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# Design and Perception of an Approach to Improving Chinese as a Foreign Language Learners' Self-Regulated Learning Strategies

Shenglan Zhang  
Iowa State University, shenglan@iastate.edu

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# Design and Perception of an Approach to Improving Chinese as a Foreign Language Learners' Self-Regulated Learning Strategies

## **Abstract**

Self-regulated learning (SRL) is a social-cognitive construct in the realm of self-regulation that describes the ways in which individuals actively and constructively regulate their own cognitive processes in an educational setting. SRL conceptualizes effective learning as a process of cognitive and motivational evaluation where a learner completes academic tasks (Heikkilä & Lonka, 2006; Pintrich, 2000; Zimmerman, 1990; 2008). Different models of SRL developed over the years (Boekaerts & Niemivirta, 2000; Borkowski, 1996; Pintrich, 2000; Winne & Hadwin, 1998; Zimmerman, 2000), but all models assume at least three phases: a preparatory or forethought phase, an actual performance or task completion phase, and an evaluation and adaptation phase. In the preparatory phase, learners engage in task analysis, planning, and goal setting based on their cognitive and metacognitive knowledge about the subject as well as their motivational beliefs about the self, the task and the situation. In the performance phase, learners choose strategies to monitor the process of completing the tasks such as comprehension monitoring, time and resource allocation, and physical environment choice. The last phase, the evaluation phase, consists of evaluating outcomes and reflecting upon learning. All models assume the SRL phases to be cyclical in nature and assume that the evaluation phase influences the subsequent preparatory phase.

## **Disciplines**

Bilingual, Multilingual, and Multicultural Education | Chinese Studies | Educational Sociology | Language and Literacy Education | Vocational Education

## **Comments**

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# Design and Perception of an Approach to Improving Chinese as a Foreign Language Learners' Self-Regulated Learning Strategies

Zhang, Shenglan  
Iowa State University, USA  
shenglan@iastate.edu

## **Abstract**

This study investigates the effects of an approach to improving Chinese-as-a-Foreign-Language (CFL) learners' Self-Regulated-Learning (SRL) in personally managed contexts using a flipped/blended course environment. In addition, the study examines student perceptions of the approach and how learners' beliefs about language learning correlate with their use of SRL. Studies indicate that SRL has positive effects on students' academic performance in face-to-face classrooms (Kramarski & Gutman, 2006; Kramarski & Mizrahi, 2006; Lan, 1996; Orange, 1999; Schunk, 2005) and in online classes (Lynch & Dembo, 2004); therefore, different models and methods have been proposed and implemented to improve college students' SRL. These models vary in scope, content, timeframe, and design (Hofer, Yu, & Pintrich, 1998; Lan, 1998; Winne & Stockley, 1998; Lin, Lai, Lai, & Chang, 2015; Stoeger & Ziegler, 2008; Schmitz & Wiese, 2006). However, SRL is context specific (Schunk, 2005), and no previous approach has been tested for improving foreign language learners' SRL, especially when applied to a flipped/blended course.

The conceptual framework used in this study is based on the social-cognitive model of motivation and cognition (Garcia & Pintrich, 1994; Zimmerman, 1998). The approach incorporates two groups of strategies: 1) domain-specific cognitive learning strategies and metacognitive and self-regulatory strategies, and 2) self-knowledge, self-efficacy, and motivational strategies. The intervention, a 20-minute person conference with the instructor/researcher, lasted 3 weeks and was integrated into a CFL flipped/blended course. During the individual meetings, the instructor/researcher gave each student individualized instruction to improve SRL based on learning situation, strengths, and weaknesses. Additionally, students were encouraged to focus on one area of their Chinese study with which they had challenges while applying the SRL strategies. Each week the students wrote structured diaries to help them self-regulate their learning.

Nineteen CFL learners participated in the study. Data were collected in three different ways. First, a questionnaire was administered at three time points: before implementation of the approach, right after implementation of the approach, and three weeks after implementation of the approach. This questionnaire was adapted from the Motivated Strategies for Learning Questionnaire (MSLQ by Pintrich, Smith, Garcia, & McKeachie, 1993), the Online Self-Regulated Learning Questionnaire (OSLQ by Barnard, Lan, To, Paton, & Lai, 2009), and the Belief About Language Learning Inventory (BALLI BY Horwitz, 1988). All three questionnaires included items asking about students' use of SRL which measured learners' self-reported perception of their use of cognitive strategies, meta-cognitive self-regulatory strategies, resource management strategies, and motivation. In addition, the questionnaire at the second time point included nine open-ended questions about students' perceptions of the approach. The questionnaire at the third time point included a survey regarding learners' beliefs about language learning. Second, students kept a structured diary (Schmitz & Wiese, 2006). The diary was structured with the intent to a) Depict the entire self-regulation cycle; b) Support self-regulated learning, and c) Capture the intervention effects. The third way of gathering data was a reflection paper written by the participants.

The data have been collected and entered and are currently being analyzed.

## **Conference Paper**

### **1. Self-Regulated Learning**

Self-regulated learning (SRL) is a social-cognitive construct in the realm of self-regulation that describes the ways in which individuals actively and constructively regulate their own cognitive processes in an educational setting. SRL conceptualizes effective learning as a process of cognitive and motivational evaluation where a learner completes academic tasks (Heikkilä & Lonka, 2006; Pintrich, 2000; Zimmerman, 1990; 2008). Different models of SRL developed over the years (Boekaerts & Niemivirta, 2000; Borkowski, 1996; Pintrich, 2000; Winne & Hadwin, 1998; Zimmerman, 2000), but all models assume at least three phases: a preparatory or forethought phase, an actual performance or task completion phase, and an evaluation and adaptation phase. In the preparatory phase, learners engage in task analysis, planning, and goal setting based on their cognitive and metacognitive knowledge about the subject as well as their motivational beliefs about the self, the task and the situation. In the performance phase, learners choose strategies to monitor the process of completing the tasks such as comprehension monitoring, time and resource allocation, and physical environment choice. The last phase, the evaluation phase, consists of evaluating outcomes and reflecting upon learning. All models assume the SRL phases to be cyclical in nature and assume that the evaluation phase influences the subsequent preparatory phase.

SRL plays a critical role in student learning and is a key factor contributing to students' mastery of their own learning (Zimmerman, 2008). A self-regulating learner is able to use a variety of strategies to set task-related and reasonable goals, take responsibility for his or her learning, and maintain motivation. When applying a strategy, he or she is able to monitor the strategy use and modify it based on the task demands and task differences (Butler & Winne, 1995; Zimmerman, 2000). Additionally, a self-regulating student knows how to manage and control effort and maintain cognitive engagement with the task despite distractions (Wolter, 1998; Pintrich & De Groot, 1990). The use of SRL has been shown to not only predict the academic achievement of learners but also to contribute to learners' self-confidence (Kramarski & Gutman, 2006; Kramarski & Mizrachi, 2006; Lan, 1996; Orange, 1999; Pintrich, Smith, Garcia, & McKeachie, 1993; Zimmerman & Bandura, 1994; Zimmerman & Martinez-Pons, 1986).

With more online/blended courses offered by academic institutions throughout the world, SRL is even more important to students' academic success, but it is a misconception that "digital natives" (Palfrey, Gasser, 2008, Prensky, 2001) are naturally adept at learning in digital environments (Bennett, Maton, & Kervin, 2008; Kirschner, van Merriënboer, 2013). It is important that students learn how to self-regulate their study in these learning environments. It is also important to note that SRL processing has significant domain-specific aspects (Alexander, 1995, Boekaerts, 1999, Greene, Dellinger, Tüysüzoğlu, & Costa, 2013; Greene, Bolick, Jackson, Caprino, Oswald, & McVea, 2015; Poitras & Lajoie, 2013). Some scholars have called for studies to investigate domain-specific tasks and individuals' regulation of their cognition, motivation, and emotions (Alexander, Dinsmore, Parkinson, & Winters, 2011).

Furthermore, as Hofer, Yu, & Pintrich (1998) pointed out, college students' knowledge base and strategy use may be fixed due to their habitual use during students' elementary and secondary schooling, but learning a language that is totally different from their native tongue might require students to use new SRL strategies. In this context, the purpose of this study is to find out if a specific method of enhancing the learning of SRL impacts the improvement of SRL when it is implemented with Chinese-as-a-Foreign-Language (CFL) learners who study Chinese in a flipped/blended learning environment.

### **2. The Design of the Individualized Approach to Improve SRL**

SRL develops through two essential sources: social experiences and self-directed experience (Schunk & Zimmerman, 1996). There are multiple ways of reaching mastery of SRL, including adult and peer modeling, corrective feedback, supervision and monitoring, and reciprocal teaching. In socially supportive environments, students should have opportunities for self-directed practice. These opportunities allow them to rehearse and develop SRL on their own.

A recent study on CFL students' SRL in flipped/blended learning environments (Zhang, 2017) found that students used SRL in order to solve the specific problems and challenges they had in learning Chinese. However, despite their eagerness to change the situation and their plans to tackle the problems, they were not confident about their SRL. They did not set specific goals and did not think to monitor their strategy use or seek external help.

While students rehearse and develop their SRL skills on their own, it is important that they get support and feedback on implementing those skills. With support and feedback, all students should be

able to look at their own problems, strengths, weaknesses, and goals and become committed learning participants who can efficiently control their own learning experiences in a variety of ways such as organizing and rehearsing information to be learned, monitoring their thinking processes, seeking help when needed, and having knowledge and positive motivational beliefs about their capabilities (Boekaerts, Pintrich, & Zeidner, 2000; Schunk & Zimmerman, 1998). Therefore, an approach is needed to help learners develop their SRL. This approach should both help learners gain the “skill” and “will” to use SRL strategies properly (Hofer, Yu, Pintrich, 1998).

An approach was designed based on three theories and concepts: 1) The cognitive behavioral intervention model (Meichenbaum, 1977; Harris & Graham, 2009), 2) Vygotsky’s Zone of Proximal Development (ZPD) concept (Vygotsky, 1978), and 3) The concept of informed instruction (Brown, Campione, & Day, 1981). First, the cognitive and behavioral intervention model emphasizes Socratic dialogue and discussion, interactive learning between student and teacher with more responsibility for monitoring and applying strategies being transferred to the student over time (Meichenbaum, 1977; Harris & Graham, 1985; 2009). It encourages teachers to use instructional procedures such as initial teacher direction and modeling along with feedback and reinforcement with the student as an active collaborator. Second, when the concept of ZPD is applied in education, educators believe that the role of education is to give learners experiences that are within their zones of proximal development. Scaffolding, a concept developed based on the concept of ZPD, is a process through which a teacher or a more competent peer/adult gives assistance to the student in his or her ZPD and then reduces assistance gradually. This process advances learners’ use of strategies with guidance provided by a teacher through focused questions and positive interactions (Balaban, 1995). Third, informed instruction means that students should clearly understand what they are doing and why they are doing it. It can motivate student to learn and make learning more meaningful.

This approach to improving students’ SRL was designed as an individualized approach using an interactive method with scaffolding to teach CFL learners two categories of SRL strategies within a 3-week period. Students meet with the teacher individually in 20-minute meetings once a week during the three weeks. Before the meetings started, the instructor addressed the whole class about this SRL project and gave them an overview about the project’s structure. During the meeting sessions, the teacher and the student worked together to come up with tasks that the student wanted to work on and then discussed student goals, plans to achieve their goals, time management skills, how to find a distraction-free environment, how to seek help, and how to reflect.

During the week between the meetings, the students were to stick with the plans that they made with the teacher based on the goals they had and were to complete diary writing. At the next meeting they would hand their diaries in. The diary writing form was modeled upon Schmitz & Wiese (2006).

This study examined how the learners perceive the approach and whether it was effective in improving learners’ SRL. Due to the limited space, this proceedings article will only answer one research question: What was the CFL learners’ perception of this approach?

### 3. Methodology

This study adopted a mixed method. It includes three surveys at three time points, an opened-ended questionnaire, and student reflection paper. Due to the space limitation, the survey and questionnaire instruments will not be described. Only the analysis of the reflection paper data is reported in this proceedings paper.

Nineteen second-semester students who were learning Chinese in a 4-credit flipped/blended course at a comprehensive university in America participated in the study. The teacher/researcher implemented this approach beginning in week 7 of the semester, and the intervention lasted 3 weeks. The intervention started mid-semester to allow time for the students and teacher to build a relationship and increase the students’ comfort in talking with the teacher about their challenges in learning while still giving students time to practice new strategies and apply them to other learning environments.

After three weeks of implementation, participants were asked to reflect on what they had experienced and to write a reflection paper addressing 1) What they had learned doing the SRL project, the satisfactory and the unsatisfactory parts of the project, and their own Chinese learning; 2) What they had improved with respect to their use of self-regulated learning strategies with their Chinese; 3) How they felt about the changes they experienced, if any; 3) What their future plans were for continuing to improve their self-regulated learning strategies, if there were any; 4) What their specific plans were for improving their Chinese learning on their own; and 5) Any other thoughts that they might have.

#### 4. Findings and discussion

Student reflections showed positive views about the approach. They reported that the SRL project not only helped them improve their language skills, but more importantly, helped them learn how to set goals and discover new strategies for learning the language. Students were also more aware of themselves and their learning and more capable of managing their time efficiently. They reported that they would apply what they learned to other courses and to their life in general and that they had become more confident in solving learning problems. In addition, they said the one-on-one sessions with the teacher helped them feel like the teacher was their advocate, and said the teacher's optimism helped them succeed. Students also said the project was "very beneficial as it involved critical thinking and actions based off of those thoughts." In short, most of the participants (N=18) enjoyed the SRL project.

Improving learners' SRL means, at the least, making them aware of their learning habits and at best, improving their learning habits. Students appreciated the efforts the teacher put forward on their behalf. One student cited Charles Duhigg, author of the book *The Power of Habit*, "There's nothing you can't do if you get the habits right." The student wrote that the project allowed him to evaluate his current study habits to identify obstacles to effective learning, an important step for him to "get his habits right." Another student wrote, "I had a lot of habits that I am happy to say I have left in the past. These included waiting until the morning before class to do the homework, not intently watching the grammar and culture videos presented from you, and just not devoting the proper amount of time to study Chinese on a daily basis." Because of this project, he said, "some of the changes that I made include but are not limited to, spending 15 minutes every morning reviewing the homework from the night before and practicing the respective vocabulary of the week."

Each student developed different SRL problems over their years of studying. The implementation of this individualized SRL approach helped most of the participants deal with their study challenges and work on poor habits they had held onto for a long time. There were other advantages students noted as a result of the individual meetings.

*First, they learned new learning strategies from the teacher.* A majority of the students (11/19) wrote that they learned domain-specific strategies from the teacher, including using recordings to compare their pronunciation and tones with native speakers' to learn better pronunciation, speeding the memorization of characters by grouping radicals of the characters together and finding similar characters, developing sentences and practicing them with native speakers, reviewing grammar while sitting close to a friend who is a native speaker, improving reading comprehension by reading materials that are at a slightly higher level than his or her current reading level, and so on. Sometimes these strategies were straightforward and similar to strategies that students already knew but were not implementing. Reminding students of those strategies or pointing them out helped students succeed, as did helping students be more aware of strategies they had used in the past. Students discovered the extent to which those strategies could be valuable and developed new strategies by combining familiar strategies with new ones the teacher recommended. Students were happy to see that the aspects of language learning that they worked on using these new strategies improved greatly.

*Second, they learned to set specific goals.* Twelve out of 19 participants mentioned that they had learned how to set up measurable, realistic, and achievable goals. First and most important, they learned that setting mastery goals was more important than setting goals that focused on grades; second, they learned that breaking their work into smaller pieces and dealing with the pieces one at a time made their study less frustrating and more motivating. One student wrote, "over the three weeks of the project, I believe that setting the small daily goals for 10-15 minutes helped me focused on what I needed to work on with regards to my language ability and focus less on the grade." Some students who already knew that they work best in small pieces of time said that this project helped them learn how to better organize that time and to plan in advance. One student said that planning gave him "a good idea of what I need to complete before I am done." Another student wrote,

Another learning outcome from this assignment that I want to stress is the importance of setting realistic, achievable goals for myself. I have a very bad habit of biting off more than I can chew when it comes to coursework, so it is vital that I set goals for myself that I can achieve without using up too much of my time.

One student said that by setting small achievable goals it was easier for him to get started working on tasks that involved a large amount of new and challenging information. He said,

I think that making a small plan before I start a study session would benefit me greatly and it will help me to stay focused and stay on track. I realized that that was one of the things that was

somewhat holding me back. It was kind of like I didn't want to start the work because I was stressed about how much there was to do. Therefore, I learned to set small goals and complete them one by one without trying to conquer them all at once.

*Third, they became more aware of their own learning.* Nine out of 19 students mentioned this in different ways. Some became more aware of their strengths and weaknesses in learning Chinese. Some mentioned that they realized that they needed to be consistent with their motivation and goals and be more open-minded to new suggestions. Some realized that they were easily distracted and that they needed to be cautious about where they study and when. Some said that they realized that they didn't have good study habits before and discovered what they needed to do in order to improve learning. Some discovered "how important the little details are, such as location, time, and energy level," and they realized "all of these seemingly unimportant factors actually contribute significantly to my levels of productive activity." One student wrote,

The last few weeks have been a great learning experience for me. I always tried my best to study as efficiently as possible. I would simply sit down somewhere and try to cram out as much work as I could until I could not focus anymore. However, through the Chinese Learning Strategies project, I learned that there are so many more efficient ways to conduct my studies.... I always tried my best to study as efficiently as possible—or at least I thought I did. It was not until I fully explored the value of learning strategies that I discovered how much time I could have saved over the years. I plan to make very good use of these methods, such as setting realistic goals, for the rest of my college career."

Furthermore, students started to evaluate their learning. Some students mentioned that filling out the diary form helped them evaluate how well their learning went that particular day. One student said that if they did not have to complete the diary form, they would simply complete an assignment or task and believe that they were learning. Another student wrote,

Reflecting on how one learns is just as important as learning itself, in the sense that one must understand when one truly knows the material. These strategies have helped me realize the level of understanding that I must have. The best way to test if you truly know and understand something is the speed of recall and confidence that you have in the answer.

*Fourth, they started to manage their time wisely.* Students purposefully found a location where there were fewer distractions and started seeking help when needed. Six students became more conscious of how to divide time according to the specific goals they wanted to achieve for that day. One student wrote that he liked breaking up his study time and "mastering one concept at a time." Students also made note of the time that they spent learning Chinese, which helped them see if they had been distracted while studying. One student wrote that she made sure that when she studied she got the most out of the time she had, and another student said he purposefully tested out a few different study times and found that he did his best work in the morning.

Six students mentioned that they noticed the importance of constructing a good learning environment for themselves where they had fewer distractions. They turned off their phones because even if "I didn't look at the messages, the sound of notifications would make it hard to concentrate." Another student found a new area in the library where they had almost complete silence and no distractions. A third student said that when she planned to study she could not be around her friends, while another student found that he couldn't study in noisy areas but did need background noise since he could not focus nearly as well when surrounded by silence.

Even though only four students mentioned that they would continue to ask for help from the friends that were willing to offer it, this approach at least reminded students that seeking help was a good idea when needed.

*Fifth, they had the motivation to continue effective study.* Five students reported that they were more motivated to deal with challenging parts of the language after the individual session. They were more confident after they learned the most important and effective ways to improve and saw results from implementing those changes. Based on what they had learned from this project, they had even had plans for their future study and felt confident about that future study.

*Sixth, they transferred what they learned to other spheres of learning.* Half of the participants reported that through this project they discovered useful and effective strategies that they thought could be

applied to the other courses and to the other aspect of their life. Students said they would use these strategies widely. For example, one student said because the use of planning study time had helped him overcome his habit to “slack;” he was determined to use planning not only in his Chinese studies but also in other aspects of his life. Another student found that self-evaluation was helpful in his study, and he wrote that since he was graduating, he could use self-evaluation at his job in the future.

Students mentioned other academic skills they learned. For example, one student said, “Through this project, I have improved my time management skills tenfold. I am grateful that we had the chance to participate in this project, as it has seriously helped me achieve so much more than I thought I would be able to this semester.” Another student wrote, “The practicality of these strategies does not only pertain to this Chinese course but to all of life’s tasks in general.”

*Seventh, they liked the personal connection of the one-on-one meetings.* Three students expressed that they liked the meetings because “it gave the project a more personal feel to it.” This student believed that was a good thing because “the one-on-one meetings give the student a chance to ask the teacher more personal questions and to solve problems that need some attention.” Another student wrote, “Honestly, the whole process was really important and helpful to me, because it came at a time where I felt like I was falling behind in everything and nobody cared. Over the course of this project, it really felt like ... [the teacher] cared about my success and her optimism helped make me want to succeed.”

Some participants did have suggestions to make the SRL approach work better. First, one student suggested that the project should start earlier in the semester. In the student’s words, “The things that ... [the teacher] and I talked about were mostly habit-forming things, which are best learned early before bad habits kick in.” Another student made a similar suggestion, saying that the project should be extended to “give more time for the new information to settle and stick in the brain longer.”

Second, a student suggested that there should be more time between the one-on-one meetings because, he said, there was “an issue with the amount of time trying out a new studying technique, ... and one week was not a sufficient amount of time for me to get a feel of a different studying style.” He said, “I think my brain is a bit slow on using new strategies, as it asks it to work a completely different way. So I think allowing just a bit more time between meetings would remedy this issue.”

Third, six students said the diary forms were “boring” to fill out. Two students thought that the diary form was not necessary because they already did very well in monitoring their learning. One student suggested that that form could be shortened to fit one page. However, not everyone agreed. One student wrote, “Although the fill-out sheets felt a little bothersome at times, I am very thankful that we had them.”

## 5. Conclusion

This individualized approach to improving learners’ SRL strategies was successful in helping students find and apply effective strategies to maximize their learning. All students want to succeed, but they sometimes do not know how to get started or get frustrated when facing a large task (Zhang, 2017). At those times, instructional scaffolding is needed. This SRL approach supported learners by helping them get started, revitalizing their current study strategies, and working out new strategies - both cognitive and metacognitive. The method also helped motivate the students and helped them be more confident in their learning. This approach was implemented for only three weeks, and would likely be more effective over a longer period of time.

The positive perceptions of the participants make this SRL approach easily applicable in other learning environments. However, considering the time the teacher spends with each student, one of the weaknesses of this approach is that implementing it requires a significant commitment of time and energy from the teacher.

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### **Bio data**

Shenglan ZHANG is an Assistant Professor of Chinese and the Coordinator of the Multi-Section Lower Division Chinese language courses at Iowa State University. He earned his Ph.D. in Educational Psychology and Educational Technology at Michigan State University. His main area of research is second language learning with technology. His current research program addresses how blended and flipped learning environments can be designed to maximize learners' language and culture learning, and how teachers can help students improve their self-regulated learning skills in the blended learning environments.