

# The Cultivation of Chinese Learners' English Writing Competency through Learning-oriented Assessment\*

Xin Yang

School of Foreign Languages, Sichuan University of Arts and Science, Dazhou, Sichuan, China

**Abstract**—This study is to empirically investigate the effect of the learning-oriented assessment on Chinese learners' development of English writing competency. This experiment was implemented in the writing classroom among 74 English majors from a local Chinese university within one term, and the findings from the analysis of 68 pairs of qualified essays indicate a significant difference between the scores in the pretest and the posttest. Based on the fact that the participants displayed a better performance on the lexical and syntactic level in the posttest, it can be inferred that the participants have shown a tendency of being better at exerting their linguistic ability together with their topic knowledge, cognitive and metacognitive strategies to achieve the communicative goal through the learning-oriented assessment model.

**Index Terms**—writing competency, learning-oriented assessment, feedback

## I. INTRODUCTION

The concept of “Key Competencies” was first put forward by OECD (Organization for Economic Cooperation and Development) in 1997, which raised a strong wave of quality education around the world. In terms of the framework advocated by OECD, the ability to use language, symbol and text, as one component of the Key Competencies, is embodied by the effective use of spoken and written language skills. In China, the quality-oriented education has been greatly emphasized since 1990s, but until 2016 *Chinese Students' Development of Key Competency* was formally published, in which the language key competency is defined as the capability of understanding and communicating the information in oral and written form. English writing competency, serving as a key to interactively communicating with the outside world, is definitely an essential part in learners' all-round development.

English writing is not only the output of the simple combination of lexical, syntactic and discourse knowledge, but also the indicator of students' comprehensive language competency. As an embodiment of language key competency, it does not function alone, but cooperates with the students' cultural character, thinking quality and learning ability. It is expected that through the cultivation of English writing competency, students can develop their ability to interact with the society, to express their personal thoughts and emotions effectively, and to implement critical thinking in the cross-cultural communication. Therefore, the cultivation of English writing competency is not just focused on the development of the writing skill, but also concentrated on the enhancement of the students' cultural awareness, critical thinking and the life-long learning ability. How to cultivate learners' writing competency has drawn the attention of a lot of teachers and researchers. However, many of them just focus on the theoretical aspect about the principles or the strategies to enhance learners' writing competency, but few have implemented empirical studies about the effectiveness of those teaching methods or principles. Since learning-oriented assessment takes learning and learners as the priority, which just meets the demands of developing learners' key competency, this study is to adopt it as the guideline in designing the writing course for English majors. Therefore, this paper is to carry out an experiment of applying the learning-oriented assessment in the cultivation of Chinese learners' English writing competency and to examine its effect in general and in depth.

## II. LITERATURE REVIEW

### A. The Definition of Learning-oriented Assessment

Learning-oriented assessment (LOA) refers to the assessment in which “a primary focus is on the potential to develop productive student learning processes” (Carless, 2009). It originated from the redefinition of the roles of assessment in teaching and learning, the doubt of the traditional assessment and the revolution of the modern learning and technology. Since 1990s, there have been heated debates about the functions of language assessment, because the traditional summative assessment fails to provide enough illuminating feedback for learning process and it cannot satisfy learners' requirements for self-monitored autonomous learning. Among them, Krogstrup (1997) proposed the “dialogue and

---

\*This is a paper supported by the Teaching Reform Project of Sichuan University of Arts and Science, Grant No. 2020JZ031, and by Sichuan Foreign language Literature Research Center, Grant No. SCWYG20-09.

learning oriented evaluation method”, but it was Carless (2006, 2007) who first coined the term “learning-oriented assessment”. Considering the potential advantages of LOA, Carless (2009) put forward the LOA mode aimed at the learning process to promote the learning instead of merely emphasizing the testing results.

Just as pointed out by Bachman and Palmer (2014), the main function of assessment lies in the collection of information, for the stakeholders to make further decisions, especially for teachers and learners. Based on the feedback, they can be better informed so that assessment is used not merely for the summative purpose but also for the formative evaluation of the learning process. LOA is just the one which can fulfill the two functions. Based on their literature review, Zeng etc. (2018) noted that LOA is a “holistic assessment methodology”, which embodies at least three preexisting assessment approaches, assessment of learning (AoL), assessment for learning (AfL) and assessment as learning (AaL). AoL is a reflection of summative assessment, which is to evaluate the status of learners’ achievements. AfL echoes the core idea of formative assessment, but it moves a step further by emphasizing the role of learners in learning so that they can be informed of the learning progress. Not only the teacher but also the learners can be involved in the decision-making in the learning process. AaL may advance even further than AfL, because it intends to balance the weights of learning and assessment for learners. Learners are encouraged and instructed to evaluate their performance and even their peers’ so that their learning motivation can be fully activated. Since the three approaches have their own focus and advantages, LOA is to mediate them all, aiming at a balance among them (Zeng, et al., 2018). Within the framework of LOA, AoL is to help the teacher and learners to confirm their learning results, and AfL is to clarify the gap between “the desired goal and the current level of learning for both the parties” (Zeng, et al., 2018), with AaL monitoring and evaluating the learning process.

Therefore, it is believed that LOA can effectively realize self-directed learning in which learners should take the responsibility for important learning decisions about goals, resources, strategies, and assessments. Besides, LOA can promote learners’ cognitive ability, because learning tasks are designed to stimulate them to analyze the task, monitor their learning, and also interact with their teachers and peers. Especially in the interactional process, they need to adjust their cognitive and metacognitive strategies to negotiate with the feedback from the teacher and their peers.

### *B. The LOA Model*

Based on the research about assessment for learning, Carless (2009) proposed a triangle-shaped LOA model, which is composed of three elements at the vertices: learning-oriented assessment tasks, developing evaluative expertise and student engagement with feedback. Learning-oriented assessment is the apex, highlighting the designing of the thinking and practicing activities for learners within the relevant discipline, and involving learners in the authentic and contextualized problem-solving process. Evaluative expertise refers to learners’ evaluation ability to judge their own performances and the peers’, which can be achieved by their familiarity with the evaluation model and criteria (Boud and Falchikov, 2007). Student engagement with feedback focuses on learners’ active decoding of the feedback message, which indicates an overlap with the evaluative expertise (Carless, 2015).

According to Jones and Saville (2016), there are three specific learning-oriented methods: mastery learning, dynamic assessment and cognitive acceleration. Mastery learning advocates that learners should continue to learn about a particular topic until they have mastered it. Otherwise, they cannot move to a new topic. However, the effectiveness of this approach has been questioned (Jones and Saville, 2016). Dynamic assessment emphasizes the full development of learners’ potential, so in the learning process, teachers will provide learners with scaffolding instantly in terms of the results of the diagnostic test. This approach mainly gets enlightenment from the Vygotsky’s Zone of Proximal Development for a “cognitive development and transfer of skills to future tasks through intentional systematic mediation” (Jones and Saville, 2016). Cognitive acceleration is to enhance learners’ cognitive development by drawing learners’ attention to the cognitive process. This approach is composed of cognitive conflict, social construction, metacognitive and schema theory. It focuses on the stimulation of learners’ cognitive process by presenting them gradual cognitive challenges, involving them in appropriate group interactions, making them consciously reflect on their own thinking process, and using “the schema of concrete operational thinking” (Jones and Saville, 2016).

Based on the previous theories, Jones and Saville (2016) constructed their LOA model from the macro level and the micro level. On the macro level, the factors, such as setting and monitoring targets and external exam, need to be taken into consideration. On the micro level, the focus is mainly on the classroom, and the classroom activity forms an LOA cycle, including four key points: interaction, observation, evaluation and feedback. In the center of the cycle is the LOA activity, which is manifested by learning tasks and the record of the activity. At the very beginning, the teacher is to design some tasks for learners so that they can interact with the learning task, other learners and the teacher, which will be observed and interpreted by the teacher. Based on the observation, the teacher and learners can get some feedback so as to modify the teaching objective or to guide further teaching, which serves as a new start point for the next cycle of LOA assessment.

By comparing the two models, it can be found that both emphasize the assessment task design, which is to involve learners in the active learning and assessment process. And the assessment task fulfills a diagnostic function as well as a learning one. That is to say, learners, through the designed task, can progress with their learning and self-evaluate it at the same time. Another element, feedback, is also emphasized in the two models. Without feedback, learners cannot effectively interact with the teacher and other learners, which may hinder their learning. However, in Carless’ model, the task is more focused on the contextualized thinking and practice carried out by learners, and learners’ capacity of

self evaluation and feedback decoding.

### C. *Research Questions*

English writing is a comprehensive process which requires learners to fully motivate their exiting language knowledge, and organize their ideas in accordance with the English way of thinking. In the whole process, they need to adopt some cognitive strategies effectively to monitor their production and adjust to the phrasing closer to English. Therefore, all the key competencies of English can be found in the process. But since it is uncertain whether the writing competency can be fostered in the writing process, it is significant to check its teachability by exploring an effective way to help learners to develop it. Combining the elements in the two LOA models, this paper is to apply the LOA approach to cultivate Chinese learners' English writing competency, because the key idea of LOA is learner-centered, which just coincides with the requirement of developing learners' key competency. In this study, learners' writing competency, serving as a focus of the study, is placed at the center of the LOA model, and provides the guideline for the task design, the classroom observation and the classroom feedback. It is aimed to find out the answers to the following questions:

- (1). Is there any influence of LOA on the Chinese learners' English writing competency?
- (2). Which aspects of the Chinese learners' English writing competency can be influenced?

## III. METHODOLOGY

### A. *Participants*

The participants in this research were 74 first-year English majors from two classes in a local university in the southwest of China, disproportionately with only 8 male learners, which is a normal situation in the majors like English. Most of them had been studying English for at least 6 years since junior middle school, and they were close to the intermediate level. At the very beginning of the research, they were informed that all the activities organized in the course were to improve their writing proficiency, and if they were not willing to continue, they could refuse to participate in any activities.

### B. *Instruments*

Since the participants were freshmen and their linguistic knowledge had not been systematically internalized, this writing course would serve as a basic writing course to help them reorganize their linguistic knowledge in a logical way and increase their metacognitive ability of evaluating their own and their peers' writing and monitoring their learning process, so that they could smoothly adjust to the academic writing in their learning later. Therefore, the course designed for one semester included the following eight topics: the typical English sentence types and differences between the English and Chinese sentences, the expansion of simple English sentences, the run-on sentences, the modifiers, the parallel structures, the punctuations, the figures of speech, and the diversity of sentences.

Before and after the course, two writing proficiency tests were adopted respectively. In order to make the rating more objective, the essays written in the two writing tests were evaluated by Jukuu English Essay Assessor, which is a specialized website providing automatic essay scoring services based on standard corpuses. In addition to releasing the scores, it can also provide a general comment and sentence-by-sentence feedback for each essay. Moreover, it can present the teacher some key information based on the comparison of two essays in terms of the mistakes in spelling, grammar and sentence structures, ect., the diversity of the vocabulary, and the length of the sentences. According to He (2013), the Cronbach's Alpha was 0.694, proving the reliability of the Assessor, and he also noted that it is better at evaluating the essay's vocabulary and grammar than the logic and discourse. Zhang's research also indicated that there is a general agreement between the scores given by the Assessor and by the human raters (Zhang, 2017).

Since this research is to examine the influence of the LOA model on learners' writing competency, we need to find the supporting evidence for learners' development in language ability, cultural character, thinking quality, and learning ability. However, because these competencies are implicit abilities, which can only be reflected by the learners' linguistic production, this research decides to analyze the improvement of learners' writing competency from the factors of mistakes, the diversity of the vocabulary, the length of the sentences, sentence structure and components.

### C. *Procedure*

The writing course was composed of eight topics, so it was designed to be finished in one semester within sixteen weeks, two weeks for a topic. One week before the course, a writing pretest was conducted among all the participants to diagnose their current level of writing proficiency and their problems in writing. On the platform, all the writing tasks in the pretest would be automatically assigned a task number, and for this pretest, that number was 1502551. All the participants were informed of that number and required to input their essays into the Jukuu English Essay Assessor on the website within a week.

During the course, before each topic, a diagnostic task would be held to analyze the participants' strength and weakness, and their needs, based on which, the teaching objective would be designed. Then, there would be an explicit explanation of the task objectives and the requirements for evaluation. For that, the teacher would present some samples to illustrate the objectives and explain the focus of evaluating one's writing in that class, which was to help learners to

be familiar with the constructs and the assessment skills needed. After that, a learning activity would be assigned for the learners to apply the evaluative skills to assess their own and others' writings in the class and provide necessary feedback for each other, which could serve as a formative assessment indicating key information for both the teacher and the learners. Based on the feedback observed, the teacher could adjust the objectives and the instruction for the next topic to satisfy the learners' needs further.

After the conducting of all the eight topics, all the participants were required again to take the second writing test, and their essays also were input into the Assessor for the same kind of evaluation as the previous one. For the writing task in the posttest, it was also automatically assigned a task number "1814216" by the platform. The writing test was also implemented online within one week when it was convenient for all the participants.

#### D. Data Analysis

After each test, the scores provided by the Assessor were input into the Excel ready for the data analysis. During the two tests, some participants were absent for a certain reason, and at last, there were only 68 participants left with qualified essays in both tests. Since this research is to investigate the influence of the LOA approach on the learners' writing competency, the distributions of the pre-test and the post-test scores were first analyzed and described to check the general effect. Then, a paired T-test was adopted to examine the effect of the LOA approach through SPSS 20.

It is known that writing is a good way to indicate learners' comprehensive linguistic ability and thinking quality, the differences on the lexical and syntactic level between the pretest and the post-test essays were compared and analyzed. The former included the factors like the mistakes in spelling, collocations, the lexical diversity, and the misuse of parts of speech, while the latter covered those like the sentence length and its density, the syntactic structure, and the sentence component.

### IV. RESULTS

#### A. The general Effect of the LoA Approach on Learners' Writing Competency

As is indicated in Table 1, the data show that the participants have a better performance in the post-test score, for the mean of the post-test scores is 86.434 with a standard deviation of 3.6507, while that of the pre-test scores is 81.34 with a standard deviation of 4.722. In order to check their metacognitive ability to monitor self-learning, the times of modifying the essays before the deadline were also calculated, which indicated that the participants showed a higher level of self-learning frequencies. In the pre-test, the average number of the modifying times is 4.4, and in contrast, that in the post-test reaches as high as 16.7. In the post-test, there are 42 participants who had modified their essays for at least ten times, while in the pre-test, there are only 7 of them willing to modify their essays more than 10 times, which shows that after the course, the learning autonomy has greatly been improved for most of the participants.

TABLE 1  
MEAN COMPARISON OF THE PRE-TEST AND THE POST-TEST SCORES

	Mean	N	Std. Deviation	Std. Error Mean
pre-test scores	81.38	68	4.722	.573
post-test scores	86.434	68	3.6507	.4427

TABLE 2  
DISTRIBUTIONS OF THE MODIFYING TIMES IN THE PRE-TEST AND THE POST-TEST

	≤5 times	5~10 times	≥10 times	Total number
pre-test	51	10	7	68
post-test	14	12	42	68

Paired samples test was adopted in this research in order to check the influence of the model on the participants writing proficiency. The results indicate that there is a significant and meaningful difference between the pretest and the posttest scores, as is shown in Table 3.

TABLE 3  
PAIRED SAMPLES TEST

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
pre-test score post-test score	-5.0588	5.0767	.6156	-6.2876	-3.8300	-8.217	67	.000

#### B. The Development of Learners' Writing Competency on the Syntactic Level

The average length of the sentences in the posttest is 20.152 words, while that in the pretest is 16.447. In Figure 1, it can be found that, the participants produced more sentences with 17 words or fewer in the pretest, but above the range between 17.654 to 21.147 words, they showed a greater preference for using longer sentences in the posttest.

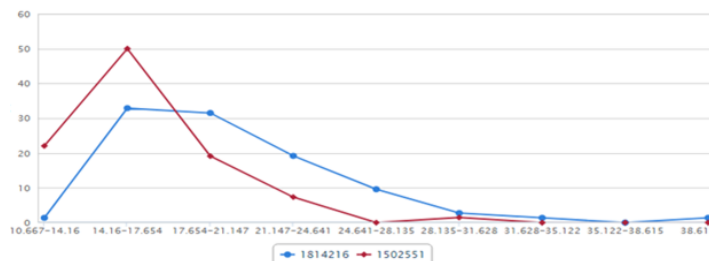


Figure 1 The Distribution of the Sentences with Different Length

To find further evidence on the syntactic level, the numbers of words in each sentence were also calculated and analyzed. In Table 4, it can be found that in the posttest, the participants have a better performance in their management of the sentence length. As for the sentences which contain more than 21 words, there are 529 sentences in the posttest, accounting for 39.06% of the total number of sentences in the posttest, while there are 191 sentences in the pretest, accounting for 22.42%. In contrast, for the sentences with a length of 1-10 words, there are 224 sentences in the posttest (15.97%), and there are 207 in the pretest (24.3%).

TABLE 4  
THE DISTRIBUTION OF THE DIFFERENT NUMBERS OF WORDS IN SENTENCES

The numbers of words in each sentence	The number of sentences		The rate (%)	
	Pretest	Posttest	Pretest	Posttest
1~5	23	12	2.7	0.86
6~10	184	212	21.6	15.11
11~15	267	328	31.34	23.38
16~20	187	322	21.95	22.95
21~25	106	226	12.44	16.11
>25	85	303	9.98	21.6
Total	852	1403	100	100

Since language is a reflection of thought and culture, Chinese and English have a great difference in sentence constructions as a result of the cultural influence. In order to check the participants' changes in their thinking patterns while composing an English sentence, the mistakes made in sentence structures and sentence components were also accounted, as is indicated in Table 5. It can be found that the number of the mistakes in the two aspects have declined from 25 to 6, and from 44 to 21 respectively.

C. The Development of Learners' Writing Competency on the Lexical Level

On the lexical level, the diversity of words was measured to evaluate the participants' development in writing proficiency. In this research, the type-token ratio was used to calculate the diversity of the vocabulary. As is depicted in Figure 2, after the type-token ratio of 5.336, there is a contrast tendency of the distributions of the diversity of words in the pretest and posttest. After that point, the posttest result shows higher ratios until reaching the point of 6.368, where the two lines overlap, ending with a ratio of zero.

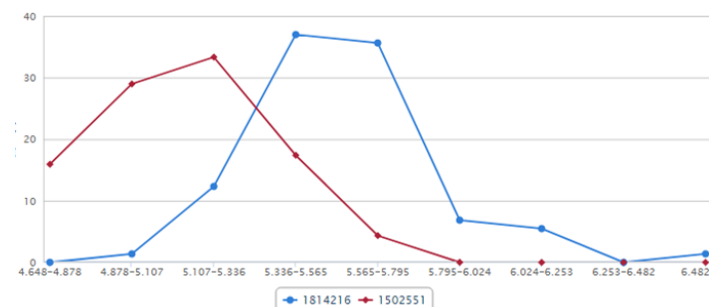


Figure 2 The Distribution of the Diversity of Words

In order to further check the participants' development in writing proficiency, the factors such as mistakes in spelling, collocation, and the misuse of different parts of speech were also analyzed. From Table 5, it can be found that there is a general decline of the numbers of all kinds of mistakes listed. The most obvious change occurs in the mistakes in spelling: In the pretest, there are 55 mistakes, while in the posttest, there are 24. The number of the mistakes in collocation and that of the misuses of parts of speech also decrease respectively from 47 to 30 and from 12 to 8.

TABLE 5  
DISTRIBUTIONS OF THE MISTAKES IN THE PRE-TEST AND THE POST-TEST

	Sentence structure	Sentence component	Collocation	Spelling	The misuse of parts of speech
pretest	25	44	47	55	12
posttest	6	21	30	24	8

## V. DISCUSSIONS

Through our data analysis, it is clear that in the posttest, the participants displayed a better performance generally, with a higher mean score and a lower standard deviation. There is also a significant difference between the scores of the two tests. It can be inferred that the participants have shown a tendency of being better at exerting their linguistic ability together with their topic knowledge and cognitive strategies to achieve the communicative goal. Besides, these participants' behaviors of modifying their essays much more actively in the posttest future prove that they have become more active and independent in monitoring and managing their learning after the course. During the LOA-approached writing course, the learners have been used to adjusting their learning behaviors with the feedbacks given by their teacher and peers. Therefore, even though the feedback was just given by the Assessor in the tests, their cognitive and metacognitive ability still played a part in involving them in modifying the essays again and again until they were personally satisfied.

The data were just a general indication of the participants' progress after the course, and more detailed evidence can be found in their sentence constructions and word choices. On the syntactic level, the learners' ability to manipulating the longer sentences in the posttest is much stronger in the posttest, especially for the sentences with a range from 17.654 to 28.135 words. Although the sentences have become longer, the mistakes in the sentence structures and the sentence components are comparatively fewer than those in the pretest. It can be inferred that the learners, through their participation in the course, have become more used to the English thinking patterns while expressing their ideas. Their schema of English sentence patterns and structures are more clearly established, indicating an improvement of their cognitive ability, which can be further supported by their choices of words.

On the lexical level, the higher diversity of words in the posttest shows that the participants have become more conscious of diversifying their words in writing to avoid repetition, which shows their development in their meta-cognitive ability to monitor the writing production. Also, the fewer mistakes in spelling, collocation and the use of parts of speech in the posttest echo the findings that the participants have a better metacognitive ability in monitoring their writing behavior while implementing the communicative aim.

## VI. CONCLUSION

This study was aimed at facilitating the Chinese learners' writing competency through the LOA approach. With the model, the learners showed an improvement in their general language ability, and their cognitive knowledge and their metacognitive ability in writing. Besides, they have also adjusted to the English thinking patterns while composing English sentences. Therefore, the findings indicate a great significant effect of the LOA approach on the learners' development of English writing competency, especially on the lexical and syntactic level. However, because of the limited energy and expertise, more detailed analysis needs to be made from the discourse aspect, which can provide a more comprehensive picture for the effect of the LOA approach on the learners' writing competencies. Besides, it is suggested that the LOA approach can be further applied in the other aspects of English teaching, such as reading, listening and speaking, which can help provide a full insight into the approach and fully exert its advantages in the learner-centered era in English education.

## REFERENCES

- [1] Bachman, L. & A. Palmer. (2014). *Language assessment in practice: Developing language assessments and justifying their use in the real world*. Oxford: Oxford University Press.
- [2] Boud, D. & N. Falchikov. (2007). *Rethinking assessment in higher education: Learning for the longer term*. London: Routledge.
- [3] Carless, D. (2006). Differing perceptions in the feedback process. *Studies in Higher Education*, 31(2), 219-233.
- [4] Carless, D. (2007). Learning-oriented assessment: Conceptual basis and practical implications. *Innovations in Education and Teaching International*, 44(1), 57-66.
- [5] Carless, D. (2009). Learning-oriented assessment: Principles, practice and a project. In L. H. Meyer, et al. (Eds.), *Tertiary assessment and higher education student outcomes: Policy, practice and research*. Wellington, New Zealand: Ako Aotearoa, 79-90.
- [6] Carless, D. (2015). Exploring learning-oriented assessment processes. *Higher Education*, 69(6), 963-976.
- [7] Hattie, J. & H. Timperley. (2007). The power of feedback. *Review of Educational Research*, 77(1), 81-112.
- [8] He, X. L. (2013). Reliability and validity of the assessment by the Pigaiwang on college students' writings. *Modern Educational Technology*, 5, 64-67.
- [9] Jones, N. & N. Saville. (2016). *Learning oriented assessment: A systemic approach*. Cambridge: Cambridge University Press.

- [10] Krogstrup, H. K. (1997). User participation in quality assessment: A dialogue and learning oriented evaluation method. *Evaluation Volume 3*, 2, 205-224.
- [11] Paulus, T. M. (1999). The effect of peer and teacher feedback on student writing. *Journal of Second Language Writing*, 3, 265-289.
- [12] Volante, L. (2010). Assessment of, for, and as learning within schools: Implications for transforming classroom practice. *Action in Teacher Education*, 31(4), 66-75.
- [13] Vygotsky, L. S. (1978). *Mind in society: The Development of Higher Psychological Process*. Cambridge: Cambridge University Press.
- [14] Zeng, W. J., F. Q. Huang & Y. Lu. (2018). Towards a learning-oriented assessment to improve students' learning: A critical review of literature. <https://doi.org/10.1007/s11092-018-9281-9> (accessed 13/1/2020).
- [15] Zhang, L. (2017). A study on the evaluation, generalization and extrapolation of automated writing evaluation system. *Foreign Language and Translation*, 3, 64-71+98.

**Xin Yang** was born in Sichuan, China. She got her MA in Southwest University in China, majoring in Foreign Linguistics and Applied Linguistics. She is currently an associate professor in the School of Foreign Languages, Sichuan University of Arts and Science, Sichuan, China. Her research interests include Second Language Acquisition and Foreign Language Teaching.