# Establishment of Flipped Chinese Course Based on Socially Shared Learning Regulations in Chinese Normal University Students

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#### Abstract

With the continuous development of the social environment and the continuous advancement of technology, digital learning has increasingly higher requirements to optimize self-regulated learning, and it has become a popular trend designed to cultivate the self-regulated learning of normal university students. This study examines how the teachers of Chinese normal students integrate their courses based on socially shared regulations of learning theory to supplement the existing coursework. Based on modern Chinese, in a flipped professional course for a normal university student in northwest China, this study provides the teaching objectives, teaching contents, teaching methods, learning methods, and teaching evaluation methods. Ultimately, this study explores how to improve students' self-regulated learning and Chinese language proficiency through the cultivation of self-regulated learning strategies.

Keywords: socially shared regulation of learning, self-regulated learning, normal university students, flipped teaching, Chinese course

#### 1. Introduction

Self-regulated learning (SRL), as an important skill in the 21st century, has been the focus of research in higher education for several decades (Teng & Zhang, 2022). With the continuous development of society and the continuous change of technology, digital platforms have gradually become a part of daily human life (Järvelä et al., 2023). The concepts of collaborative learning, collective competence, and learning community have gradually challenged the existing concepts of SRL. New learning situations increasingly call for attention to regulate the social embedding of learning and the process of collective learning (Bransen et al., 2022). The SRL of normal university students needs to be paid more attention to and improved (Özdmeir & Önal, 2021) because teacher education is a powerful channel to enact long-term changes in the field of education (Häkkinen et al., 2017). Language discipline should take cultivating SRL as one of its main goals (Pan, 2018). In the language curriculum design of universities, more attention should be paid to students' SRL and ability growth. SRL among normal university students is vital; however, university teachers have less studied SRL (Moos & Ringdal, 2012). According to Jiao's (2018) survey results, conducted on 310 normal students from X University, show the SRL levels of normal students are not high. The issues with the traditional education mode in the field of higher education in China are becoming increasingly prominent, and SRL and training have become increasingly popular (Ye et al., 2022).

The importance of language proficiency as one of the abilities of a person to survive and improve oneself cannot be overstated. This is because it not only affects one's income but also one's career choice (Aldashev et al., 2009). The training of teacher trainees should pay more attention to the development of teachers' professional language, which must be developed through the process of observation, self-awareness, practice, and mentoring, and the teachers of specialized courses should help teacher trainees improve their language skills (Yerian et al., 2019). Therefore, Pan (2018) pointed out that language courses should take the development of self-regulated learning as one of their primary aims, and more attention should be paid to students' self-regulated learning and the growth of their linguistic competence in the design of language programs in higher education.

As a typical curriculum program today, flipped teaching is considered an effective method (Blau & Shamir-Inbal, 2017) because it is beneficial to language teaching (Zeynep et al., 2020) and can help learners become better learners

in SRL (Al Mulhim, 2021). The flipped teaching mode also puts forward higher requirements for the SRL of normal university students in the new learning situation (Serdyukov & Hill, 2013; Van Alten et al., 2020). In the traditional flip model, learning new content can transmit information from teacher to student through watching videos (Panadero et al., 2015), but this is still a teacher-centered method. Adult student-centered flipped learning research has great growth potential (Akcayır & Akcayır, 2018), so more and more scholars are constantly exploring new models of flipped learning.

The socially shared regulation of learning (SSRL) theory is also effective in developing student SRL (Panadero & Jarvela, 2015), which has been recognized as one of the most important challenges in the flipped classroom. Due to the complex role of the learning environment, the pressure of active learning and participation in shared learning situations is increasing (Näykki et al., 2014). SRL has risen from individual construction to social construction because SRL in the learning process is influenced and restricted by the environment to some extent (Winne & Hadwin, 1998). Normal students should be trained in social shared regulation of learning (SSRL) theory and model it to be more efficient in adapting to the workplace in the future (Moos & Ringdal, 2012). Higher education requires more social-sharing moderation interventions because this allows for more opportunities for group collaboration. The type of task and the coordination of shared activities are critical to facilitating the occurrence of SSRL (Barron, 2000). However, few studies have explored the significant effects of other contexts or task contexts on the SRL (Panadero, 2017).

In response to the growing importance of SRL and the possibility of SSRL theory curriculum, a university in northwest China developed a flipped course for Chinese language normal university students in the fall semester of 2019. The course explores how to use SSRL tasks to help students preview independently and discuss learning before class, use self-regulated strategies to further discuss them in class, and complete group tasks and reflect constantly after class, which influences students to use self-regulated strategies to improve SRL and Chinese language proficiency. The undergraduate course was designed for the first time in fall 2019. The group discussion topics adopted in this institute were all derived from difficult feedback from before the class preview in 2020–2022, and more content was added to each new course. Course details are designed for the fall 2022 course. Students enrolled in the course were first-year college students who were selected as research samples because Panadero (2017) had recommended that future research could focus on a specific critical academic year (e.g., the first year of college).

Therefore, the purpose of this study was to construct a flipped Chinese course based on the SSRL theory in Chinese normal university students. With adult students as the center of the flipped classroom mode, this study explores how to use SSRL theory. With SRL as the teaching goal, SSRL as the generation method of teaching content, and coregulated learning (CoRL) and SSRL as the main teaching method, this course was constructed based on the compulsory courses of Chinese language and literature in normal universities to improve the SRL and Chinese language proficiency of Chinese normal university students.

#### 2. Literature Review

SSRL is an emerging field developed under the framework of SRL theory (Panadero, 2017). Using SSRL to improve students' SRL has been recognized as one of the most important challenges in the flipped classroom (Yoon et al., 2021). Social constructivism theory holds that learners in a CoRL environment build knowledge together and regulate their learning process by giving feedback and receiving each other (Carswell et al., 2000). The socially constructed view does not focus on the individual's cognition, behavior, or motivation but rather focuses on the individual's interactions in the social system (Volet et al., 2009). It tries to explain the system because it includes individuals, materials, and the social space where individuals participate in the practice (Carswell et al., 2000). Volet et al. (2009) found that SSRL in groups is more effective than SRL in individuals. Because SSRL leads to a higher level of CoRL and content understanding, with the increasing number of CoRL opportunities, it is critical to train students as colearners to perform high-level CoRL in the collaborative learning process (Volet et al., 2009).

Three regulation modes exist in the collaborative learning environment, including SRL, CoRL, and SSRL (Hadwin et al., 2011). SRL includes five basic domains of controlling motivation, emotion, behavior, cognition, and metacognition (Schunk & Greene, 2018). Cognition, motivation, and metacognition are the building blocks of SRL, CoRL, and SSRL (Hadwin et al., 2018).

Teacher candidates should be trained in SRL theory and modeling to make student learning more efficient for future adaptation to the workplace (Moos & Ringdal, 2012). The need for social shared regulation interventions is even greater in higher education because there are more opportunities for group work. The type of task and the degree of coordination of shared activities are crucial (Barron, 2000) if we want to enable social shared regulation to occur,

and the type of task that teachers design during classroom instruction can have a significant impact on students' shared social regulation (Panadero & Järvelä, 2015) because having social shared regulation-oriented questions can increase students' engagement (Michalsky & Cohen, 2021). However, apart from the work of a few scholars, not much research has been conducted to explore the significant effects of other contexts or task situations on SRL (Panadero, 2017). Silverajah et al. (2022) stated future research should consider different SRL models in flipped learning environments.

In summary, for successful collaborative learning, SRL and SSRL were significantly and positively correlated. In the SSRL model, SRL was the foundation and an important predictor of SSRL (Panadero et al., 2015). Compared with individual SRL, CoRL and SSRL were very rare, even in graduate courses (Blau & Shamir-Inbal, 2017). In both physical and social environments, SRL, CoRL, and SSRL appeared over time (Hadwin et al., 2011). Järvelä et al. (2016) noted that, at the beginning of the collaborative task, individual SRL behaviors gradually translated into SSRL. This finding highlights the dynamic relationship between individual SRL and SSRL in collaborative tasks, which has important implications for curriculum design and teaching management.

## **3. Curriculum Construction Process**

The flipped Chinese course of SSRL was mainly designed using the SSRL model. The teaching time of the course was about 3 months (14 weeks), one semester, with a total of three credits, mainly for first-year students majoring in Chinese language and literature education. The course instructors systematically taught basic theory and basic knowledge of Mandarin to modern Chinese Han people and cultivated and improved the ability of Chinese normal university students to understand, analyze, and use the common language of modern Chinese Han people, building a good foundation for students to engage in Chinese teaching in the future. Based on previous studies, this study focused on cultivating students' SRL and professional Chinese skills. According to Yang and Chen (2022), course objectives and outlines should be reviewed by five experts to establish course expert validity and revise it. First of all, this study took the Chinese-language normal university students as the research participants and analyzed the problems that existed in the previous courses. The literature review was developed according to the SSRL theory. Second, the teaching objectives should be invited to review the teaching objectives and revise them. Third, on the basis of the teaching objectives, the teaching content, teaching methods, and teaching evaluation methods should be designed to generate a complete curriculum outline. Finally, the experts should be invited to review the course and revise it again, as shown in Figure 1.

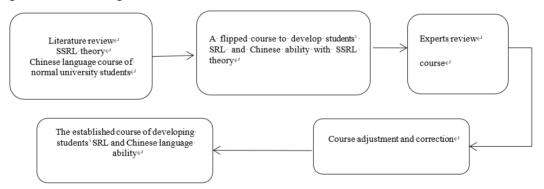


Figure 3. Establishment of the Flipped Chinese Course Based on Socially Shared Learning Regulation

# 4. The Established Content of The Flipped Chinese Course Based on Socially Shared Learning Regulation

In the design and implementation of higher education curricula, Liow et al. (1993) pointed out that the educational objectives and the teaching methods adopted should match and be closely related to each other. The student-centered perspective and approaches based on clear identification of SSRL are ways that link goals and teaching methods, such as organizing a group of students to interact as a means of developing their self-management, group leadership, and communication skills (Liow et al., 1993). The established course revolves around the learning objectives, teaching content, teaching methods, learning methods, and course evaluation. The SSRL model adopted in this study is mainly used to design the teaching method in the class to promote student interactions through teaching tasks, as shown in Table 1.

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Course Content	Intervention Duration	Learning Objectives	Learning Strategies	Intervention Steps
Introduction	6 (45 min*6) Week 1–2	To establish the SRL concept, understand cognition and metacognitive strategies A1, A2, and A3. To adapt to the	Cognitive and metacognitiv e strategies, resource	Before class: Reading guidance-classroom platform preview In class: Introduction teaching method
		requirements of advanced management work for Chinese B1 and B2.	management strategy	After class: Knowledge point test-group discussion
		To master the method of constructing SRL goals A1. To accurately recognize		Before class: Rain Classroom platform preview-group discussion/difficult points
Pronunciation	16 (45 min*16) Week 3–7	learners' own learning status and learning completion degree A2. To master the basic knowledge of speech, have the ability to analyze	Cognitive and metacognitiv e strategies	feedback to the teacher In class: Teacher teaching difficult points-group cooperation and discussion-intelligent platform classroom interaction (demonstration)
		speech, and have good speech ability B1.		After class: Knowledge point test-group discussion
Chinese Characters	8 (45 min*8) Week 8–10	To master the methods of constructing ways of SRL A2 and A3.		Before class: Rain Classroom platform preview-group discussion-difficult points feedback to the teacher
		To actively and reasonably use learning resources to master the basic knowledge of Chinese characters A3.		In class: Teacher teaching difficult points-group cooperation and discussion-intelligent
		The ability to analyze Chinese characters B1.	strategy	platform classroom interaction (demonstration)
		To use Chinese characters correctly for communication B2.		After class: Knowledge point test-group discussion
Vocabulary		To establish SRL concepts, learning goals, and be able to construct SRL methods with metacognitive	Applying cognitive and metacognitiv e strategies, Applying resource management strategies	Before class: Rain Classroom platform preview-group discussion-difficult points feedback to the teacher
	12 (45 min*12) Week 11–14	strategies A1, A2, and A3. To master the basic knowledge of vocabulary, have the ability to analyze the vocabulary B1, and have the ability to		In class: Teacher teaching difficult points-group cooperation and discussion-intelligent platform classroom interaction (demonstration)
		accurately use Chinese vocabulary in a complex communication environment B2.		After class: Knowledge point testgroup discussion

Table 1. Content Design of Each Unit in Interventions of Sociall	v Shared Learning Theory Regulations

Note: SRL = self-regulated learning; The table was designed for this study.

# 4.1 Learning Objectives

Tyler (2013) emphasizes that the most important thing in the course design is the course objectives, and each link of the course design is set around how to achieve the teaching objectives of the course. Based on this, this study is mainly based on the learning motivation theory of Pintrich et al. (1991), which involves constructing the core competence indicators of SRL. A total of five-course competence indicators were evaluated and revised by five-course experts.

Indicators of the ability to self-regulate learning include A1: Able to actively use cognitive and metacognitive strategies to enhance learning. This is demonstrated by the ability to recite and memorize the basic knowledge points in the course; the ability to connect the points learned to previous knowledge through elaborated strategies and learn how to take notes; the ability to draw mind maps between knowledge points; the ability to think critically, and the ability to correctly evaluate the learning tasks of classmates; A2: Able to recognize one's learning state accurately when completing learning tasks. This is demonstrated by being able to set learning objectives for themselves for each lesson based on the teacher's pre-reading materials; after completing the pre-reading, they can find out what they do not know and give feedback to the teacher through self-testing and reflection; A3: Able to make rational use of learning resources, such as planning study time, discussing and studying with peers, and taking the initiative to seek assistance. This is reflected in the ability to plan and utilize study time rationally and choose a distraction-free environment for study; to control one's attention and overcome difficulties encountered in a study; to take the initiative to seek assistance from the teacher or classmates when encountering difficulties in the study.

Indicators of vocational Chinese language proficiency include the following: B1: mastery of basic Chinese language knowledge such as phonetics, vocabulary, grammar, Chinese characters, and so on; and B2: good Chinese language proficiency, the ability to utilize Chinese language freely and appropriately in complex social environments and occupational scenarios, and the ability to adapt to the Chinese language proficiency requirements of intermediate and senior management.

Combining the whole process of flipped classrooms with the six levels of Bloom's (1994) cognitive ability, this study found that students' extracurricular learning focused on memory and comprehension, which belongs to a lower level of cognitive learning. Classroom learning cultivates higher levels of cognitive learning such as application, analysis, and evaluation (Francl, 2014).

#### 4.2 Course Content

The flipped Chinese course on SSRL mainly trains students' SRL strategies through pronunciation, Chinese characters, and vocabulary units to achieve the curriculum objectives. In the first two weeks of teaching, lecture teaching was conducted to cultivate individual SRL. The first lesson introduces the SRL strategies and the Rain Classroom teaching platform to explain to the students the flipped classroom model that will be adopted (Tsai et al., 2018). Before implementing SSRL, students' SRL should be cultivated first (Tsai et al., 2018). Students in the SSRL group received additional guidance on SRL strategies because conceptual support can be provided to students by teaching SRL strategies (Perez-Sanagustin et al., 2021; Rasheed et al., 2021). Procedural supports can be provided by informing students of their teaching process (Jarvela & Hadwin, 2013). The theme content of each unit was introduced as follows:

The pronunciation part focuses on cultivating the level of Mandarin and recitation ability, and it systematically introduces the knowledge of Mandarin in its initials, finals, tones, syllables, phonetics change, and so on, so students can correctly spread Chinese. To cooperate with unit 2 of the textbook, 5 weeks of flipped learning was performed using a protocol for cultivating individual SRL. Because SRL is an important predictor of SSRL (Panadero et al., 2015), it serves as the basis for the development of CoRL and SSRL (Schunk & Greene, 2018). Based on the introduction unit, the group discussion before and during class was added, focusing on cultivating cognitive and metacognitive strategies in SRL strategies.

The Chinese character section introduces the nature, evolution and development, calligraphy culture, and structure of Chinese characters. To cooperate with unit 3, based on cultivating individual SRL, group cooperation was added to cultivate CoRL and SSRL and flipped learning for about 3 weeks. Because group discussion can promote critical thinking, knowledge building, and the problem-solving skills of group members, the effect of online group discussion can be similar to that of group discussion in class (Carswell et al., 2000). Based on the first two units, this unit would continue to promote individuals before the class preview, prompting the group to complete the before-class and in-class discussions, and focusing on cultivating resource management strategies in SRL strategies.

The vocabulary part teaches the vocabulary unit of modern Chinese, the structure and relationship of words, the multi-level nature of word meanings, and the part of vocabulary. Based on the previous parts, this unit utilizes groups to encourage students to actively call up the SRL strategies when completing the group collaboration tasks.

## 4.3 Teaching Method

When designing and implementing higher education programs, educational objectives and teaching methods should be matched (Liow et al., 1993). One of the learning objectives of this course is to promote students' SRL. Based on the experience of previous studies, the theory of SSRL can be used to redesign the course (Öztürk & Cakıroğlu, 2021; Yoon et al., 2021). Starting with SRL strategies, students can develop SRL through various activities (Panadero et al., 2015). Zimmerman (2002) pointed out SRL is a circular process through which students participate in three different stages of prethinking (e.g., task analysis, goal setting), performance (e.g., strategy formulation), and self-evaluation (e.g., self-reflection, metacognitive judgment). SRL should be able to support student activities in all three stages-before-class, in-class, and after flipped class exactly coincide with the three stages of SRL. Therefore, the teaching method of this course is the Rain Classroom, which can be previewed before class. Rain Classroom is a learning application software developed by Tsinghua University, one of the most prestigious universities in China, ranking highly in the world, and it can provide convenient teaching content and learning space. Students can study the course through a computer or smartphone, and teachers can also observe students' learning behavior through the platform (Yu & Yi, 2020). The preview courseware of Rain Classroom consists of four links: key and difficult points analysis, self-study content introduction, self-test, and learning feedback. Each class has released the content 1 week in advance. After the students complete the preview 2 days in advance, they conduct group discussion and submit feedback on the learned content, testing everyone and noting unknown content. The teacher adjusts the class topics and teaching difficulties according to the feedback. Students' preview time, self-test scores, and teaching feedback are fed back to the teachers through the platform. The teacher sorts out and determines whether students have doubts and designs in challenging questions for students to discuss. Because teachers design challenging curriculum tasks for students, they can stimulate the motivation to solve real and complex structure problems (Liow et al., 2011). In class, group discussion and presentation focus on the feedback of difficult problems before class to realize the cocreation of course content. Classroom activities are designed around tasks, including debate, explanation, negotiation, consultation, interrogation, and questioning. All learning tasks are designed to trigger demonstration, interpretation, negotiation and questioning, and stimulate the learning mechanism (Häkkinen et al., 2017). Classroom discussion questions originated from students' feedback, prepared before class in 2020-2022. After class, the learning effect of students was tested through the exercises in the Rain Classroom wisdom platform, and the group joint task was assigned to stimulate and supervise the group to achieve SSRL when completing the task.

#### 4.4 Learning Methods

The main learning methods of the SSRL course based on the flipped classroom are as follows:

A. Before class—Rain Classroom preview courseware, key and difficult micro video, and group discussion feedback

According to the learning resources released by the Rain Classroom, combined with the key and difficult teaching materials, and cooperating with the teacher to preview courseware and micro video, students freely arrange the learning time and place for self-study, so students can set simple but realistic goals. Students can find out the knowledge blind spots through the self-test in the Rain Classroom, give feedback to the teacher, and then participate in the group discussion. The group would submit the group preview results to the teacher before the class.

B. In-class—Group class discussion, group presentation, and Rain Classroom interactive discussion

Students discuss the challenging problems designed according to their confused knowledge points within the specified time. After the group discussion is completed, colleagues complete the group discussion of the course with the help of the interactive function of the Rain Classroom, to promote students' internalization and absorption.

C. After class—Group homework, Rain Classroom knowledge point test, and group self-evaluation and mutual evaluation, etc.

Students arrange, on their own time, to complete the knowledge test, and they work in groups to arrange group discussions to complete the group homework. After completing the collaboration task, students evaluate their participation in the group using the self-assessment tool (Radar), shared plan tool (Our Planner), and shared arrangement tool (Social Shared Evaluation), and they are asked to think about how to do better in the next cycle.

## 4.5 Course Evaluation

The teaching evaluation of this course is both formative and final. Due to the technical-supported flipped teaching, the formative evaluation method is mainly an online evaluation, whereas the final evaluation is still mainly based on the final examination. The following introduces the formative evaluation.

The score before class is subject to individual preview and group discussion, and full marks can be obtained after completing the above two steps. Group discussion develops SRL by helping students share their learning views, and it feeds back to the teacher the questions the groups do not understand. Students bring questions to online or offline classes to discuss and show their results around difficult points and feedback topics. In class, students actively participate in classroom interaction to cultivate SRL, and the platform retains the traces of learning. The attendance rate and interactions are the focus of the assessment. After class, the formative assessment is completed by completing the knowledge point test.

In addition, the homework of this course is not only the preview before-class and after-class testing homework with the course knowledge points based on the Rain Classroom platform but also the design groups for each teaching unit to promote SRL, CoRL, and SSRL. The first assignment was the group discussion to complete the knowledge mind map in the first chapter to facilitate students using organizational strategies and detailed strategies to improve SRL. The second assignment was to complete the teaching design of a primary school Chinese character course together, which promoted students to actively participate in the discussion with various SRL strategies, to achieve the group SSRL state. The third assignment revolves around all the knowledge points of this semester, after a group discussion for a test paper for this course. Before each assignment, the Radar tool is used to aid students in developing a clear cognition and analysis of the task, and then the Our Planner tool is used to make group planning to form the group cognition and plan of the task. After task completion, using the Social Shared Evaluation tool would aid with reflection. The details of the evaluation of this course can be seen in the appendix.

#### 5. Effectiveness of The Course

## 5.1 Course Review of Expert Validity

In this study, five experts were invited for expert validity assessment, and the expert inclusion criteria were (1) (more than 10 years of experience in language education or education management, familiarity with course construction and course management), (2) (a doctorate degree or above), and (3) (associate professor or above title). The two expert validations were completed by an evaluation team composed of two Chinese linguistics experts, two education management experts, and one language assessment expert. The first assessment consisted of course objectives based on Pintrich et al.'s (1991) theory of motivation for learning combined with the proficiency indicators in the Chinese National Standardized Test of Vocational Chinese Proficiency (ZheYe HanYu NengLi CeShi, ZHC) syllabus. A Likert three-point scale conversion was used to determine expert validity. The intra-group correlation coefficient and Cronbach's Alpha within the first assessment were 0.845, indicating the expert evaluation was relatively consistent and statistically significant (F = 6.435, p = 0.003). According to the suggestions of the first evaluation, the researchers revised the course objectives. The main modifications are further refinement of the self-regulated learning and vocational Chinese language proficiency objectives to make them more measurable. The second expert validity assessment was evaluated with the participation of the same group of experts, with the within-group correlation coefficient and Cronbach's Alpha 0.890, indicating the expert evaluation was relatively consistent and statistically significant (F = 9.077, p = 0.002). Revisions were made based on the comments of the five experts, with the main point of modification being how the course was assessed, and the finalized syllabus is referenced in the appendix of this paper.

# 5.2 Teaching Feedback

To verify the effect of the course, the research team used Curtis and Keeves's (2000) adapted Course Experience Questionnaire to investigate the course experience of 233 students who had participated in the course, and they found participants showed strong satisfaction (16.31%), relative satisfaction (13.73%), and satisfaction (60.09%). These results indicated the majority of students who participated in the survey were satisfied or very satisfied with their experience in the course.

In addition, the Occupational Chinese Proficiency Test was used as the pre-and posttest instrument in this study, which was developed by experts from various aspects of Chinese linguistics, language teaching, psychology, and educational measurement, and it belongs to the national standardized test. Before participating in this course in the fall semester of 2022, the average score of 97 students on the vocational Chinese proficiency test was 591.742 (total

score is 1,000), and the average score of the vocational Chinese proficiency test at the end of the course was 715.27. These data suggest this course can significantly enhance the vocational Chinese proficiency of teacher educators.

#### 6. Conclusion

The flipped Chinese course based on the theory of SSRL provides supplementary ideas for the curriculum system and curriculum reform of Chinese normal undergraduate majors. Through the results of the two expert validity assessments and the Course Experience Questionnaire survey, the teaching objectives and syllabus of the flipped Chinese course were carefully reviewed and evaluated, and experts assessed the consistency of the course objectives and syllabus, finding they were high and statistically significant. This course can be recognized by the majority of students, and it is expected to improve the SRL skills and professional Chinese skills of normal university students. In addition, according to the theory of SSRL, previews before class, group discussions, and teaching feedback with the help of Rain Classroom are helpful in improving students' ability to use SRL strategies. Group cooperation to complete the group tasks in the class is conducive to the cocreation of knowledge, can promote the communication and cooperation between students, and help form a good learning atmosphere. Making challenging assignments after class helps with setting goals and participating in the reflection and assessment of shared regulations. To sum up, this study has certain theoretical and practical significance for the exploration of the professional course of normal students in Chinese higher education, and it has a positive effect on improving the teaching quality of Chinese higher education. In the future, the course effect can be further verified through teaching experiments.

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#### Appendix Syllabus

Table 1. Basic Course Information

Course Title	Socially Shared Regulations in Flipped Chinese Courses	Course Lesson Time	3 hours/week
Course Category	Core curriculum	Applicable Major	Chinese language and literature education
Course Credits	3+3	Course Semester	First and second semester of freshman year
Prerequisite Programmes	none	Follow-up Programmes	Ancient Chinese, Introduction to Linguistics
Course Platform	Rain Classroom app (Pre- and	postcourse work, in-class interaction)	
Teaching Materials	Modern Chinese (edited by Huang Bourong and Liao Xudong Higher Education Press, sixth edition, 2017)		
Course Description	Based on China's language policy, this course aims to cultivate qualified language communicators regarding socialism and to improve students' self-regulated learning and Chinese language proficiency. It systematically teaches the basic theories and fundamental knowledge of Putonghua, the common language of the modern Han Chinese nation, trains the basic strategies of self-regulated learning and Chinese language proficiency, and cultivates and improves students' ability to understand, analyze, and apply the modern Chinese national common language, laying a good foundation for students to engage in language and writing work in the future.		

Table 2. Learning Objectives

Cognitive ability level (optional code): 1. memorize 2. understand 3. apply 4. analyze 5. evaluate 6. create

Core Competence Objective	Competency Indicators	Cognitive Level	Ability
	A1. Be able to construct self-regulatory concepts and actively use cognitive and metacognitive strategies to enhance learning ability.	2, 3	
A. Self-regulated learning of normal university students	A2. Be able to construct self-regulation goals and accurately recognize their learning status and the extent to which they are completing learning tasks.	3	
university students	A3. Be able to construct self-regulation and take the initiative to use learning resources appropriately (e.g., planning learning time, peer discussion, and learning, and taking the initiative to seek assistance.	2, 3	
B. Vocational Chinese	B1. Master the basic knowledge of the Chinese language, such as phonetics, vocabulary, grammar, and Chinese characters, and have the ability to analyze Chinese phonetics, vocabulary, and grammar.	1, 2	
language proficiency of normal university students	rmal university Chinese freely and appropriately in complex social		

Courses Content	Self-Regulation Strategies	Teaching and Learning Activities	Methods of Assessment
	Introduction to Cognitive and Metacognitive		1. Preview Completion
Preface	Strategies (2) Introduction to Resource	Smart Learning Platform preview, reading guide, introduction to self-regulated learning strategies, group discussion	2. Knowledge Points Online Test
	Management Strategies (2)	strategies, group discussion	3. Cognitive Feedback Report
		Smart Learning Platform prereading, reading guide, inspirational lectures, classroom	1. Preview Completion
Phonetics	Cognitive and Metacognitive Strategies	interaction with the help of the smart platform, group mind mapping of the course,	2. Knowledge Points Online Test
	Training (3)	group use of memorization strategies to memorize knowledge points, group discussion	3. Classroom Participation
Courses Content	Self-Regulation Strategies	Teaching and Learning Activities	Methods of Assessment
			1. Pre-Reading Completion
Chinese	Resource management	Smart Learning Platform prereading, classroom interaction with the help of the	2. Group Work Sharing
Characters	strategies training (3)	smart platform, group collaboration, group discussion, heuristic lecture	3. Knowledge Points Online Test
			4. Classroom Participation
			1. Pre-Reading Completion
Vocabulary	Integrated training of cognitive and	Smart Learning Platform prereading, classroom interaction with the help of smart platform, group collaboration, group discussion, heuristic teaching	2. Group Work Sharing
	metacognitive strategies and resource management strategies (3.4)		3. Knowledge Points Online Test
			4. Classroom Participation

# Table 3. Teaching Content and Strategies

Content	Assessment Methods	Specific Requirements	Weights
Process- Oriented Evaluation	Precourse preview	100 points. Through the Rain Classroom to set up the pre-class prestudy task, including the key difficulties, self-study content, self-testing, and self-feedback four parts of the test; students complete the situation (attitude, content, results, etc.), and understand the difficulties of the group through common prestudy.	10%
Process-	Classroom participation	100 points. Students' attendance in class will be checked through online check-in, and students' classroom discipline, classroom participation in case analysis, scenario simulation, role-playing, and so on will be examined for their motivation and initiative.	20%
Oriented Evaluation	Posttest	100 points. Through the Rain Classroom, the platform will be sent to the students after the test exercises, personal independent completion of the system automatically generates grades, and the end of the semester comprehensive assessment of the test scores after the formation of the students this grade.	10%
Content	Assessment Methods	Specific Requirements	Weights
	Group work for the course	100 points. There will be a total of four group assignments, one for each chapter, and the grading scheme is detailed in Annex B.	10%
summative evaluations	Final test	100 points. The system of competencies involved is assessed according to the system of knowledge around the knowledge competencies that examine students' understanding and application of the basic theories of modern Chinese.	50%

# Table 4. Course Teaching Evaluation System

# Table 5. Curriculum and Teaching Program

Chapter and Weekly	Content/Capacity Indicators	Teaching Strategies and Activities	Class Schedule
	Introduces how the course is delivered, introduces how the course is learned,	1. Introduction to Lecture Method Course Delivery	
	introduces how the course	Introduction to the Intelligence Platform	
Chapter 1	is assessed and evaluated, and teaches students to use the smart platform for	Introduction to Cognitive and Metacognitive Strategies	2 lessons (2*45 min)
Preface Week 1–2	self-regulation and classroom interaction	Introduction to Resource Management Strategies	
	(A1, A2, A3)	2. Teaching course content	
	Dialects and common languages (B)	Dialects and common languages	2 lessons (2*45 min)
	Characteristics of Modern Chinese (B)	Phonological, lexical, and grammatical features of modern Chinese	2 lessons (2*45 min)
	Section I. Introduction to phonetics (A1, B1)	1. Cognitive and metacognitive strategies—Metacognitive self-regulation -	2 lessons (2*45 min)
	Section II. Chinese initial consonants (A1, B1)	Based on the levels provided by the teacher, each student sets their own learning goals and analyzes the learning tasks; Rehearsal	2 lessons (2*45 min)
vowe Secti	Section III. Chinese vowels (A1, B1)		2 lessons (2*45 min)
	Section IV. Tones of voice (A1, B1)	rehearsal strategies to memorize the lesson; Refinement Strategies—Teach students to	2 lessons (2*45 min)
	Section V. Syllables (A1, B1)	mind map the curriculum and learn to use mind mapping software; Organizational	2 lessons (2*45 min)
Chapter 2	Section VI. Sound changes (A1, B1)	Strategies—Encourage students to participate in small group activities, participate in pre-class previews, pre-and post-class tests,	2 lessons (2*45 min
Week 3–7 Section VII: The art of reading Mandarin (A1, B1)	and in-class discussions; Critical Thinking—According to the learning highlights that come from the feedback of each group, students are invited to present, and the teacher focuses on the difficulties of the students' feedback; the classroom trains students' self-assessment and other-assessment skills by critiquing the learning tasks; Relevant subject knowledge of the part of speech—To be able to analyze Chinese syllables, to understand the phenomenon of speech flow and phonological change in Mandarin, and to be able to communicate in Mandarin.	2 lessons (2*45 min	
Chapter 3	Section I. Introduction to Chinese characters (A2, B2)	1. Resource Management Strategy Time and Research Environment-monitoring students' prep time, test length, and accuracy	2 lessons (2*45 min
Character Week 8–9	Section II: Evolution of Chinese character forms (A2, B1)	students' prep time, test length, and accuracy, and controlling class discussion time through the backend of the smart learning platform. Effort Management—Students are urged to	2 lessons (2*45 min

	Section III. Characterization of Chinese characters (A2, B1)	<ul> <li>test their learning through group goal setting and to use cognitive and metacognitive strategies for persistence.</li> <li>Peer Learning—Set challenging learning tasks and work together through group collaboration.</li> <li>Seeking Help—Setting up an environment that facilitates help-seeking, encouraging students to seek out those who can help them, and taking the initiative to ask for help.</li> <li>Subject Knowledge of Chinese Characters</li> </ul>	2 lessons (2*45 min)
		To understand the process of the creation and development of Chinese characters, to understand the evolution of the forms of Chinese characters, and to understand and be able to analyze and teach Chinese characters by applying the method of creating characters.	
	Section I. Introduction to vocabulary (A3, B2)	1. The integrated use of cognitive and metacognitive strategies and resource	2 lessons (2*45 min)
	Section II. Types of Word structures (A3, B1)	management strategies, the standardization of methods for the continuous use of learning	2 lessons (2*45 min)
	Section III. Meaning of words I (A3, B1)	strategies, and the consolidation of the results of the previous training.	2 lessons (2*45 min)
	Section IV. Meaning of words II (A3, B1)	2. Subject knowledge in the vocabulary section: to understand the lexical units of modern Chinese and be able to identify and analyze them; to understand the structural	2 lessons (2*45 min)
Chapter 4 Vocabulary Week 10–12	Section V: Composition of modern Chinese vocabulary (A3, B1)	analyze them; to understand the structural relationships of modern Chinese words and be able to analyze them; to understand the multilayered nature of word meanings in modern Chinese and be able to analyze them; to understand the components of the vocabulary of modern Chinese and be able to identify and analyze the types of archaic, dialectal, and exotic words.	2 lessons (2*45 min)
	Course Summary	1. Tutoring and Q&A for the content of the three chapters; 2. Rewarding students who have adhered better to the self-study part of the course; 3. Rewarding students who win the Chinese character utilization ability test; 4. Self-regulation test, posttest of vocational Chinese language ability.	2 lessons (2*45 min)

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