<.001) was greater than that of creative teaching (β=.156, p<.01). The reason might be that teachers' emotions and support of learning for the students created a sort of open and pleased-to-learn state of mind (Ellis, 2004) so that students had more activeness and self-confidence in EFL learning and more actively participated in various classroom activities. Hence in the classroom teaching it is of paramount importance for teachers to offer necessary support and help to meet individual students' need. And creative teaching based on this will be more conducive to students to use effective learning strategies in their learning and make reasonable plan and self-monitoring in order to steadily improve their autonomous EFL learning abilities.

3.3 The Effect of Students' Learning on the Autonomous Learning

In order to make comparison and contrast between the effect of teachers' teaching and that of students' learning on students' autonomous EFL learning，the researcher took the five elements for students' learning such as students cooperation, partnership, classroom participation, task orientation and learning responsibilities as independent variables, controlled the two virtual variables of students' sex and subject and made a multiple-regression analysis of the autonomous EFL learning for students of non-English majors. For the results, see regression model 2 (students' learning in table one. Analysis of variance revealed that the significant probability value for the regression model was less than .001 (F=32.011, df=7), indicating that students' learning in the classroom fit well for the regression model and data for the autonomous EFL learning for students of non-English majors. Results for collinearity diagnostics indicated that there was no collinearity between the five independent variables. From the adjusted $R2$ of coefficient of determination it could be seen that the regression model for students' learning in the classroom environments could explain 34.1% of the variables of the autonomous EFL learning for students of non-English majors. In view of the previous analysis of the regression model for teachers' teaching, it could be seen that in the context of classroom environments students' learning could be more conducive to students' autonomous EFL learning than teachers' teaching. Hence teachers can not teach merely for the sake of teaching. Instead they ought to activate students' interest of learning, improve their participation in the classroom activities and guide them to take learning itself as the purpose of learning.

From the standardized regression coefficient value, the variable of subject had no significant effect on students' autonomous EFL learning, the variable of sex did have significant effect in the model and it was higher for female students than for the malestudents (0.104). From the standardized regression coefficient value of students' five elements, it could be seen that only students cooperation had no significant effect on students' autonomous EFL learning. The reason might be that the Chinese college education had not taught students how to cooperate with others and that the students were not well aware of the significance and value of cooperation. In addition, partner relationship had significant negative effect on the autonomous EFL learning of students of non-English majors (β=0.128, p<.01). In other words, the better the partner relationship was, the worse the students' autonomous EFL learning would be. The reason might be that the better the partner relationship was, the more the students would take on what ought to be done by others. In this sense, this "good" partner relationship was not healthy. The classroom participation, learning responsibilities and task orientation had significant positive effect on students' autonomous EFL learning. Among the above three variables, the classroom participation (β=0.422, p<.001) had the greatest effect. Therefore both teachers and students should make every effort to promote the degree of students' classroom participation. The fact that the students shoulder more learning responsibilities could also be conducive to their autonomous EFL learning (β=0.218, p<.001). In other words, teachers should make it clear that students ought to be aware of their own responsibilities and of the fact that their activeness in learning would be well conducive to their autonomous EFL learning. In addition, each time it increased one unit for a student's orientation element in his English learning task, his autonomous EFL learning would increase 0.107 unit, or teachers should guide students' task orientation, not the learning for scores or achievement orientation.

3.4 The Interaction Between Teachers' Teaching and Students' Learning on Autonomous EFL Learning

Previously, the author of this paper made an analysis of how teachers' teaching and students' learning affected students' autonomous EFL learning from the perspectives of teachers' teaching and students' learning. In this part, she would analyze how and at what degree the interaction between teachers' teaching and students' learning affected the autonomous EFL learning for students of non-English majors. Hence she would take the five elements of students' learning and the four elements of teachers' learning as independent variables, control the two virtual variables of sex and subject and make a regression analysis of the autonomous EFL learning for students of non-English majors. For the results, see the model in table

Table 2
Pretest-Posttest Results

	Standardized coefficient	Standard error
Constant variables	45.562***	5.643
Female	.110**	1.429
Science	-.040	1.388
Students cooperation	-.003	.193
Partner relationship	-.108*	.229
Classroom participation	.410***	.200
Task orientation	.159**	.259
Learning responsibilities	.249***	.307
Fair teaching	-.017	.170
Teachers' guidance	-.181**	.216
Creative teaching	.037	.191
Teachers' support	.017	.178
F	21.897***	
R^2	.359	

Note. *$p<.05$; **$p<.01$;***$p<.001$; females vs males; science vs liberal arts.

two. Analysis of variance indicated that the significant probability value for the regression model was less than .001 ($F=21.897$, $df=11$), meaning that in the classroom environments the interaction between teachers' teaching and students' learning fitted well for the regression model and data for the autonomous EFL learning for students of non-English majors. Results of collinearity diagnostics revealed that there was no collinearity between the nine independent variables. From the adjusted R^2 of the determination coefficient, it could be seen that in the context of classroom the regression model for the interaction between students' learning and teachers' teaching could explain 35.9% of the variation for the autonomous EFL learning for students of non-English majors. In view of the above analysis of the regression model for teachers' teaching and students' learning, it could be seen that the interaction between students' learning and teachers' teaching could better promote the autonomous EFL learning for students of non-English majors.

From the value of standardized regression model, it could be seen that although the virtual variables and the specific elements for students' learning had almost the same effect on students' autonomous EFL learning as that of the previous two regression models, the effect of the specific elements for teachers' teaching changed substantially. To be more specific, the teachers' support and creative teaching that had significant positive effect on students' autonomous EFL learning failed to produce significant effect in the model for the interaction between teachers' teaching and students' learning. In other words, when teachers' teaching and students' learning interacted upon students' autonomous EFL learning, the effect of teachers' teaching almost disappeared and only the teachers' guidance that had significant effect still produced significant negative effect on students' autonomous EFL learning. Therefore in the classroom teachers should change their concept of teaching, change their teaching mode to learning mode (Barr & Tagg,

1995), and to teach for learning, not for teaching, or else teachers' teaching would not produce positive effect on students' autonomous EFL learning, but a sort of negative one instead.

3.5 Implications for Classroom Teaching

There are some implications for the above results. As for the specific elements for teachers' teaching in the classroom, firstly, teachers' guidance had a sort of negative effect on the autonomous EFL learning for students of non-English majors. Hence in actual EFL teaching, teachers should have a good command of the guidance and control of the student-centered classroom teaching, be able to have dialogues and communication with students so that teachers' guidance would produce positive effect on students' autonomous EFL learning (Benson, 2013). Secondly, teachers' support and creative teaching had a significant positive effect on the autonomous EFL learning for college students of non-English majors. Teachers' support had comparatively more effective than that of creative teaching. Hence from now on, in the English classroom, in contrast with the repeated advocating and the significance of the emphasis of creative teaching, to encourage teachers to offer students necessary and appropriate support and help had more effect on students' autonomous EFL teaching. Thirdly, although the two specific elements of teachers' support and creative teaching had a significant positive effect on students' autonomous EFL learning in the single analysis of teachers' teaching, in the model of the interaction between teachers' teaching and students' learning, they had no significant effect. In other words, if not student-centered, no matter how much teaching support and creative teaching there were, they would not produce any effect on students' autonomous EFL learning. Hence in the EFL classroom, teachers have to change their concept of teaching, from the emphasis of "teaching" to "learning" by means of effective strategies to improve the teaching quality, to emphasize the

importance of learning process, to guide students to discover and construct knowledge to improve the quality and efficiency of learning by the creation of the environments and atmosphere appropriate for learning so as to meet the needs of the development and success for the various groups of students (Barr & Tagg, 1995). Based on this, it may promote students' autonomous of EFL learning via offering students sufficient support and creative teaching approach.

From the specific elements for students' learning in the EFL classroom environments, it could be found that the better the partnership was, the worse the students' learning would be. Therefore in future EFL classroom teaching, great attention should be paid to the nature of the relationship between the students, the healthy development of partnership ought to be encouraged, which means real cooperative learning, discussion, mutual promotion and improvement, instead of copying each other or finish the learning tasks for others. A great number of researches abroad indicated that partnership would produce positive and active effect on students' learning and development (Zimmeman, 2003). Secondly, classroom participation, learning responsibilities and task orientation all had significant positive effect on the autonomous EFL learning for students of non-English majors. Among them classroom participation had the greatest effect on it. From the result it could be concluded that in the course of teaching, teachers should employ task-driven teaching approach and design different tasks for students to finish according to different teaching purposes. And each task should have its own specific purpose to be achieved (Adwards & Willis, 2009), which requires students to make correspondent learning plans according to different learning purposes and employ different strategies for different tasks. And many tasks themselves such as discussion, debate and problem solution prove to be interesting and particularly conducive to arouse students' activeness of self-input (Harmer, 2005) so that students will have sufficient self-confidence, actively participate in the classroom activities and willing to shoulder more responsibilities of learning.

CONCLUSION

The author of this paper observes that in the classroom "teaching" and "learning" turn out to be the essential elements that may affect EFL teaching quality and also the crucial ones for students' autonomous EFL learning. The previous researches with respect to autonomous learning failed to discuss the two crucial elements of the various ones: teachers' teaching and students' learning. In this sense this research might provide some other means and suggestions for autonomous learning research, or to discuss the elements that affect students' autonomous EFL learning from the pedagogical perspective. All in all,

it might be concluded that in the classroom environments both teachers' teaching and students' learning had significant positive effect on the autonomous EFL learning for the Chinese university students of non-English majors. And students' learning had comparatively more effect on students' EFL learning than teachers' teaching. In the context of the interaction between teachers' teaching and students' learning, teachers' teaching not only failed to produce significant positive effect on students' autonomous EFL learning, but also had negative effect instead, which indicates that the present teachers' teaching is not student-centered. Accordingly from the perspective of the promotion of the autonomous EFL learning for students of non-English majors, future classroom EFL teaching should more emphasize students' active learning, or not teach for the sake of teaching.

In conclusion, teachers ought to pay sufficient attention to each of the specific elements for teaching and learning so as to let it produce positive effect on students' autonomous EFL learning. The issuing of *College English Curriculum Requirements* (Chinese Ministry of Education, 2007) arouses the Chinese scholars' enthusiasm to make researches on the autonomous EFL learning for students of non-English majors. But how to promote the autonomous EFL learning will depend on teachers' teaching and students' learning. The results of this research may provide some empirical proposals and references for the further development of the current college English teaching reform and the promotion of the autonomous EFL learning for students of non-English majors from the perspectives of teachers' teaching and students' learning.

Finally, there might also be some limitations to this research. This paper failed to examine the English proficiency of the students who participated in the survey of the questionnaires so that the relationship between the students' English proficiency, the classroom environments and the students' autonomous EFL learning, which proves to be the drawback or deficiency of this research. In addition, this research merely employed the method of pure variables. In the future mixed design which combines quantitative analysis with qualitative one may be used to have a further discussion the effect of the classroom environments on students' autonomous EFL learning.

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