Paper Presentation:

"A Brief Review on Multimedia Technology Applied in Chinese Instruction"
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1. Introduction

The rapid development and wide application of computers offer both great challenges and opportunities for education. Undoubtedly, the wide spread of multimedia technology and the advent of the internet provide convenience for language learning and expand possibilities for using them to support language instruction. The fact that appropriate employment of multimedia technologies facilitates both language teaching and learning procedure has been proven through countless practice including those in TCSL area. Language acquisition is a highly complex process involving linguistic proficiency and cultural proficiency. To make learners succeed in the integration of these two abilities through their learning activities, it is vital to find out what the effectual and efficient teaching methods are. This paper focuses on the domains where multimedia technologies have been employed to improve and develop Chinese acquisition activity and innovative solutions multimedia assisted Chinese instruction provided to extend students' learning beyond what traditional classroom offers for improvement of their ability and confidence in communication in Chinese.

2. Areas Explored by Multimedia-assisted Chinese Instruction
2.1 On Pronunciation

Pronunciation is one of the most difficult subjects to handle for Chinese instructors. As for Pin Yin, it shares the same letters with English but each letter has a different pronunciation which always mixed up by learners, especially the beginners. However, as the essential part of meaning conveyance, it deserves great attention from both instructors and learners and must be conquered in earliest stage otherwise its negative impact will emerge in and baffle spoken communication conducted afterward by learners.

It is crucial to master the correct pronunciation of syllables, vowels and tones of Pinyin at the beginner stage in Chinese learning. In order to articulate the sound syllables and vowels, pronunciation instruction should be focused on the proper tongue position, mouth shape and control of breath. Showing the exact movements of vocal organs when producing a particular syllable or vowel will definitely facilitate learners' understanding and imitation in a proper way. However, it is an impossible mission for Chinese instruction with restricted traditional teaching methods. Therefore, many innovative solutions based on multimedia technologies have been conducted in addition to still picture-based demonstration and teacher-based interpretation to fill in this gap. With manifold functions and inexhaustible instruments, the whole pronunciation process is clearly and vividly illustrated by computer-designed animation, courseware and programs to learners for their easy understanding.

By employing an X-ray produced 3D-animation, learner visually get the knowledge on the structure and functions of vocal organs and easily access to pronouncing activity as

viewing exact inner movements of vocal organs as they are uttering a particular sound.

As for tone instruction, teacher's demo is pre-recorded in computer and the pitch is displayed as a beeline set the standard for learner to simulate and compare with.Multimedia technologies are also involved in pronunciation error detection and accent reduction. Standard pronunciation demonstrated by various human voices for learners to imitate and study is the basic function of all digital Chinese dictionaries. By using multimedia-based peripheral equipments, learner's voice can be input the computer to compare with the pre-set standard voice when learning particular pronunciation and the two voices are displayed visually by two curves. In this way, learner can clearly understand what the differences are and adapt pronunciation to match the standard specifically. The instant feed-back provided by multimedia based pronunciation instruction enable learners correct and improve their pronunciation promptly even without instructor's supervision.

2.2 On Character

Acquisition of Chinese character is another challenge in Chinese teaching activity. For many of Chinese learners especially occidentals, starting to write Chinese for the first time is a "big event" in their experience. They are confronted to a very different writing, in its visual form, its spatial organization and density, as well as its kinaesthetic execution.

Writing the Chinese characters involves several mechanisms: the perception of the form either seen or imagined in the mind, the motor sequence, the management of the space, the coherence of the vision and the hand, and all these mixed capacities should become a natural embodiment after many hours of practice so that practitioner are not only be able to copy correctly a character but also take the programmed chain of movement sequence as a via for memorizing and for recalling.

In the class, the teacher is engaged in instructing other language skills rather than worrying about the performance of each student in their writing, and the evaluation of their handwriting is mostly given from the static result rather than the process how it is written. Thus many of the beginners show difficulties, such as in the single stroke orientation, or in order of the stroke sequence, or in the spatial manipulation. Multimedia-assisted Chinese Instruction assists in correcting these wrong writing habits and easing variable difficulties.

Many of Multimedia-based Chinese learning programs explicitly illustrate Chinese Characters from perspectives of stroke order, component, structure, evolvement etc. Digital hand writing pad enables learners to practice calligraphy which is an innovative and impressive way to learn Chinese character. These comprehensive illustrations can be used by students on the web or from other sources with the minimum consumption of classroom time and the maximum possibility of acquisition.

Using character-input software to help learning and working with the Chinese written language also has many benefits and classroom applications. Recent developments in Input Method Editor (IME) and Windows 2000 "built-in" applications for Chinese characters assist in teaching the Chinese script, character recognition, and sentence composition. Based on some of the suggested applications, Chinese teachers can pursue a new avenue of learning

and empower their students to write Chinese character compositions via e-mail or Word documents.

2.3 On Listening Comprehension

Multimedia technology supports listening comprehension activity in many ways. In traditional listening practice, teacher spent time on adjusting tapes whenever repetition is needed. During the adjusting process, most teachers have the frustrated experience as the tapes can not be manipulated easily and accurately. With multimedia technology, audio, video and other computer-based files and materials can be edited and rearranged for specific instruction purpose and played at any speed to meet the diversified needs of instructors and learners. With the help of professional software, any audio file can be extracted part by part. And the chosen parts can be linked to the corresponding text. Sound, video, image, text etc. can be integrated to enhance the listening consolidation.

In different phases, multimedia assisted instruction expedites activity of Chinese listening comprehension. The designs listed below divided tasks into smaller practice components to meet diverse needs, each of which contributed towards the practiser's acquisition.

From perspective of sounds, some programs present beginner learners with online quizzes (e.g. multiple-choice questions, or short-answer questions, with built-in feedback) asking them to differentiate, for instance, between the four tones in Mandarin Chinese, or between syllables which sound similar (e.g. syllables in the retroflex and dental sibilant categories).

To become accustomed to rhythms and speech rates in spoken Chinese, some programs provide second language learners with examples of how a sample passage would sound at different speech rates (while allowing learners to control how they access digital sound clips) and draw their attention to the word stresses and rhythms in Mandarin Chinese, which may be very different from those in their first language.

To accept phonological variations, some programs prepare recordings of the same passages spoken/read by different individuals so that learners might have the opportunity to listen to different accents and voice qualities of native speakers. One would find quite distinct differences between the Mandarin Chinese pronunciations of individuals from different parts of China, for instance. Learners do need to be exposed to such differences because it is an aspect of the language that they will encounter in the real-world.

To develop the ability to extract keywords, the gist or main ideas from listening material, some programs use on-screen prompts or questions to get learners to enter/select the keywords or main ideas that they believe they have heard and program the computer to provide instant feedback on whether they were correct. This would allow learners to pinpoint where they might have made an incorrect interpretation of the material they heard.

To Integrating listening comprehension skills with other language skills, some programs provide a task which requires learners to use their listening skill with other language skills. For example, ask learners to generate a sequel or a verbal response to a dialogue they have

heard, and then record it as a digital sound clip for others to listen. This provides them with the incentive to comprehend the original dialogue in order to complete the related task of generating a sequel or a verbal response, as well as both listening and speaking practice.

2.4 On Culture Understanding

Successful language acquisition is an integration of linguistic mastery and cultural comprehension. Knowing how to say something with correct pronunciation, grammar, and vocabulary is not sufficient for effective communication in Chinese. Learners need to understand Chinese culture and society and must know what to say and what not to say, when to say it, and how to adjust what they say for the occasion. Since the Chinese language is itself part and parcel of Chinese culture, there is no way of avoiding the teaching of culture.

Experts have discovered that the best way to really get to know another society and its culture is to live in it as an active participant rather than simply an observer. Although there are numerous summer camps and short term programs offer Chinese learners field trip in China, it is impractical for most receivers of overseas Chinese education.

Multimedia-assisted Chinese instruction provided various solutions to fill in this gap. First, it developed programs consisting variety of cultural information in history, geography, philosophy, tradition, literature, religion etc. and helps the learners to interact and explore the subject available in image, audio, text, graphics, animation and video on a computer in a non-linear mode other than by word of mouth. It also provides natural and real learning surrounding so that learners can be familiar with and further understand cultural meanings of words, phrases and sentences through their various applications in real cultural contexts. Second, in accompany with specifically designed programs with scripted approach involves teaching learners the many facets of non-linguistic communication including: proxemics, gesture, body language, social appropriateness, and the importance of the roles, time, place, and audience in communicative situations to help learners acquire correct and effective communication. The script of a communicative situation involves not only what is said, but the appropriate actions that accompany the dialogue based on intentions and expectations of the natives in the context of the situation. Synthesizing all kinds of multimedia technology to give learners comprehensive culture cultivation on specific topic is another effectual way on culture teaching. The following teaching plan successfully builds up a multi-dimensional culture instruction by adequate employment of multimedia technologies.

Teaching Plan: The Song of Spring
By Teacher of Beijing 55th Secondary School
Target Students: Students with advanced level
Teaching Goal: Focusing on the cultural connotation of spring, the course aims at introducing it's from Chinese perspective.
Methods: Cross-cultural and interdisciplinary methods and multimedia technologies
Procedures:
• 	Preparation before class:

1. Composing an article depicting spring from your point of view
2. Copy a poem about spring in your language

- Classroom Activities:

1. Discussion: Talk about features of spring in your countries and activities related to it.
2. Listen to the music "The Song of Spring" and talk about what you perceive about this song
3. Summarize features of spring by studying the essay "Spring" by Zhu Ziqing.
4. Watch the documentary "The Growth of Plants" and discuss where the beauty of spring lies.
5. Study the poem of "咏柳" by He Zhizhang to appreciate the beauty of spring created by Chinese ancient poet.
6. Listen to classical Chinese music "春江花月夜" to imagine how Chinese ancient musicians feel about spring.

- Assignments: Report project

Choose one of the above works we studied together and describe your feeling of spring in a composition.

The above teaching plan well organized visual and audio instruments and other multimedia to support a core topic containing a great deal of cultural information. It also explored the possibility of using Cross-cultural and interdisciplinary methods in Chinese instruction to accomplish comprehensive cultural immersion which give a three dimensional view of Chinese culture.

3. Conclusion:

Through continuous exploration and innovative application, multimedia-assisted Chinese instruction supplemented and updated the impoverished, fractional and increasingly outdated traditional teaching methods. With diagrams, charts, video, film, animation, theater/plays, pictures, sounds and other changes of perceptual views, multimedia-based instruction methods enriched the Chinese teaching and learning activities and practically solved numerous problems in acquisition of pronunciation, character, listening comprehension as well as culture understanding.This paper made a brief review on Chinese instruction areas where Multimedia technologies are largely and effectually employed in order to facilitate Chinese language acquisition and convinced its conspicuous contribution to Chinese teaching and learning activities.

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