

# Exploring Online Self-regulated Learning from a Sociocultural Perspective: The Case of Eight High-achieving EFL Learners

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**Abstract:** High-achieving language learners' effective learning strategies have always been the research focus in the field of second-language acquisition. In recent years, with the rapid development of information technology, the research topic of English language learners' online self-regulation has become increasingly important. This qualitative inquiry investigated the features of eight high-achieving students' online self-regulated learning with a focus on how they strategically improve their English listening and speaking proficiency from a sociocultural perspective. Participants were English as a foreign language (EFL) learner at a comprehensive university in China. Data were collected from in-depth and face-to-face interviews. Using the activity theory to interpret these data, four types of self-regulatory strategies were identified, namely, artefact-mediated, rule-mediated, community-mediated, and role-mediated strategies. The results inform the development of pedagogical schemes to enhance EFL learners' listening and speaking proficiency through online self-regulated learning.

**Keywords:** Sociocultural theory, activity theory, online self-regulation, high-achieving EFL learners, English language learning

## 1. Introduction

With the development of globalization and the continuous deepening of China's reform and opening up, there are more and more EFL learners in China. Since it is believed that self-regulated learners learn more and better (Pintrich, 2000; Zimmerman, 2000), high-achieving English learners' effective learning strategies have been the research focus for decades in the field of SLA. In recent years, the rapid development of information technology has profoundly changed the way language teaching and learning, and online self-regulated language learning has become a vital way for EFL learners to learn English informally. Many related studies have started to focus on self-regulated learning strategies of language learners in online learning environments (e.g., Barnard, Lan, To, Paton, & Lai, 2009; Zheng, Mu, Li, & Yuan, 2016).

## 2. Literature Review

### 2.1 Online Self-regulation and Second Language Acquisition

In the 1970s, Albert Bandura (1977) and his associates proposed the concepts of self-efficacy and self-regulation, which has gradually attracted much research attention in the field of SLA. Zimmerman (1989) argued that self-regulated learning refers to learners' actively participation in their own learning process. Given the belief that self-regulated learners learn more and better, many researchers conducted studies on foreign language learners' self-regulatory strategies. Besides, due to the rapid development of information technology in the past few decades, there has been a growing interest in college EFL learners online self-regulated language learning (e.g., Liu, Lan, & Ho, 2014; Zheng, et al., 2016).

## 2.2 Sociocultural theory and activity theory

Vygotsky, the former Soviet Union educational psychologist, put forward the sociocultural theory (1978) which emphasized that every development of human high-level psychological functions first appeared at the social level, between individuals, and later at the psychological level, within the individual. It meant that language as a kind of high-level psychological functions must be acquired by interaction with the outside world. Broadly defined, the sociocultural theory included four parts, the mediation theory, the internalization theory, zone of proximal development theory (ZPD), and the activity theory. Drawing on Vygotskian's notion, Leontiev (1981) and Engeström (1987) further developed the activity theory, and later, Engeström (1999) developed an activity system, as shown in figure 1. There are six elements, subjective, objective and four mediators, namely artefact, rules, community and roles. Artefacts refers to the various resources that help subjects interact with the outside world, such as online learning platforms, electronic dictionaries, films, etc. Rules refer to some criteria or limitations that learners need to follow. Community refers to a social group that members have the same goal, and roles mainly refer to their social roles in a community. The four mediators interact with each other when acting upon subjects' activities.

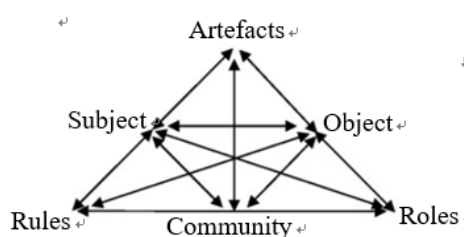


Figure 1. Activity system

## 2.3 Gaps in previous literature

It seems that in the SLA field in China, most previous studies only focused on introducing and discussing the sociocultural theory or activity theory, lacking comprehensive and empirical investigations yet. As for studies drawing upon self-regulation theory in SLA field, most emphasized the relationship between learners' internal cognition and self-regulation behaviors. However, from the sociocultural perspective, self-regulated strategic learning pays more attention to social contexts and learners' interaction with the outside world. Until now, from the perspective of sociocultural theory, studies focusing on Chinese EFL learners' self-regulation, especially about learners online self-regulated listening and speaking, is still lacking. To address this issue, the present study combined activity theory and self-regulation theory, and explored the features of eight high-achieving students' online self-regulated learning with a focus on how they strategically improve their English listening and speaking.

## 3. Research Methodology

### 3.1 Research context

The present inquiry was conducted in the researchers' university. It's a comprehensive university with emphasis on Computer Science and Technology, Information Engineering and some other disciplines related to computer, providing a good online learning environment for students. The university offers a course named "College English Listening and Speaking", which is compulsory for all non-English freshmen and sophomores. The main goal of this course is to develop EFL learners' comprehensive skills with a focus on English listening and speaking, and the teaching procedure consists of two parts: face-to-face in-class instruction and learners' online self-regulated learning (Zheng, Liang, Li, & Tsai, 2018). There are two online learning management systems for students' online self-regulated English language learning, called "New Perspective Foreign

Language Teaching and Learning Platform (V5.0)” and “Online Teaching and Formative Assessment System” respectively.

### 3.2 Research participants

Eight participants, including five females and three males, were selected by extreme sampling method for the study. They were all non-English majors at different departments of the university and they came from all over the country. Some detailed information about the participants is shown in Table 1. The eight EFL learners were in the second semester of their sophomore year when interviewed. In their first year in college, they took the National College English Text-Band 4 (CET4) in June and scored top ten of all freshmen in the university. In addition, they all participated in the College English Listening and Speaking Course taught by Teacher Zheng and performed quite well. According to the two criteria, we defined them as high-achieving EFL learners. They were expected to have better self-regulation when improving English listening and speaking online.

Table 1

*Detailed information about the participants*

Participants	Sex	Grade	Major	Hometown
S1	F	Sophomore	Computer Science & Technology	Anhui
S2	F	Sophomore	Economics and Management	Beijing
S3	M	Sophomore	Economics and Management	Hubei
S4	M	Sophomore	Communication Engineering	Liaoning
S5	F	Sophomore	Economics	Shandong
S6	F	Sophomore	Electronic Information Science and Technology	NA
S7	M	Sophomore	Communication Engineering	Beijing
S8	F	Sophomore	Engineering Management	NA

### 3.3 Data collection and analysis

The study employed a qualitative research method and data were gathered mainly rely on in-depth and face-to-face interviews. A total of eight interviews were conducted and audio-recorded independently with the participants, each lasting 30 to 60 minutes. In consideration of convenience, the native language Chinese was employed. Before the interview was conducted, the researchers designed an outline of interview questions which mainly involves three aspects, namely, learners’ belief and motivation, learners’ technology acceptance and usage, and their online self-regulated learning. However, interviews were not confined to the questions of the outline, and researchers made more detailed inquiries based on the interviewees’ response (Cohen, Manion, & Morrison, 2013). At the beginning of the interviews, the researcher briefly explained the goal of the interview, and promised the participants that the data they provided would be kept strictly confidential and would be used only for research. After the interviews, all the qualitative data were transcribed into English. During the transcription process, the researcher coded the eight participants as S1 to S8 in order to ensure that the interviewees’ personal information won’t be revealed.

## 4. Results and Discussions

From the perspective of activity theory, the interview data revealed that high-achieving learners’ online self-regulated English language learning strategies could be identified as four categories, namely, artefact-mediated strategies, rule-mediated strategies, community-mediated strategies, and role-mediated strategies. Subcategories were specified to further explicate their strategical online self-regulation.

### 4.1 Artefact-mediated Strategies

The study found that the eight high-achieving students strategically used various artefacts, such as online language learning platforms, English news websites, films or television programs, to improve their English listening and speaking proficiency when they conducted self-regulated learning online. Among them, the online language learning platforms served as very efficient and convenient platforms. For example, S1 stated, “our university’s language labs are accessible to us all the time and the online English language learning systems enable us to do online self-tests, which helps a lot”. S4 also mentioned “In online English language learning systems, there are lots of tests, English articles and exercises, which are quite useful resources for English language learning”.

In addition to the university’s experimental platform, news websites or WeChat official accounts were also widely used. The participants recommended some commonly used websites or official accounts, such as New York Times (S2), Voice of America (S3), China Daily Bilingual News (S2, S4), Daily English Listening (S5), British Broadcasting Corporation and Cable News Network (S6), etc. Almost all the participants said that they would get their daily listening materials through these diverse websites or official accounts.

What’s more, the most popular approach is watching films and TV programs, because it can offer the most native and daily useful English. For instance, S4 expressed, “Sometimes I may search for some BBC documentary films or news programs. American TV dramas is also a good choice, for the language used in dramas is colloquial and daily life-oriented, which can bring us into a real life situation”. In the similar vein, S6 appreciated the authentic and native expression in English movies.

Overall, these eight high-achieving EFL learners were good at using various online artefacts to regulate their online English language learning.

## *4.2 Rule-mediated Strategies*

The interview data showed that when learning online, the eight high-achieving students would regulate their learning behaviors according to certain rules. Two types of rule-mediated strategies emerged from the data: evaluation-mediated strategies and time-mediated strategies (Hu and Gao, 2017; Lei, 2008).

### *4.2.1 Evaluation Criteria-mediated Strategies*

All participants agreed that good oral English was mainly characterized by standard pronunciation, authentic expressions, and fluent speaking. The evaluation criteria influenced their online self-regulation and promoted them to achieve better performance, and their performance tended to be assessed mainly by exams or others’ evaluation. S2 and S3 both reported that they must practice their spoken English to pass TOEFL exams or get a higher score. For them, test scores were the plainest criteria to reflect their English proficiency. Another important criterion helped learners knowing about their English proficiency is others’ evaluation. “In some occasions, as long as I speak in English, others will know my English proficiency. If I can speak English fluently, they will be impressed by me”, S1 stated. S4 shared his traveling abroad experience, “What’s more important, at that time (communicating with local people in English), many people traveling together with me expressed their praise and said that this boy was quite excellent. I like this feeling”. S8 had the similar experience to S4 when exchanged students stayed at her home. Their reflection suggested that others’ evaluation, especially praise can effectively encourage language learners to perform better.

### *4.2.2 Time-mediated Strategies*

EFL learners’ English language learning was greatly limited by time. However, the emergence and development of mobile technology has overcome the time and space limitations of traditional language learning to a large extent. “I usually check the update in official accounts every morning, sometimes at noon or in the evening. It’s flexible” (S2). S4 said that he would check his phone at night, and S5 reported that she learned English in fragmented time, such as “walking in campus or taking the subway”. Besides, S6 told the researcher that she tended to browse the latest news when eating. It can be concluded from the data that the participants were good at making full use of fragmented time through mobile technology. In addition, S1 and S8 explicitly mentioned that

English language learning is a long process and that persistence and perseverance were basic factors to master English. In summary, the eight high-achieving EFL learners made the best use of tiny pieces of spare time and persevered for a long time to achieve their great performance.

### *4.3 Community-mediated Strategies*

From the sociocultural perspective, language learning is achieved in the social and cultural context, and interaction plays an important role in language acquisition. Echoing the findings reported in previous research that learners' online self-regulation has been mediated by immediate school communities and the broad society (Hu & Gao, 2017), community-mediated strategies can be subcategorized as two types: campus community-mediated and society-mediated strategies.

#### *4.3.1 Campus Community-mediated Strategies*

The eight high-achieving EFL learners were deeply aware of the importance of class groups, especially their English teacher. S4 stated, "Our teacher carefully selects appropriate topics, and offers us many pictures as well as videos in the online language learning platform. Some group tasks give us opportunities to open our mouth to express. More importantly, when we meet any difficulty, our teacher will come to us with advice". Apart from this, S5, S6 and S7 all mentioned that their English teacher could "stimulate our interest in English, and inspire us to communicate with her". In a word, from the campus community, EFL learners could get rich communication opportunities and individual instructions or advice, which helps a lot in their self-regulated online language learning.

#### *4.3.2 Society-mediated Strategies*

Besides the emphasis on English teachers, the interview data revealed that the participants also appropriated social resources outside the campus community, such as parents and friends. S3 often sought encouragement from one of his friends who "also plans to pursue graduate study abroad and takes TOEFL exams". S6 said that if she met something she didn't understand, she would "ask my friends who are English majors". Furthermore, S7 stated the influences from his parents who "encourage me to speak bravely and talk with me in English". There is no doubt that interaction with parents and friends can also effectively promote the self-regulation of the participants.

### *4.4 Role-mediated Strategies*

The social environments in which the learners live influenced how they identify themselves, and further influenced their self-regulation. There were mainly two factors affecting their identification in this study. One is their clear awareness of the importance of English in the era of globalization, the other is they were all non-English majors. One obvious feature was that they paid great attention to the practical of English communication. As mentioned above, S4 realized the benefits of good oral English when traveling abroad. This is further echoed by S6, S7 and S8 who emphasized that English was a great tool to communicate with others and could "broaden my horizon and make me a global person" so that they could "know about the outside world and understand people from different culture backgrounds".

Another important feature was that many of them clearly realized that good English proficiency can facilitate their professional learning. S4 said, "good command of English can be a guarantee which help us obtain more resources and support us to study further in our major field". S5 agreed with this opinion, "I think English proficiency can reflect a person's comprehensive quality. It also helps in understanding some economics journals and papers in English (her major is economics)". S8 further confirmed, "Learning English in university is helpful for our professional courses". However, S3 and S7 had different opinions. They thought English as a tool only helpful in communication and they said that they "spend more time in professional learning" (S7) and could "find the balance between English and major" (S3).

#### 4.5 Discussion

To some extent, the findings of present study are in tune with previous research. For instance, the artefact-mediated strategies in this inquiry are similar to the internet-mediated strategies in Lei's (2008) study. The rule-mediated strategies and community-mediated strategies echoed with the study of Hu and Gao in 2017. However, compare with previous studies, there are two differences need attention. First, in this study, when the participants used artefacts to regulate their online English language learning, they seldom or never adopted sign-mediated strategies. Previous studied showed that sign-mediated, especially L1-mediated strategies were quite important for EFL learners' self-regulation (Hu & Gao, 2017b; Lei, 2008; Yu & Lee, 2016). The inconsistency may be caused by different linguistic skills. Compare with writing, reading, or vocabulary learning, EFL learners are required to reduce or even avoid the occurrence of L1 in the process of input (listening) and output (speaking) in English as much as possible. Of course, more studies are needed to explore and verify the specific reasons. Second, the present study considered more about the learners' social role, while previous studies regarded the role learners played in their language learning process. From this perspective, the study explored more about the participants' identification and motivation rather than the learning process.

The study offered evidence showing that the participants actively used diverse resources and strategies to mediate their self-regulated online English language learning, and that the four categories of mediators interacted with each other in the regulation process. For example, using mobile devices (artefact-mediated strategies) to assist English listening broke through the limitation of time (rule-mediated strategies). Others' evaluation (rule-mediated strategies) is kind of interaction in a community (community-mediated strategies) and could influence EFL learners' identification (role-mediated strategies). When the eight high-achieving students actively mediated their online English language learning, all these strategies interacted together to facilitate their self-regulation.

#### 5. Conclusion

This qualitative study provided insights into understanding EFL learners' online self-regulated English language learning strategies. The interview data showed that all the eight high-achieving students had clear awareness of their own identifications (role-mediated) and had strong motivation to learn English. They were good at using a variety of network resources (artefact-mediated) to assist their EFL learning. They set appropriate evaluation criteria (rule-mediated) for themselves and made full advantage of fragmented time. Besides, they could seek help from peers and teachers actively (community-mediated) to overcome obstacles they encountered when learning online.

According to the major findings and the participants' response in the interviews, some pedagogical implications are as follows: (1) English teachers should actively discover appropriate learning platforms and technologies and introduce them to EFL learners; (2) English teachers should recommend a list of high-quality online learning materials to facilitate EFL learners' English language learning; (3) According to the sociocultural theory, authentic social context and the interaction with the outside world are so important for language learning. Hence, English teachers should make full use of resources to construct authentic and interactive situations for learners.

Certainly, there are some limitations to this study. First, it employed a qualitative method, and findings of present inquiry cannot be generalized to a large population. Second, due to the limited time, the present study only collected and analyzed one-on-one interview data. Therefore, the researchers hope that in combination with learners' homework and online learning journals, a longitudinal empirical study can be conducted to further investigate the use of students' online self-regulated learning strategies in future.

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