# Common Stroke Mistakes in Chinese Character Writing Among Business Administrative Students

## Ch'ng Looi-Chin

Academy of Language Studies, Universiti Teknologi MARA, Sarawak

Email: looichinchng@gmail.com

#### **Ting Hie-Ling**

Academy of Language Studies, Universiti Teknologi MARA, Sarawak

#### Chuah Kee-Man

Faculty of Language and Communication, Universiti Malaysia Sarawak

Received Date: 21 June 2018

Accepted Date: 28 September 2018

Available Online: 22 October 2018

# **ABSTRACT**

Due to the diplomatic and economic relationship between Malaysia and China, many undergraduates are encouraged to enroll the Chinese course in their respective universities. Among those, students of Business Administration in UiTM Sarawak are made compulsory to join Mandarin course. This has made their learning an uphill challenge because the learning of Chinese character writing is viewed as one of the toughest elements in Chinese language course especially among non-Chinese due to lack in their learning environment to assist and support their learning. This study aims to identify the common stroke writing mistakes among the non-Chinese learners. A dictation of 68 words has been carried out to all 50 undergraduates who enrolled the Mandarin level 2 course. The test items in the dictation were the extracts of common words that they have learned and practiced in their course' text book for a semester. Data suggested that Stroke Misalignment, Stroke's Shape and Non-existing Strokes are the most common mistakes done among the non-Chinese learners. The findings suggest that the teaching of stroke order might be the most crucial component to help learners to rectify their stroke writing mistakes. However, further studies are needed to examine suitable teaching methods that can further assist learners to achieve accuracy in stroke writing.

**Keywords:** Chinese character stroke writing, Mistakes in stroke writing, Chinese character stroke order, Non-Chinese learners, Teaching and learning strategies in Chinese character stroke writing.

#### INTRODUCTION

The enrolment of Chinese language course by non-Chinese in tertiary education has increased dramatically in recent years. However, their learning of lexical in general is usually underperformed. Such incident is mainly contributed by their lack of knowledge and fluency in Chinese character stroke writing and its structure. In most research of second language learning in English, lexical knowledge is responsible for language acquisition and development (Schmitt, 2000; Cameron, 2001). However, in Chinese language, learners must first understand the stroke and structure of the character before they could know the lexical

and further their understanding to master the language. Thus, this adds on the difficulty in learning the language because the learning of English and Chinese language requires a totally different metalinguistic awareness (Koda, 2004). This study examined on the non-Chinese common Chinese character stroke writing mistakes in a Chinese course offered by Universiti Teknologi MARA in Malaysia, Sarawak.

# LITERATURE REVIEW

According to Koda (2004), the learning of Chinese language is totally different from learning English or Malay, which is mainly the first language of the non-Chinese. Therefore, it requires a completely different set of metalinguistics awareness. Such awareness mainly refers to the ability of the learners to be able to aware of the association of meaning with specific units of the language such as its sounds, phonemes, words, part of speech and etc in order to make meaning across, understand and use the language meaningfully. As such, Chinese language could be viewed as one of the toughest language to be learned by those whose their first language is a non-Chinese or non-Chinese culture related language.

# The possible challenges

Chinese language is seems to be the notorious language for English speaker in many studies done earlier (Freed, 1995; 1998 & Coleman,1997) and it is believed that the non-Chinese would face similar difficulties. In their research to compare the learning time of learning Chinese and Spanish among English speakers, the findings revealed that the learning time for English speakers to learn Chinese would take up to 2,200 class hours with half of the time spent in the country where the language is widely spoken. However, learners only need 600 to 750 class hours in the similar learning context to learn Spanish. The study showed that those English speakers required extra time to learn Chinese language particularly the elements that does not exist in their mother tongue such as tones in oral communication and strokes in written communication.

In terms of written communication, the huge differences of the writing system between Chinese language and their first language has contributed much of the confusion and frustrations. The Chinese characters are known as pictograph or logograph which build up by a combination of strokes and radicals. Such combination is unique for each word and they cannot be deconstructed to individual phonemes as in the alphabetical writing system in English (Koda, 2004). For instance, the word "sufficient" can be broken down to syllabus as "suf-fi-cient" and could be broken down again to individual phonemes as /səˈfɪʃ(ə)nt/. However, this does not exist in Chinese language, the words cannot be broken down past syllabus level or better known as radical. Radical is already a morpheme on its own and has its own phoneme. For example, the word  $(x_1)$  means to cherish, to begrudge and to pity. It consists of the left radical of  $(x_1)$  which means love and right radical of "昔" (xi) means formerly, ancient, in the beginning, it also provides the sound for the word 惜(xī). Apart from that, the combination of structures in a word itself is unalike. For instance, prefix and suffix in either English or Malay usually contributes to diversify the meaning of the root word by changing the word's part of speech within the word family but they usually have a shared meaning. For example, the word "sufficient", an adjective to describe enough can become "sufficiency", a noun to state the condition of being adequate when the suffix of the word changed. When a prefix "in-" which denotes the meaning of not added to the root word it becomes "insufficient" means not enough. However, such understanding cannot be transferred to the learning of Chinese language as changing the radical would alter the root word's meaning as well as pronunciation entirely. Using the previous example, if the left radical "小" of the word "惜" were to be substituted with the radical "钅" (jin) it forms the word "错" (cuò) which means wrong and with the radical "亻" (ren) it forms "借"(jiè) which mean to borrow. As such learners need to recognize each word based on its meaning, unlike in English, learners can have the liberty to extend their lexical knowledge to spell a new word based on their awareness of the combination of phonemes.

On top of that, the vast difference between character writing and phonetic writing in Chinese language (Guo, 2008) also adds on to the challenges in learning Chinese language. Similar phonology words might be written in distinct characters with different meaning. For example, '亿' ('hundred million'), '易' ('easy'), or '翼' ('wing') all of them are different in meaning but they are all pronounced as (yì). They share the same phonology but contrast in meaning, radicals, and number of strokes, a concept to describe the 'basic unit of handwriting' (Qiu, 2000). Therefore, learners who are lack in their lexical knowledge might find this confusing and this may also contribute to mistakes making in Chinese character writing.

The memorisation of strokes in Chinese language is far beyond the 26 alphabets in English or Malay. According to Nancy et al. (1998), Chinese calligraphy in Kaishu can be discerned in to the basic 8 strokes as in Figure 1.

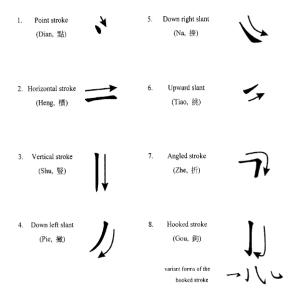


Fig 1 Basic Strokes in Chinese Characters (Nancy et al., 1998)

However, there are myriads combination of strokes to form radicals or characters. The functions of radical can be semantic or phenetic that contributes the meaning or pronunciation (Ho et al.,2003; Su, 2010) for the character respectively. Semantic radical usually found on the left or top of a character (Ho et al.,2003; Liu et al.,2010). For instance, radical "亻" pronounce as (ren) can be a radical as well as a standalone Chinese character "人". It can be semantic radical that gives the meaning to "傲" (ào) carries the meaning of proud/pride which mainly describes human's feeling. It can also be a phonetic radical for "仁" (rén) which means humane, that borrows the pronunciation of the radical "亻" (ren).

# Common learning strategies taught in classrooms

Rote learning strategy has always been used for centuries to drill the strok-by-stroke writing practices repeatedly. Findings from McGinnis (1995) indicated that such strategy is perceived as the most impactful learning strategy by the non-native Chinese novice learners during a five-week summer immerse programme. Survey conducted by Wang (1998) and Yin (2003) also argreed that such strategy is the most preferred strategy used for effective learning of character writing.

Similarly, Ke (1998) and Sung (2012) revealed that learners performed better in character writing when they used orthographic knowledge-based strategies. Their studies, reported that learners tend to rely on repetitive copying to enhance their familiarization and memorization of words. The strategy is said to enable them to increase their understanding of the construct and structure of the Chinese character.

Pass studies discovered that, though rote learning is popular among foreigners the teaching and learning of Chinese character writing classrooms but it might not be a successful strategy as learners still make mistakes in writing in various ways (Wei, 2007; Guo, 2008; Dong, 2010; Zhou, 2014; Li, 2016). These mistakes making cannot be ignored or underestimated, therefore, the need to investigate the common mistakes made by non-Chinese learners is crucial. It is a measurement to rectify the mistake making as well as the teaching and learning process as to improve the accuracy of stroke writing among the non-Chinese learners in future.

#### RESEARCH METHODOLOGY

The study involves all 50 non-Chinese Business Administration students in UiTM Sarawak, Mukah branch. These undergraduates were taken for the study when they were in Level 2 Mandarin course because it is pre-supposed that they have gone through the lessons of basic stroke character writing and its writing rules in their Level 1 and it is assumed that their mistake making in character writing is not solely due to trial and error as in in their initial stage of learning in Level 1. Since they have acquired a basic level of understanding on the skills, mechanics and fluency in character writing the findings of the study could be more accurate in terms of measuring their mistake making in character writing.

#### Instrument

A dictation was carried out to identify the learners' mistakes in writing Chinese characters. The dictation consisted of 68 common words that could be found in their Foundation Mandarin Level 2 course textbook's writing exercises. They have been learning and practicing those words for a semester.

### **Framework**

A revision of frameworks on the stroke mistakes from various studies has been done. This has enabled the study to narrow down the type mistakes that are repeated but named differently in these studies. This study adapted the revised framework based on the studies done by Wei (2007), Guo (2008), Dong (2010), Zhou (2014) and Li (2016) as illustrated in Table 1.

Table 1 Analysis Framework for The Types of Chinese Character Writing Mistakes

Coding	Types of Stroke Mistakes	Stroke Mistakes Descriptions		
A	Stroke Addition	Extra stroke in a character.		
В	Stroke Omission	Missing stroke in a character.		
C1	Stroke Misalignment	The stoke is not relatively arranged to its position.		
C2	Incomplete Stroke	Unfinished/ Abandoned stroke writing.		
D1	Stroke's Position	The position of where the stroke(s) meet(s) are unclear or		
		reversed.		
D2	Stroke's Length	The length of the stroke is written either too long or too		
		short.		
Е	Stroke's Direction	The direction of the stroke(s) is/are written incorrectly.		
F1	Broken Stroke	One stroke is written as 2 strokes in a character.		
F2	Stroke Attachment	2 strokes are written as 1 stroke in a character.		
G	Non-existing Stroke	Strokes that do not exist in Chinese characters.		
Н	Multiple Mistakes	Multiple stroke mistakes identified in a character.		

Mistake of the same family would share the similar initial in the coding such as C1, C2, D1, D2, F1 and F2. Stroke's Misalignment (C1) and Incomplete Stroke (C2) are the subcomponents of Stroke's Shape, as the name suggests, it describes the distorted shape of the written strokes compared with the original shape of the word. Meanwhile, Stroke's Position (D1) and Stroke's Length (D2) are under the mistake of Wrong Combination, which describes the wrongly joint strokes written by the participants. Lastly, Broken Stroke (F1) and Stroke Attachment (F1) are part of Stroke Distance, they explain the mistakes by the written strokes' distance – whether it is 2 strokes written as 1 or contrary.

# **FINDINGS**

Table 2 records the types of mistakes made by 50 non-Chinese Business Administrative students in their dictation of 68 Chinese characters. These were 3400 words (N) being analysed based on the revised analysis framework in Table 1.

Table 2 The Types of Mistakes Made and the Frequency of Mistake Making in Character Stroke Writing by Non-native Chinese Learners.

Coding	Types of Stroke Mistakes	Frequency of mistakes	Percentage of mistake
		making (n)	making (%)
A	Stroke Addition	18	0.72
В	Stroke Omission	110	4.42
C1	Stroke Misalignment	683	27.46
C2	Incomplete Stroke	90	3.62
D1	Stroke's Position	712	28.63
D2	Stroke's Length	176	7.08
Е	Stroke's Direction	40	1.61
F1	Broken Stroke	60	2.41
F2	Stroke Attachment	69	2.78

Н	Non-existing Stroke Multiple Mistakes	224	9.01	
	TOTAL	2487	100	

Overall, there were 2487 words written wrongly by the participants, which is 73% of the total words dictated. This has indicated the constraint of the current teaching and learning method used among the beginner non-Chinese learners. The current bottom-up sequence teaching method demanded a strict sequence of teaching. It started off focusing on the teaching of stroke types, stroke orders then the positioning of components or strokes in the characters (Shek, Ference, Wing & Elizabeth, 2007). The whole process might be labourous yet the result may not be promising. Unlike in learning English, the teaching and learning method relies on dry drilling and memorization of the orthography that might slow down the progress of word recognition as well as writing characters with accuracy.

The results also show that Stroke Misalignment (C1) is the most serious mistakes made by the participants, that is 28.63% from the overall mistakes made. Figure 2 is the samples of C1. Examples show the radicals were written in the correct position but they are not well aligned as in the standard characters.

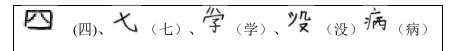


Fig 2 Samples of Stroke Misalignment (C1).

According to Feng (2015), making mistakes in positioning and aligning the distinct radicals in a character is a common challenge among these non-native beginners especially in the recognizing and writing compound characters compared to simple characters. This is because compound characters' visual-orthographic structure is proportionately higher than the simple character (Liu, 2011). Furthermore, the skill of spatial adjustment of the combination of more than one radical in a word is not found in the participants' writing system, thus, beginner learners are prone to make mistakes in stroke alignment (Lee, 2014).

Stroke's Shape (D1) is the second most common mistakes made by the participants. It is 27.46% from the overall mistakes made. Shape changing may be noticed from various directions – top to bottom, left to right. Though writing on grid is helpful to help learners to get their writing in shape in their routine writing practices but it does not seem to be habitual when they were tested on in this study. Figure 3 shows the samples of D1.

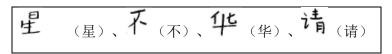


Fig 3 Samples of Stroke's Shape (D1).

The change of shape in character is a unique invention of the learners in writing but it is crucial to promote their word recognition (Feng, 2015). According to Feng (2015), the findings concluded that first grade learners were prone to make such mistakes and the mistakes will eventually disappear at the end of

second grade. Moreover, Norlida (2015) emphasized that pen-shaped mistakes is common among foreign learners. It changes the shape of the character. According to Tan, Hoosain & Siok (1996) the nature of Chinese characters is composed of strokes that packed into a square shape with no clear initial position. Thus, beginner learners usually would compute such configural properties and strokes in a fast and non-serial way and resulting them to make mistakes in character writing. For instance, the spatial and structure of the character "#"should be written as but the non-native beginner learners might wrote it as ...

Interestingly, Non-existing Strokes (G) is the third highest mistakes among other mistakes, which takes up 12.26% from the overall mistakes made. Learners have accidentally coined stokes that is not existing in stroke writing in Chinese. Figure 4 shows the samples of G.

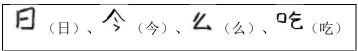


Fig 4 Samples of Non-existing Strokes (G).

The sample of mistakes showed the trace of influenced of punctuation mark in alphabetic writing system in writing Chinese character. For example, the stroke "J" is written as "J" is written as "J". Apart from that, some mistakes are likely affected by the alphabetical writing system and has mistakenly transferred to their Chinese characters writing similar with Norlida (2015) pen-shaped mistakes. For instance "L" is written into "t", "V" into "V", the radical "I" at the right part into "I".

According to Gass and Selinker (2001), coining a totally new word by the learners is regarded as one of the communicative strategies to compendate the learners' deficiency in the language. It is part of the interlanguage development. As such, in this case, it can be perceived that learners are trying to relate their learning with their prior knowledge in English or Malay to compensate their deficiency in recognition and memorization of the stroke writing. Mistakes made can be regular especially the learners' first language and second language are interrelated. However, this would speed up the learning process (Gass and Selinker, 2001).

### CONCLUSION

Stroke Misalignment, Stroke's Shape and Non-existing Strokes are the common mistakes found among non-Chinese learners in this study especially when learners are in the beginning stage of learning. However, such mistakes need to be noticed and rectified before it fossilises in their later level of learning. Generally, stroke writing mistakes is mainly due to the negative transfer of writing knowledge from the participants' first language (Gass & Selinker, 2001; Norlida, 2015), unfamiliarization of the structure (Tan, Hoosain & Siok, 1996; Feng, 2015) and spatial of written Chinese character (Liu, 2011; Lee, 2014) compared to their first language. The result may not be conclusive but it has shed lights to the planning of teaching and learning in future as to assist learners to accelerate in stroke writing. The findings suggest future teaching and learning need to focus on stroke order learning to improve stroke writing accuracy. According to Li (2009) proved that the stress on stroke order learning could improve learners to recognize and remember the Chinese characters easier besides enhance their speed and accuracy in their writing. However, further studies need to be done to investigate the teaching methods that can effectively aid learners in stroke order learning to reduce their stroke mistakes.

# **REFERENCES**

- Cameron, L. (2001). Teaching languages to young learners. Cambridge: Cambridge University Press. Koda, K. (2004). Insights into Second Language Reading. Cambridge: Cambridge University Press.
- Coleman, J. (1997). Residence abroad within language study, Language Teaching, 30, 1-20.
- Dong, F.F (2010). Investigate and analyze in the Chinese character errors of primary and intermediate overseas students from Central Asia (Master Thesis). Xinjiang Normal University, Xinjiang, China.
- Feng, X.W. (2015). Analysis of Development Patterns in Writing Acquisition of Chinese Studies. European Scientific Journal, 1, 1-9.
- Freed, B. F. (1995). What makes us think that students who study abroad become fluent? In B. F. Freed (Ed.), Second language acquisition in a study abroad context (pp. 123-148). Philadelphia: John Benjamin's.
- Freed, B. F. (1998). An overview of issue and research in language learning in a study abroad setting. Frontiers: the Interdisciplinary Journal of Study Abroad, 4, 31-62.
- Gass, S., & Selinker, L. (2001). Second Language Acquisition (2nd ed.). Mahwah, NJ: Lawrence Erlbaum & Associates.
- Guo, S.L.(2008). The Features of Chinese Character Stroke and Foreign Learners' errors of Chinese Character Stroke. Journal of college of Chinese Language and Culture of Jinan University, 4, 63-69.
- Ho, C. S., Ng, T., & Ng, W. (2003). A "Radical" Approach to Reading Development in Chinese: The Role of Semantic Radicals and Phonetic Radicals. Journal of Literacy Research, 35(3), 849-878.
- Ke, C.R. (1998). Effects of Language Background On the Learning of Chinese Characters among Foreign Language students. Foreign Language Annals, 31(1), 91-102.
- Koda, K. (2004). Insights into Second Language Reading. Cambridge: Cambridge University Press.
- Lee, L.李丽 (2014). 对外汉字教学之留学生汉字书写偏误研究 [Teaching Chinese As A Foreign Language: A Study On Foreign Students' Chinese Character Writing Errors]. Journal of Inner Mogolia Normal University (Education Science Edition, 3, 102-104.
- Li Xiangeng. (2009). Qiantan Bishun Bihua Jiaoxue De Yichu 浅谈笔顺笔画教学的益处.Retrieved 2 September, 2014 from: http://www.5dhz.com/hanziliushu/wenzhangtuijian/2009-05-06/248.htm
- Li, J. (2016). 俄罗斯学生汉字笔顺和笔画偏误分析及教学对策[An Analysis On Chinese Stroke And Stroke Order Errors Among Russian Students And Teaching Strategies]. Journal of Language and Literature Studies, (6), 87-91.

- Liu, P. D., Chung, K. K. H., McBride-Chang, C., & Tong, X. (2010). Holistic versus Analytic Processing: Evidence for a Different Approach to Processing Chinese at the Word and Character Levels in Chinese Children. Journal of Experimental Chinese Psychology, 107(4), 466-478.
- Liu, Y. F.刘艳芳 (2011). **欧美初学者**汉字书写的偏误及成因分析[An Analysis of Mistakes and Causes in Writing Chinese Characters By European Beginners].Journal of Shanxi Teachers University, 3, 134-135.
- McGinnis, S. (1995). Students' goals and approaches. In M. Chu. (Ed.) Mapping the course of Chinese language field: Chinese Language Teachers Association Monograph Series, Vol. III (pp.151-168). Kalamazoo, MI: Chinese Language Teachers Association.
- Nancy, L., Ki, W.W., Chung, A.L.S., Ko, P.Y. & Lam, H.C. (1998). Children's stroke sequence errors in writing Chinese characters. Reading and Writing: An Interdisciplinary Journal, 10. 267-282.
- Norlida, R. (2015). Foreign Students' Common Problems In Writing Chinese Characters. International Journal of East Asian Studies, 4(1), 63-78.
- Qiu, X. (2000). Chinese Writing. (Louis, G., & Norman, J. Trans.) In Early China Special Monograph Series (Vol. 4). Berkeley: Society for the Study of Early China and Institute of East Asian Studies, University of California, Berkeley.
- Schmitt, N. (2000). Vocabulary in language teaching. Cambridge: Cambridge University Press.
- Shek, K.T., Ference, M., Wing, W.K., & Elizabeth, K.Y.L. (2007). An Integrative Perceptual Approach For Teaching Chinese Characters. Instructional Science, 35, 375-406.
- Su, X. (2010). Radical Awareness among Chinese-as-a-Foreign-Language Learners. Ph.D., Florida State University.
- Sung, K.Y. (2012). A study on Chinese-character learning strategies and character learning performance among Ameican learners of Chinese. Chinese as a Second Language Research, 1(2), 193-210.
- Tan, L.H., Hoosain, R.& Siok, W.W.T. (1996). Activation of phonological codes before access to character meaning in written Chinese, Journal of Experimental Psychology: Learning, Memory, and Cognition 22: 865–882.
- Wang, S.H.C. (1998). A study on the Learning and Teaching of Hanzi-Chinese Characters. Working papers in Educational Linguistics (WPEL), 14(1), 69-101.
- Wei, W. C.**尉万**传 (2007). 东南亚华裔留学生汉**字偏**误综合考察报告[An Investigation On Character Writing Errors Among Foreign Students]. Journal of Yunnan Normal University: Teaching and Reseach of Chinese as A Foreign Language,6, 70-74。

- Yin, J. (2003). Methods used by American college students in memorizing Chinese characters. Journal of the Chinese Language Teachers Association, 38(3), 69–90.
- Zhou, W.H. (2014). **泰国初**级阶段学生汉字书写偏误分析 [Error Analysis of Chinese Character Writing Among Chinese Beginner Learners in Thailand]. Data of Culture and Education, (26), 31-34.