ABSTRACT
Under the guidance of the demand for interdisciplinary foreign language talents, many Japanese majors in colleges and universities have also set up the course of scientific Japanese. However, the setting mode of comprehensive knowledge content learning is mostly adopted and there is no separation between reading and translating and other links. As a result, students feel it difficult to learn the content and thus have bad learning effect, to which the teachers also have no effective solutions. So, in this paper, based on the experience of teaching practice, the author proposes to set up reading and translation courses for scientific Japanese separately, and introduces the teaching practice of "Scientific Japanese Literature Reading", so as to provide ideas and methods for reference to the Japanese major setting in Chinese universities and the curriculum setting of scientific Japanese.

Keywords: undergraduate major, Scientific Japanese Literature Reading, teaching mode

I. INTRODUCTION
Since "The 13th Five-Year Plan for The Development of Scientific and Technological Talents" put forward higher requirements for the cultivation of high-level and compound scientific and technological foreign language talents, universities in China are responding more actively to the call. In terms of the cultivation of foreign language talents, they have strengthened the output planning of compound talents who know both technology and foreign language. As a result, sci-tech foreign languages are entering the curriculum system of undergraduate foreign language majors at a faster pace. At the same time, however, the problems in the teaching of scientific and technical foreign languages cannot be neglected, such as the change of teaching objectives, the updating of teaching materials and the retraining of teachers. In the context of promoting classroom reform and "creating golden lessons" in particular, the reform of teaching mode has become the central problem to be solved urgently in the curriculum reform of scientific and technical foreign languages. As a common foreign language other than English, scientific Japanese personnel training has been promoted in many colleges and universities, and scientific Japanese courses have also been set into the personnel training program.

II. RESEARCH DESCRIPTION
As early as the 1980s, scholars began to pay attention to the problems existing in the scientific Japanese teaching and the selection of teaching materials and reading materials in domestic universities (Takano, 1981; Zhang Zhiping, 1988 et al.). These problems have been troubling teachers for a long time. In 2008, the "new teaching mode of scientific and technical" was proposed. This model advocates targeted teaching for specific groups and needs, especially for the teaching of scientific Japanese, and focuses on reading comprehension and translation, so as to strengthen students' comprehension and quickly improve their Japanese reading level. Although this teaching mode is mainly targeted at science and engineering students, it is of certain guiding significance for Japanese majors to learn scientific Japanese and improve their reading ability of scientific Japanese. Many universities have also used this teaching mode for reference. Cao Yang (2015) proposed that the teaching mode should focus on the main role of students and the interaction between teachers and students, and advocated that students can
not only learn language knowledge, but also achieve the
effect of consistency between words and deeds and
blending of scenes through different language
environment settings and a lot of training. [3]

In recent years, through unremitting efforts, the
domestic academic circle has also accumulated a
certain amount of research on scientific Japanese. For
example, Zhang Yuxia (2006) discussed the teaching
orientation and importance of scientific Japanese
translation in higher vocational Japanese education, and
gave suggestions on the cultivation of students' scientific Japanese translation ability [4]; Liu Chunfa
(2013) introduced the translation of foreign words in
scientific Japanese [5]; Li Hong and Ren Honglei (2019)
elaborated the Chinese isomorphism of words in
scientific Japanese [6]; Zhang Lingli (2016) discussed
the characteristics of scientific and technical translation
from the perspective of the translation principles of
"faithfulness, expressiveness and elegance" [7]. There
have also been developments in teaching research. For
example, Yang Qiuxiang (2006) explored the teaching
mode and textbook construction of scientific Japanese
based on the teaching exploration of more than 20 years,
and put forward the teaching ideas of research-based
learning, taking textbooks as the media, information
exchange between teachers and students as the main
body, strengthening practical teaching, and hiring
experts to guide teaching, which are of great reference
significance. [8] Li Xiaohong (2012) emphasizes the
particularity of scientific Japanese course and puts
forward new teaching concepts from the aspects of
teaching objectives, methods and contents. The object
of this teaching model is the large-class teaching
of science and engineering majors, and the teaching
process does not require grammar, vocabulary, listening
and speaking, but focuses on training students in
reading and translation, with the aim of improving the
level of scientific Japanese in a short time. [9] This
method focuses on speed and short-term effect, and
does not require too much teaching mode in listening,
speaking, reading and writing. In a sense, it meets the
study and work requirements of science and
engineering students. However, for professional
Japanese students, the effectiveness of the teaching
mode of "overgeneralization" and "lack of
understanding" in terms of professional knowledge still
needs to be explored.

In 2020, the Beijing Institute of Technology Press
published the new textbook "Scientific Japanese". However, most of the textbooks we have seen so far are
comprehensive curriculum teaching books for science
and engineering, and few of them respond to the
breakthrough of "new scientific Japanese teaching mode", namely, separating translation from reading.
Without separating the links of listening, speaking,
reading and writing, scientific Japanese teaching with
comprehensive content has cumbersome courses
overloaded with information. As a result, students feel
it difficult to learn and remember, and thus show less
interest in this subject.

In addition, among the four stages of foreign
language learning, "listening, speaking, reading and
writing", "reading" is the foundation and an important
source of knowledge acquisition. Therefore, paying
attention to the cultivation of reading ability and setting
up scientific Japanese literature reading courses should
be the first task of the adjustment of science and
technology Japanese curriculum system. Only when
students understand the content can they translate it
correctly, so reading in scientific Japanese is actually a
very important part. Therefore, through the separate
setting of reading, translation and other courses and the
gradual introduction of scientific Japanese learning
tasks in stages, the current difficulties in scientific
Japanese teaching can be solved to a great extent.

III. INTRODUCTION TO THE COURSE OF
"SCIENTIFIC JAPANESE LITERATURE READING"

Based on the undergraduate teaching practice of
Japanese major in science and engineering universities
in Shaanxi Province, the author introduces the teaching
of "Scientific Japanese Literature Reading" from the
aspects of specialty setting, course positioning, course
content, teaching objective and teaching practice.

A. Course setting

Since the beginning of the construction of the
Japanese major in the university she teaches, the author
has taken scientific Japanese as the major training
direction. According to the professional teaching plan,
students majoring in Japanese can only study the
specialized courses of scientific and technological
Japanese after they have acquired certain language
knowledge in the first and second year of university.
"Scientific Japanese Literature Reading" in the system
setting of junior scientific Japanese courses, the
"Scientific Japanese Literature Reading", the "Scientific
Japanese Translation" and the "Translation and
Interpretation Workshop" together constitute the
professional system of scientific Japanese courses. In
the second semester of junior year and the first semester
of senior year, the courses of "Scientific Japanese
Reading (1)" and "Scientific Japanese Reading (2)" are
offered respectively.

Before 2019, the planned teaching hours per
semester will be 16 weeks, with 2 class hours per week,
for a total of 16 classes and 32 class hours. Starting
from the autumn of 2019, the teaching hours of each
semester has remained unchanged. The 16-week course
schedule has been adjusted to be offered in the first 8
weeks, and the 2 hours per week has changed to 4 hours
the second semester of Scientific Japanese, such as genre, sentence patterns, paragraphs, discourse and other aspects, it is necessary to manage reading comprehension training for them. Students should be guided to learn the systematic reading methods from the source of the article, chart reading, terminology expression characteristics to various stylistic characteristics, in hope that they can master the special vocabulary and phrase expression, grammatical features and basic sentence structure, discourse structure and expression characteristics, language expression and reading skills of scientific Japanese articles through this course, expand their knowledge, deepen their understanding of technical terms, and develop their ability to read and understand scientific and technical articles in Japanese as well as intercultural communication skills.

C. Teaching practice

The teaching is carried out in a student-oriented and teacher-assisted form. By means of reading training and expanding knowledge to supplement classroom teaching and information knowledge that cannot be obtained from books, students' autonomous learning ability is cultivated, and the explanation of learning tasks is completed through teamwork, so as to achieve the purpose of exercising students' teamwork. Attention is paid to the interaction and information exchange between teachers and students and among students, and the network technology can be used to achieve open classroom teaching, realize the combination of online and offline teaching methods, so that learning methods and ways of information exchange can be more diverse and convenient.

The courses are conducted through the online platform of the App Tree. In order to improve students' awareness of independent learning, the "learning task" of the Tree is used to arrange preview tasks before each class. Students are required to preview grammar, new words and idiomatic expressions. And homework is set after class, such as reading comprehension after class, and tips translation and other extended training. By monitoring the time and length of students' online learning, teachers can learn the learning situation of each student. For homework after class, ordinary tasks can be set, which only requires students to study independently, or they can be set as requiring to be submitted, asking students to upload the homework in accordance with the requirements before the specified time node. Teachers can also set the submission mode to allow students to submit late, urge them to submit, etc., which is very flexible.

In class, in order to avoid the single mode of teacher's monologue in online teaching and improve students' participation in class, the link of flipped teaching is set up. The whole class can be divided into several groups, each of which makes the teaching preparation for the literature of science and technology
topic. The preparation time is basically about 1 week. In the link of online teaching, the responsible team will lead the students to read the literature, and the teachers will carry out the auxiliary teaching operations such as roll call, answering questions and opening barley from the side, and provide timely guidance, supplementary correction or summary if necessary. On the column "learning materials", documents, pictures, videos and other learning resources can be uploaded and published in advance. Therefore, in the collect search and use extracurricular materials related to the topic of responsible scientific literature according to the group's lecture needs. The teacher uploads and publishes the materials submitted by students before class, and they can extract and use the materials from the courseware at any time in class.

At the end of each semester, students will reflect on the course and adjust the content and schedule through the study and feedback.

V. CONCLUSION

As a training program for scientific Japanese majors, the course "Reading Japanese Literature for Science and Technology" has only been practiced for 2 years, and it still needs to be explored and improved from the following four aspects in the future teaching practice.

A. Teaching materials

The current available textbooks, or the comprehensive textbooks of scientific Japanese, or the reading contents published earlier, cannot meet the contemporary requirements of the reading materials for this course.

B. Schedule

Since the content of scientific Japanese covers a wide range and it is not enough just to learn it in class. Therefore, how to better coordinate students' time arrangement and conduct the interaction and connection of learning in class and after class is also an issue needs considering in the future.

C. Teaching methods

Taking the app Tree used presently for example, learning resources can be selected as courseware in the meeting class, but they need to be uploaded and published in advance. When playing audio and video, the student side can control the progress of the file by itself. However, the progress bar can only be dragged by the teacher side to set to play from the middle part, and the student side can only play from the beginning. If the teacher do not foresee and deal with these problems, it may affect the normal smooth progress of the classroom. Although the problem can be solved for the moment though the use of other alternate apps like QQ live lesson, Tencent Meeting and QQ groups, it needs to be addressed urgently from the long run.

D. Teaching environment

The reform of teaching methods makes it possible to teach and learn without staying in the classroom. In this way, teachers need to work hard to attract students' attention to avoid problems such as lack of attention due to the lack of direct supervision.

Therefore, the exploration of scientific Japanese teaching still needs the efforts of more teaching workers in the continuous practice test. However, the progress and development of the times and civilization provide more space for development, and it is believed that the foreign language teaching of science and technology has great potential in the future.

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Explicit curriculum: subjects that will be taught, the identified "mission" of the school, and the knowledge and skills that the school expects successful students to acquire. What societies envisage as important teaching and learning constitutes the "intended" curriculum.[17] Since it is in some cases, people see the curriculum entirely in terms of the subjects that are taught, and as set out within the set of textbooks, and forget the wider goals of competencies and personal development.[16] This is why a curriculum framework is important. Hence, curriculum should focus on the fundamental intellectual disciplines of grammar, literature, and writing. It should also include mathematics, science, history, and foreign language. So, in this paper, based on the experience of teaching practice, the author proposes to set up reading and translation courses for scientific Japanese separately, and introduces the teaching practice of "Scientific Japanese Literature Reading", so as to provide ideas and methods for reference to the Japanese major setting in Chinese universities and the curriculum setting of scientific Japanese. Keywords: undergraduate major, Scientific Japanese Literature Reading, teaching mode.

I. INTRODUCTION. Annotated primary scientific literature is a teaching and learning resource that provides scaffolding for undergraduate students acculturating to the authentic scientific practice of obtaining and evaluating information through the medium of primary scientific literature. Utilizing annotated primary scientific literature as an integrated pedagogical tool could enable more widespread use of primary scientific literature in undergraduate science classrooms with minimal disruption to existing syllabi. Research is ongoing to determine an optimal implementation protocol, with these preliminary iterations presented here serving as a first look at how students respond to annotated primary scientific literature. Read all rules and check the list of Japan-related subreddits before submitting. If you have a question that doesn't go in the basic questions thread, 80% of the time it will get a better response somewhere else. Japanese students do not read. They are not required to have read a single book by the time they enter university. So, lots of them have their first experience with short stories of more than a couple of paragraphs and even whole novels when they get to, say, Junior year. You can spell something out like a scientific thesis, but it will be devoid of the emotion that is needed to get some points across. This is why in the West we read fiction. The principles upon which curriculum development practice has evolved date back to the early decades of this century. It is only in recent years that universities with a technological teacher education program have begun to examine the role of theory in curriculum development policy and practice. What remains to be seen is how competing and complementary curriculum theories will inform our understanding of this emerging field. The teacher education literature has not given curriculum design the attention it deserves (Haughey, 1992; Pratt, 1994; Sanders, 1990). Second, aspiring technology teachers should have an opportunity to reflect on their own attitudes and beliefs about learning (Hansen, 1995).