

Pedagogy for Teaching Mandarin with Cablecast Facility

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Abstract

Cablecast facility was utilized as an experimental environment to implement a multimedia lesson series to teach beginners Mandarin. A modern TV production studio with multi-camera, audio and video instant feedback and interactive computer-supported teaching material were employed to conduct and produce learning sessions simultaneously and consecutively for a scheduled cablecast programming. The pedagogical methods included sight singing and reading, game playing, and interactive computer learning as well as exploiting celebrity consciousness of the learners in a live multi-media TV studio and cablecast environment. Successful teaching/learning experience was observed. Students learned with undivided attention, eagerly followed up self-study during scheduled cablecast program hours and diligently produced game materials for and participated in cablecast lessons. The pedagogical procedures and research results obtained from this project are presented.

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I. Introduction

It has been recognized that learning Mandarin as a second language is very challenging.¹ Firstly, the challenge lies in the difficulties in the pronunciation² and writing characteristics³ of Mandarin as a non-alphabetical language. Mandarin is drastically different from western alphabetical languages, hence, learners have difficulty in recognition and retention of Mandarin characters or images. Secondly, the unique grammatical flexibilities⁴ in conversational Mandarin, different from grammar in classical written literal Chinese⁵, are inherited from its historical and provincial cultural background. This would make teaching Mandarin as a second language very difficult if learners did not have a Mandarin environment for learning and practicing what had been taught or learned. Thirdly, the historically evolved alphabetical or symbolic representations of Mandarin language, namely the Pinyin⁶ representation versus the Zhuyin⁷ representation, have created an unforeseen learning obstacle. For children or students who are learning Mandarin at the same time learning English, the Pinyin representation using the English alphabets confuses the learners thus presenting added challenge. On the other hand, the Zhuyin representation using a separate and unfamiliar set of symbols is often a deterrent to beginner Mandarin learners. Lastly, the traditional Mandarin characters⁸ (inherited traditionally) and the simplified Mandarin characters⁹ (created recently in mainland China) have divided the learning sphere with separate learning tools and teaching materials. Fortunately, this issue

¹ Mary Hennock, Mandarin Scam, Newsweek, Aug. 1, 2009, and comments on Newsweek Article on Learning Mandarin - Disturbing comment on Mandarin

Teaching: <http://thelinquafranca.wordpress.com/2009/08/09/newsweek-article-on-learning-mandarin/>

² Lin Hua, Understanding Pronunciation of Consonants, <http://www.canadiantesclassassociation.ca/PDF/jor0515.pdf>

³ Lu Xun, An Outsider's Chats about Written Language, Translated by Victor H.

Mair, <http://www.pinyin.info/readings/lu-xun/writing.htm#n33>, a classic article about Chinese characters.

⁴ Claudia Ross and Jing-Leng Sheng Ma, Modern Mandarin Chinese Grammar, Routledge, 2006, Taylor & Francis eLibrary, 2006

⁵ Classical Chinese, http://en.wikipedia.org/wiki/Classical_Chinese

⁶ Introduction to

Pinyin, <http://www.instantspeakchinese.com/pinyin/index.cfm>, <http://www.yellowbridge.com/Chinese/pinyin-intro.php>

⁷ Introduction to

Zhuyin, <http://knowledgerush.com/kr/encyclopedia/Zhuyin/>, <http://en.wikipedia.org/wiki/Bopomofo>

⁸ Traditional Chinese characters, http://en.wikipedia.org/wiki/Traditional_Chinese_characters

⁹ Simplified Chinese characters, http://en.wikipedia.org/wiki/Simplified_Chinese_characters

does not present a pedagogical impact to beginner learners (likely young children) as much as to more advanced learners (likely adults). Even more fortunately, the advancement in information technology applied to Mandarin (computers and various software) is a saving grace for bridging the gap of traditional and simplified Mandarin in all aspects of linguistics from teaching, learning, speaking, reading, writing to researching Mandarin literature. The power of a click that can convert¹⁰ a document from traditional to simplified Mandarin and vice versa should mute the long debate¹¹ on this issue to some degree, barring political interpretations.

Even with the available technologies, presently, learning Mandarin is still a serious challenge to students and teaching Mandarin a more challenge to educators, especially to those who teach or learn Mandarin as a second language. What is needed are innovative pedagogies that can eliminate or reduce the learning obstacles discussed above and can stimulate and sustain learners' interests. These pedagogies most likely are going to be derived from good empirical teaching experiences but enhanced by taking advantage of the available technology in an innovative manner. In this paper, the author intends to present the results of a research project – a short course - based on such an approach involving a cablecast facility. The design of the project, the technologies and techniques utilized in the pedagogy and the results obtained in terms of teaching and learning effectiveness are presented in the following sections in this paper.

II. Design of the Project

The purpose of this project is to exploit the advanced technologies available to a teacher and the students and to assess their usefulness for teaching Mandarin as a second language. The ultimate goal of this experimental project is to produce an innovative and effective pedagogy. To launch this research project, the following assumptions were made:

¹⁰ Microsoft, Conversion of Traditional to Simplified Chinese and vice versa, <http://office.microsoft.com/en-us/word/HP052727391033.aspx>

¹¹ Considerable Debate on the traditional versus simplified Chinese characters, http://en.wikipedia.org/wiki/Debate_on_traditional_and_simplified_Chinese_characters

1. For beginners, the issue is more on how to get the learners stimulated and motivated to learn Mandarin by removing learning obstacles.
2. Selecting Pinyin versus Zhuyin is not a critical choice for beginners especially if they are taught simultaneously. Let the students migrate to their own choice so long they will practice and master one system or both for learning the correct pronunciation.
3. The teaching environment is important in that it should draw and keep learners' attention.
4. The learning (including self-study) environment is important in that the learners should feel comfortable and confident that they can learn on their own.
5. Teaching material is important in that the learners can relate to it; best if the material is created with the participation of the learners.
6. Game method is beneficial to language studies hence games should be utilized in Mandarin lessons.

With the above assumptions, the author sets out to design a teaching and learning environment for Mandarin using a cablecast facility. Fig. 1 is a schematic diagram illustrating this facility. A professional TV production studio¹² is utilized for this project. The studio is equipped with a set of four cameras which can be used to focus on the teacher, the students and teaching assistant, the magnetic board and the PC screen showing teaching material. The teacher and students are equipped with microphones for audio pick up. A TV monitor is used to show the real-time production scenes to the teacher so that the teacher can adjust his position or teaching material or give command to the cameramen or the PC assistant. A set of electronic buzzers is provided to students for playing Mandarin word games. The camera and microphone signals are fed into the editing room for real-time TV production of the Mandarin Lessons. The produced TV programs are recorded and then delivered to the cablecast control for scheduled cablecast.

¹² Cablevision Studio provided by Cablevision Company where the major equipments are Digital Cameras (Hitachi), Video Switcher(Grass Valley), Audio Board(Mackie), Tape and DVD recorder and burner as well as Microphone and TV Monitors. PC Assistant used his own notebook computer.

The rationale for using the above facility is triggered by the assumptions and objectives stated above. They can be briefly summarized as follows:

1. The cablecast facility will take advantage of the learners' affinity to TV and computer. (Today's children spending a lot of time on TV and computer) Integrating a computer-assisted learning in a TV production environment is a novelty which may keep the learners attention well focused on the lessons.
2. The facility offers multimedia and computer support with instant feedback during the teaching process which can accommodate different types of teaching material, including sight singing, sight reading and interactive drills.
3. In a studio setting the learners essentially are the producers (actors) of their learning lessons which may be the best self-study material accessible through the familiar Cablecast TV and/or computer with a DVD drive.
4. The TV studio setting is very attractive from game play point of view which may stimulate learners' interests and induce creation of effective games for learning Mandarin.

With availability of the above cablecast facility, the author offered a series of Mandarin lessons (7 lessons) to two volunteers who are 4th and 5th grade students with no background or any knowledge of Mandarin but wishes to learn Mandarin. During these lessons, two teaching assistants were recruited to participate, one assistant, a fifth grader with some knowledge of Mandarin, is attending the class like a peer with the beginners but can offer help as needed. (serve as a role model for the beginners) The second assistant, a 8th grade student, essentially performs as the PC assistant controlling the interactive teaching material used in the class. The experimental project has been carried out in the summer over six weeks time.

III. Procedures and Techniques in the Pedagogy

A syllabus of was contemplated for the course but not set in stone, however, a set of objectives were firmly adhered to. The author challenged himself and the students that

during this beginner's course, they would learn the pronunciation through both Pinyin and Zhuyin methods. They would learn a sufficient amount of vocabularies and sentences so that they could make simple Mandarin conversation. Finally, they would gain enough knowledge about Mandarin so that they could easily continue on learning Mandarin after this beginner's course using a variety of learning material. A word and sentence game based on Scramble Games¹³ was introduced to help the class to achieve the three objectives. A set of teaching materials and tools (see Table I) are selected after a careful search. In this course, learning conversational Mandarin is the primary objective; writing of Mandarin characters although practiced in game card production but was not emphasized.

The course materials and tools are listed in Table I. These materials were selected for the above stated objectives and they were suitable for use in the cablecast facility. The course started with phonetics using sight singing and sight reading with both Zhuyin and Pinyin presented simultaneously. The learners seemed to have no particular problem of pairing the two representations together and were able to grasp the phonetics by hearing, singing and practicing with the aid of a Pinyin – Zhuyin comparison table. Using both systems seem to help students in pronouncing the more difficult Mandarin sounds.

The initial intent of this experimental teaching project was to use the entire Summer (8 weeks) to teach a beginner class to derive an effective pedagogy for teaching beginners Mandarin. It turned out the progress had been surprisingly smooth and by seven lessons (in six weeks), the students had demonstrated that they would be able to converse in simple sentences and build vocabularies on their own. They especially enjoyed the Scramble Chinese Word Game¹⁴ as a tool for practicing conversational Mandarin. The students had used the writing paper to practice writing on their own and produced vocabulary cards for the word game.

¹³ Ifay F. Chang, *Passport to Scramble Land*, Publisher TLC Information Services, 2001, ISBN 0-9771594-0-X; Scramble Game was invented by Ifay F. Chang first for the English language in 1985. The game challenges players to continuously make words and defend or steal words by adding letters and scrambling into longer words; a game, in contrast to Scrabble®, can be played simultaneously by a number of players without a board. The Scramble Chinese Word Game is derived from Scramble Games, Patent Pending.

¹⁴ As footer (13). Ifay F. Chang, *Research with Cablecast Facility for Mandarin Teaching*, to be published.

Table I Teaching Material and Tools Used in Cablecast Facility		
Item No.	Title	Description
1	Pinyin Charts, Initials, Finals and Tones	Three Large Wall Charts ¹⁵
2	Zhuyin Chart	Displayable on PC and TV
*	The above two representations are mapped so the corresponding symbols are always shown together	The mapping is explained and emphasized
3.	Speaking Mandarin in Five Hundred Words	Compiled by Prof. Liu Chi-Hua, National Chengchi University ¹⁶
*	This CD produced for overseas Chinese is a bilingual copy suitable for learners learning Mandarin as a second language. The teacher should supplement the conversational content for the specific learners.	The format of text, vocabulary, review and practice material are suitable for self-study especially in the present course.
4.	Song for Zhu-Yin (and Pin-Yin) by children singer	This sight singing is practiced before each class with sight reading on charts.
5	CD and online tool on Pronunciation	Teach and Practice Pinyin/Zhuyin
6	Comparison and Conversion Table of Zhu-Yin, Hanyu Pin-Yin and General Pin-Yin	Used as a reference ¹⁶
7	Writing paper and character card © (see Fig. 2)	Gridded structure assisting writing and association with related words and Zhuyin and Pinyin representation
8	Scramble Chinese Word Game © ¹³	Word game and sentence game including phonetics
9	Online references on supplemental materials	Students are encouraged to search them and to share with the class

¹⁵ 對外漢語推廣用工具, pinyin charts, HANBAN, Beijing, China.

¹⁶ Liu Chi-Hua, 五百字說華語, 2004, Professor of National ChengChi University produced under Overseas Chinese Affairs Commission (OCAC).

The seven Mandarin lessons had been cablecast for seven weeks during the course as teaching and self-study lessons for the class students as well as for the public. This series is currently scheduled to be repeated in March and again in May in 2010 in the county of Westchester, New York State.

IV. Results and Discussion

The seven Mandarin lessons although conducted and produced for a small class but it was also intended as lessons for a TV audience. The TV viewers could follow the cablecast to learn, the better if they had the above CD material at hand. Of course, the class students got to review how they learned in the class and could practice to correct mistakes and make improvements on their own while watching the TV and repeat with recorded DVD. After each lesson and reviewed it on TV/DVD in the same week, the students had become very familiar with the lesson they studied and they exhibited their confidence in their next class. After each lesson and TV episode, the students would build the vocabulary cards as their homework and would read ahead to the next lesson material if they had the time. The students adapted to this process quite well hence we were able to conduct and produce the lessons according to a weekly cablecast schedule.

The singing of the phonetics and pointing to the large wall charts in the beginning of each lesson was quite effective in getting the students to pronounce correctly and to recognize both the Pinyin and Zhuyin representations without confusion. Of course, this might be partly due to the fact that they were 4th and 5th graders having already mastered the English alphabets and its spoken language. For beginners who are learning English and Mandarin at the same time, particularly at a young age (K-1 grades), the confusion presented by Pinpin pronunciation may still be a challenge.

The interactive computer-assisted learning material (item 3 in Table I) was very effective in this course. Our PC assistant would take cue to click the material for student to listen and wait for the responding student to speak then click the text respondent's answer to show how the correct response sounded like. In this manner, the students were able to

focus their attention in the learning process for one hour, sometimes two hour without a break. The students playing a role according to the lesson text in the TV studio setting are essentially actors in a TV production; perhaps, subconsciously they would want to put the best effort forward.

The word game was an innovation in this course starting from phonetics to characters, phrases to sentences in a continuum learning procedure. The cards of phonetic symbols were used to play 'spelling' game so the students could memorize the symbols and the words learned in that lesson. As the number of words learned increased, then word cards the students produced were used to practice Mandarin phrases. The word cards as shown in Fig. 2 were essentially their homework which required them to put down for each new vocabulary learned its Pinyin and Zhuyin as well as their meaning in English plus related words or phrases in Mandarin. For the purpose of making TV viewers comprehend what was going on, we used a magnetic board and magnetic word cards so that students could play the game on the large magnetic board instead of on their table. The class was progressing nicely from phonetics to characters and from words, phrases to sentences. The key element in these games keeping students interested was that they sort of created the lessons by creating the game cards themselves and they compete in the game with fun rather than feeling pressured to learn. Fig. 3 is an illustration of the word games used in this course. Details of these games are described in another paper¹⁴.

This experimental project has taught us a number of things. First, technology is very helpful in teaching and learning Mandarin as a second language. With children growing with TV and computer games, the cablecast approach seems to be a very effective way of introducing the Mandarin language to beginners. Second, the cablecast facility, environment and cablecast programming used together for the teaching purpose is not only novel to students but beneficial in many ways to produce effective teaching and effective learning. In today's media rich world with kids immersed in Ipad, Iphone, YouTube etc, the cablecast approach appears to be a natural way for kids to accept. Third, the production of these Mandarin lessons seems to be time consuming at first, but in the long run it is quite simple since the students are actually helping in preparing and producing the cablecast

lessons. Considering the possibility of teaching a large TV audience with a small class feeling or experience, the investment of this research effort may yield handsome return in the future. Fourth, the game playing on TV has always been attractive as witnessed in game shows such as Wheel of Fortune, Jeopardy and Scramble Game Show¹⁷; but the Scramble Chinese Word Game¹⁴ developed for this course are very effective for learning conversational Mandarin. The games are extremely well liked by students and TV viewers which can be attributed to the fact that they have adopted all the attractive features of an entertaining TV game show. In a separate setting when electronic buzzers (item 12 in Fig. 1) were used, a large number of students could play the game together with excitement and enjoyment.

In summary, the teaching methods used in this cablecast project are quite well accepted by the students. We have found that the students have learned very fast in this course and have kept their interest in every lesson by eagerly producing materials for the next lesson. The students do not consider watching TV as homework, hence, the cablecast homework is also very effective. The students like the Scramble Chinese Word Games very much which since they are so naturally adapted to the Cablecast setting. Based on the results of this experimental project, albeit a small class, we may conclude that teaching Mandarin as a second language in a cablecast facility with the above described procedure is an effective pedagogy. We have not yet surveyed the reaction from our TV audience at large. Hopefully, the repeated cablecast of our Mandarin lessons will bring us more specific feedback.

This cablecast project is our first attempt to explore an effective pedagogy in Mandarin teaching. With what we have observed and learned, we are very encouraged with the positive results. We hope to continue on to perfect the Cablecast Pedagogy for teaching Mandarin.

¹⁷ Ifay F. Chang, Producer, Scramble Game Show, a weekly TV game show produced by the author since 2006, presently cablecast over the Westchester and Putnam Counties in the State of New York.

V. Acknowledgement

The author wishes to express his appreciation to Cablevision Company for its cooperation and support which enabled this research project. The author owes great gratitude to the following people for their assistance in this project: Ms Teresa Chang (Director of Production), Mr. Walter Sands and Mr. Joe Giacalone (Technical consultants), Mr. John Capra and Mr. Mike Deluca(Cameramen) as well as Ms Cecilia Mastroilli (cablecast scheduling). This experimental course would not be possible without the volunteer students (The Gorman Family, Jon and Marc brothers and their Mom Terry) as well as the two wonderful teaching assistants (Jemmin Chang and Jerray Chang).

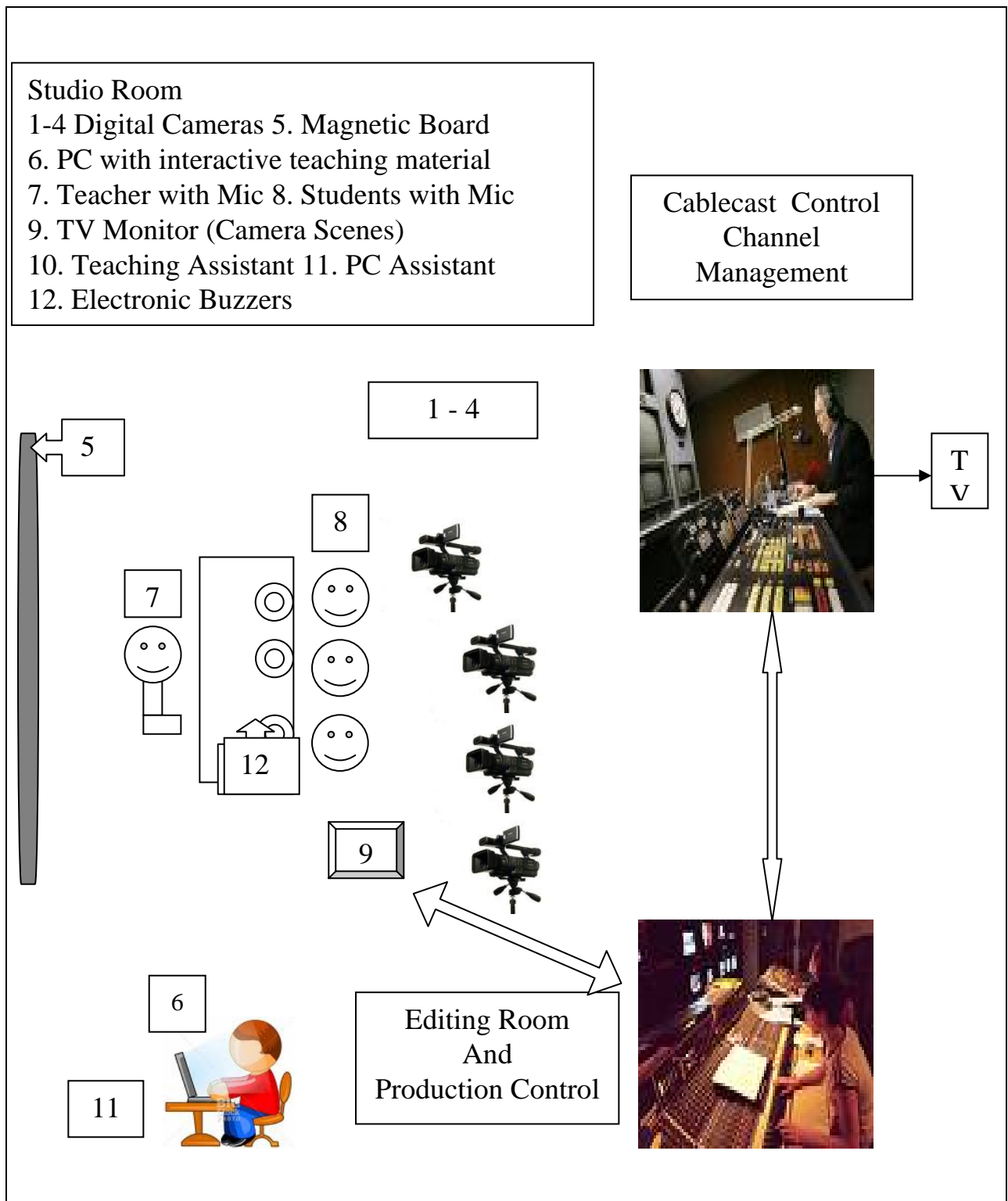


Fig. 1. Schematic of the Cablecast Facility for Conducting and Producing Mandarin Lessons.

<table border="1" style="margin: auto;"> <tr> <td colspan="3" style="text-align: center;">2</td> <td style="text-align: center;">6</td> </tr> <tr> <td style="text-align: center;">1</td> <td style="text-align: center;">1</td> <td style="text-align: center;">1</td> <td rowspan="3" style="text-align: center;">3</td> </tr> <tr> <td style="text-align: center;">1</td> <td style="text-align: center;">1</td> <td style="text-align: center;">1</td> </tr> <tr> <td style="text-align: center;">1</td> <td style="text-align: center;">1</td> <td style="text-align: center;">1</td> </tr> <tr> <td colspan="4" style="text-align: center;">4</td> </tr> <tr> <td colspan="4" style="text-align: center;">5</td> </tr> </table> <p>1 – Gridded area for one Mandarin Character 2 – Pinyin representation 3 – Zhuyin Representation 4 – English equivalent for the character and for its homonyms if any 5 – Mandarin phrases using the character 6 – Selected homophone words</p> <p>Fig. 2. Scrammle Mandarin Card</p>	2			6	1	1	1	3	1	1	1	1	1	1	4				5				<table border="1" style="width: 100%;"> <tr> <td style="width: 15%;">Game 1</td> <td>Spell words with Pinyin/Zhuyin Cards, for example, Chi -> 吃 he -> 喝</td> </tr> <tr> <td>Game 2</td> <td>Make phrases with character cards, for example, 我 - 我們 學 - 學生, 學校, 教學</td> </tr> <tr> <td>Game 3</td> <td>Make Sentences, for example, 我們學校很好</td> </tr> <tr> <td>Game 4</td> <td>Adding words and make into longer sentences: 教師教學生 -> 教師教好學生 我們學校很好 + 老, 的, 師 -> 我們學校的老師很好</td> </tr> <tr> <td>Game 5</td> <td>Adding words and scramble into longer sentences: 老師教好學生 + 才 -> 教師老, 學生才好 + 不, 會 -> 學生不好, 教師才會老 + 是, 差 學生教不好, 才會是老師差</td> </tr> </table> <p>Fig. 3. Scrammle Chinese Word Game</p>	Game 1	Spell words with Pinyin/Zhuyin Cards, for example, Chi -> 吃 he -> 喝	Game 2	Make phrases with character cards, for example, 我 - 我們 學 - 學生, 學校, 教學	Game 3	Make Sentences, for example, 我們學校很好	Game 4	Adding words and make into longer sentences: 教師教學生 -> 教師教好學生 我們學校很好 + 老, 的, 師 -> 我們學校的老師很好	Game 5	Adding words and scramble into longer sentences: 老師教好學生 + 才 -> 教師老, 學生才好 + 不, 會 -> 學生不好, 教師才會老 + 是, 差 學生教不好, 才會是老師差
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電纜電視應用於漢語教學方法與開發

張一飛*

摘要

本文敘述一漢語教學實驗方案，此方案利用電纜電視的設備和環境作為一個漢語教學實驗室來同時開發漢語教學方法及傳授和傳播課業。此實驗教學環境採用一個現代化的電視製作攝影室，內有四台數位電視攝影機，影像音響錄放設備及有互動功能的教學電腦。這些設備和環境用來作為一個漢語教學教室並同時製作成電纜電視漢語教學節目以供學生課後自修及大眾收看。授課方法包括看圖歌唱、視文朗誦、造字、詞、句、遊戲和與電腦互動學習。學生在此環境中儼如電視演員專心敬業，充分表現興趣和信心，並能利用電纜電視自修和製作下一期教學遊戲卡。此實驗教學環境設計、教學方法和觀察結果乃本文主題。

* CEO/ TLC Information Services, <http://www.tlcis.us/ifaychangbio.html>.