ABSTRACT: There are many heritage Chinese schools that provide Chinese learning for both language and cultural programs during weekend in the United States and other countries. The backgrounds of students in these Chinese schools may vary significantly. With very limited resources and time students could spend on learning in Chinese school, the instruction methodology and curriculum utilized must be different from regular ones to teach these students efficiently. With the advanced and popular of the technology, the Internet has become a universal platform for many uses. Utilizing the Internet for learning is a new trend. Incorporated with many multimedia technologies, a virtual learning environment can be accessed from anywhere around the world. Multimedia technology has been proved to be a very useful tool in language learning, many commercial multimedia packages are available for different languages, including Chinese. In this paper, we study, based on experience at a Chinese school in the USA, possible scenarios and conclude with a practical methodology that can significantly improve and intrinsically motivate student in learning Chinese. This methodology can also expend to other language and education area.

Keywords: Multimedia, Chinese as Second Language, computer-assisted learning, Computer-supported collaborating learning, Internet

1. BACKGROUND

There are hundreds of Chinese schools teaching Mandarin during weekend in the USA. Alone in New Jersey, there are more than 30 such schools [SINO 2008]. They are basically divided into two systems – teaching traditional characters [NCACLS] for those students whose parents are mostly from Taiwan or Hong Kong, and simplified characters [CSAUS, Huaxia] for those students whose parents are from People Republic of China. Students’ parents run these schools voluntary and the facilities are rented from their local school districts or churches. So they are also called heritage schools. The number of students at these schools could be from dozens to four hundred with size 5 to 20 per class. Both Chinese school systems, although their goal is to provide students a Chinese learning environment in both language and cultural, mainly focus on language learning.

As China’s economy grows so significantly, Chinese becomes a very popular language in the world. This trend has greatly impacted on the Chinese education in the USA. As a result, many Chinese schools start to offer the Chinese as Second Language (CSL) program for families that parents don’t have Chinese background and they cannot assist their children in learning Chinese at home. Since most of the teachers and staff of Chinese schools originally grew up in Chinese environment, either in China, Taiwan, or Hong Kong, they become the main teacher source as well as providing textbook resource in regular school. Hence, Chinese schools have great impact on Chinese education in many regular schools. The teaching methodology used in their learning during childhood in their original place may not fit well for children studying Chinese in the USA because of the differences in cultural environments. In the USA, students are encouraged to use computer to study language widely, and not necessary to memorize. Therefore, how to utilize computer to assist students in learning Chinese becomes a challenge in Chinese schools.

In this paper, we will use Fidelity Chinese School (FCS), a non-profit organization founded in Marlboro, New Jersey, in 1994 [NJFCS], as a case study to share our experiences at promoting computer assisted learning for helping regular and CSL students in learning Chinese. We propose possible scenarios and conclude with a practical methodology that can significantly improve and intrinsically motivated student in learning Chinese.

Since the Chinese schools are not in compulsory education system, and they are operated by enthusiastic volunteers with only two hours per week of language learning, there are some facts and challenges that differ from the ones in regular schools:

1. Resources restriction – Unlike regular schools that have stable budget plan and have laws to enforce students and teachers to follow, there is no fixed funding or support from tax payer. Funding of any Chinese Schools is
heavily depending on students’ tuition and man power is provided by parents. In addition, school’s factility is rented, it is difficult to invest expensive or heavy resource to promote teaching.

2. Unstable policy and teaching methodology– Frequently changing school officers makes school policy unstable, while changing in teachers could change teaching methodology. As Mandarin becomes popular, there are many Chinese learning books available. Sometimes different officers and teachers have different preference in selecting a textbook. It is very common that a school uses 2 or 3 different set of textbooks.

3. Parents support – Since studying in Chinese school is not compulsory, and the study performance in Chiense school will not contribute to students’s regular school academic records, parents’ support play a key to student’s Chinese learning. Especially when students get into high schools, they have busy schedule and heavy pressure at regular school, many students give up studying or cannot do too much homework for Chinese school.

A computer-assisted learning environment plays important role for helping staff administration and teachers’ teachings, as well as encouraging students’ learning. This is especially true for learning character-based Chinese that is greatly different from western spelling-based languages.

2. TEACHING METHODOLOGY

Teaching methodology not only needs individual teacher’s knowledge, but also depends on overall curriculum design and equipment provided. Since it is hard to quantify personal skills, in this paper, we will focus on curriculum that is an integration of objectives, overall outline and textbooks.

2.1 OBJECTIVES

Parents could have different goal and priority for their children’s Chinese learning, and the difference could have great impacted on curriculum design, textbook selection and teaching. We all know a language is for communication between people, but there are many different ways for communication. In modern world, people like to exchange message through computer and internet, in additional to the traditional oral and hand writing communication. We list 6 major objectives in order for learning Chinese language in the modern world.

Listening – The first thing that a person can learn and understand a language is through listening. Although listening is a one way education, baby or pet still can use body language to respond to people, if they can understand what people say. So, providing as much as a Mandarin listening environment is very important.

Speaking – The oral communication plays conveniently to people in daily life. However, speaking Mandarin for non-native speakers sometimes is not easy because it has four-tones and retroflex consonant. Same character with pronunciation in different tones could have different meaning. The pronunciation is very possibly wrong without teacher’s correction and could end with all flat-tone that makes it difficult to understand.

Reading – With both listening and speaking capabilities, it may be sufficient for conversation. However, a person considered as literacy must be firstly able to read signs, newspapers, books, letters, and all other written and printed information. In the modern world, reading Chinese should be no longer limited to written and printed materials. As a matter of fact, students today can obtain their interested Chinese information through the Internet, such as e-mail, relative or friend’s blog, Facebook. Although this could require the next objective in order to enter Chinese characters for searching.

Typing – Most people today could actually spend much more time in typing on computer than hand writing. So, typing Chinese on computer should become important part of Chinese learning. There are many input methods for typing Chinese on a computer. Han – Yu Pingyin and Zhuyin are two of the primary methods. China’s Han – Yu Pingyin is an English-letter based system. It has become the main stream for the Chinese teaching in many regular schools. Pingyin is convenient to type Chinese character through computer. Many Taiwan system Chinese schools are forced to offer Pingyin to prepare SAT-II and AP-Chinese tests.

Culture – It is no doubt that, with thousands years of history, Chinese culture has become integrated part of Chinese language. To be able to utilize Chinese efficiently and effectively, ones could require some Chinese cultural knowledge. Hence, teaching students with Chinese cultural knowledge in history, geography, literature, and traditional custom is also very important part of learning.

Writing – Since Chinese is characters based language, hand writing is very helpful and important to memorize the characters. Although it is the most difficult objective to achieve in learning Chinese, the ultimate goals of learning Chinese is, of course, to be able to write in Chinese.

2.2 OUTLINE AND CURRICULUM

With these objectives in mind, FCS offers two language prorams – regular and CSL. Regular program is from pre-K (4 years old) to H4 (17 years old) that matches the regular school system, and focuses on literature and culture based curriculum teaching students Chinese skills that meet the above objectives. We also use supplment materials to teach high school students for practical living such travel, ordering food in restuarant, etc. These Chinese cultural knowledge
and supplements are taught in multimedia style. The regular program is expected to have more than 80% Chinese usage in instruction.

For CSL program, in order to provide better education quality, CSL student population has to be maintained at a manageable level. This is mainly due to the restriction of school resources. CSL students is grouped based upon their Chinese proficiency, not just by student age. The CSL-Beginner is the key to make CSL program successful. Students moving to CSL-Intermediate and CSL-Advanced should pass placement test and teacher’s recommendation. A CSL student could stay in a class for one to three year to move to next level.

Our CSL program consists of 4 classes: CSL Beginner, CSL Intermediate, CSL Advanced Advanced Conservation, and . In order to have better pronunciation and not confused with English letter, we teach Taiwan phonetic symbols for younger children, in stead of China Pin-Yin system.

3. MULTIMEDIA METHODOLOGY

For the last two decade, the way we learn a new language has been evolved from the traditional face-to-face classroom lecturing into a more diversified methodologies. Electronic audio recording devices were first introduced as an aid for language learning. Students were submerged into a pure language learning environment facilitated with audio equipment. Later, electronic video devices were brought into the learning environment and, hence, many school have established so called Audio/video classrooms. Now, laptop, internet and website are introduced in teaching for better efficient. Here, we will focus on the computer based methodology.

34.1 MULTIMEDIA TEACHING COMPONENTS

The methodology consists of two components: A computer-human interface and the Internet multimedia technology. The Internet multimedia technology delivers the audio and video to students for real-time demonstration of pronunciations and writing. On the other hand, the computer-human interface supports a classroom-like virtual environment to students for real-time interactive guidance, such as question-and-answer or pronunciations and writing mistakes correction. There are some commercial multimedia packages are available for different languages, including Chinese. However, the lacking of interactive instruction and support of communication makes multimedia technology only useful as a second means of language learning.

With the advanced and popular of the technology, the Internet has become a universal platform for many uses. Utilizing the Internet for learning is a new trend. Incorporated with many multimedia technologies, a virtual learning environment can be accessed from anywhere around the world. However, the Internet multimedia applications in learning are not yet to become a mainstream in the instruction methodology. The primary concern is still on the efficiency of communication and interaction between instructors and students.

To individuals who would like to self-study a new language, audio/video tapes were very popular among many occasions. While technology advancing, new media such as CD/DVD replaced tapes in the last decade. With the indexing in CD/DVD, it was easier for the students to improve learning efficiency by fast searching and repeating any specific word or sentences.

When technology evolves into the information age, computers and the Internet become dominating the flow of information exchange. That change also involved the way we learn any new knowledge, including a new language. While many publishers for language learning still produce CD/DVD format, there are more and more web sites in the Internet providing brief introduction for language learning.

Despite all the modern technologies utilized in the language learning, there is one major drawback of them: No interactive activity involved. In other words, all of these new means still cannot outperform the way we learn a language in a classroom. In a classroom, a teacher can answer a question or correct a mistake in pronunciation in real-time. Furthermore, it is difficult, bored and unefficient to have young children to study a new language alone without teacher’s interactive helps. The pronunciation is very possibly wrong without teacher’s correction, especially to Mandarin because of its retroflexion and four-tones.

To take the advantages from both the classroom and modern techlogies, one best way is to integrate the computer technology into a classroom that will be able to provide a multimedia teaching. In such an integrated computer-aided language learning environment, not only the teacher can provide different forms of teaching materials seamlessly, but also the students can review those teaching materials beyond the classroom and class hours. Therefore, it will be good that textbooks also provide CD/DVD disk for students to study at home.

3.2 COMPUTER ASSISTED ENVIRONMENT

The integrated computer-assisted environment can comprise few configurations depending on the the resource restrictions imposed on the school:

- **Hardware**: In this setup, a classroom should equip with a Laptop computer, a portable projector, and a pair of amplified computer speakers. Since these are all portable devices, an extension cord may be also required. The laptop serves as the multimedia center that provides audio and video effects as the aid to teacher’s instruction. A projector of SVGA resolution (800x600) provides adequate performance to this
configuration. A pair of moderate priced computer speakers is capable of delivering the volume required for the classroom. Since our school has limited space, some devices are stored in the storage room and some teachers carry them daily.

- **Software**: In addition to the three devices utilized in the basic configuration, this setup requires the Internet connection, either by a landline or a Wi-Fi. By adding the Internet connection, the teacher can provide web contents such as Chinese related video clips on Youtube, Chinese folk songs, origins of Chinese characters, and other Chinese related information found on the Internet. There are also many the OCAC online E-books available to the public. This configuration enable the teachers to go beyond the teaching materials available within the classroom.

- **Internet**: Our school provides website for teachers to upload their weekly communication, homework, video/audio files, and notes under their class page. Students can download and read them at anytime. School and teachers also provide internet Chinese language learning resource for students. Since our facility doesn’t have the internet access, teachers download the file and play in classroom, and also provide the link to students. Many students use internet Chinese dictionary or translator to do their homework.

### 3.3 INTEGRATED MEASUREMENT

It is important to have some measurements to know students’ learning performance, and know what should the teaching or curriculum be improved. In FCS, we have the following required measurement to test students Chinese learning.

- **Traditional speech contest** – This contest is for 1st grade to 12th grade, CSL-Advanced and Advanced Conservation students to practice their Mandarin pronunciation and speech deportment. Students usually spend days to prepare and practice. We usually host this event in the December.

- **Word recognition contest** – All students will memorize and understand a set of Chinese characters and simple phrase or sentences. We usually host this event in May.

- **Multimedia poster contest** – Comparing with the above two tests that focus mainly on reading and speaking, this event is considered an integration project than a contest. It is meant to provide an opportunity for 6th to 12th grades, CSL-Advanced and CSL-Conservation students to utilize Chinese skills that meet the 6 objectives mentioned in section 2. The contest hosts in March, and students can prepare their project in summer and winter break. Parents and teachers are encouraged to guide students on their interested Chinese culture topics in history, geography, literature, custom, etc. The presentation can be in multimedia or paper poster style. The multimedia styles include computer presentation, any video or audio style, and even performance. Students are required to interactive with judges by answering questions mainly in Mandarin. We notice this is a very efficient way to encourage students to self research and study Chinese language. Students get involved more actively because they have more interests in their selected topics. To be able to search information on internet, students need to know how to type or recognize Chinese characters on website. The main reason we encourage parents and teachers to guide the students because students’ learning need parents’ support as we discussed in the section 2.

### 4. CONCLUSION

In this paper, we discussed some challenges for heritage Chinese schools in the USA. We use FCS as the case study to share the experiences for curriculum, teaching methodology, and how the computer-assisted language learning environment is provided. We demonstrates the effectness of the computer assisted environment working with a carefully planned curriculum for both regular and CSL programs. In addition, a new multimedia project for students can help to encourage and measure the students learning.

### References


