

# DEVELOPING INITIAL LITERACY IN CHINESE: WHAT ADMINISTRATORS NEED TO KNOW

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2016 National Chinese Language Conference  
Chicago, IL  
April 29, 2016

## *CELIN: Chinese Early Language and Immersion Network*

CELIN seeks to connect with and provide resources for language practitioners, researchers, policy makers, parents, and advocates for language learning across the United States.

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We are affiliated with and supported by *China Learning Initiatives* at Asia Society, which has a strong track record in leading and supporting the Chinese language field.

# CELIN's Mission

Support the growth and sustainability of Chinese early language and immersion programs in and outside the United States to ensure that students have opportunities to develop high-level multilingual and intercultural competency for advanced study and work in an interconnected world

# CELIN BRIEFS

Discussion of ways to develop students' literacy and global competency through learning of Chinese language and culture

## Purposes:

- Respond to an urgent need in the field of Chinese language education for research-based information; examples of best practices; and resources for administrators, teachers, and parents
- Address different aspects of Chinese language education; available in English and Chinese; applicable to elementary (K–8), middle, and high school, and even college Chinese language programs

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## Developing Initial Literacy in Chinese

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### CITATION

Everson, M.E., Chang, K., & Ross, C. (2016). Developing initial literacy in Chinese. In S.C. Wang & J.K. Peyton (Eds.), *CELIN Brief Series*. New York, NY: Asia Society.

CELIN Briefs are developed by the Chinese Early Language and Immersion Network under the China Learning Initiatives at Asia Society.

### Introduction

One of the biggest challenges of learning Chinese at any level of the K-16 spectrum is the challenge of literacy development, learning to read and write. This is especially true when students are first introduced to Chinese orthography, its character-based writing system. This Brief outlines the issues that programs need to consider as students begin to develop literacy in Chinese. It also explains what it means that Chinese is a character-based language, describes differences between simplified and traditional characters, discusses when and why to teach and use hanyu pinyin (or pinyin in this Brief, a system that uses the Roman alphabet to help learners sound out characters in Mandarin), and makes recommendations regarding ways to facilitate students' initial literacy development. As students continue to develop Chinese oral proficiency and literacy, the teaching of reading and writing in the Chinese orthographic system requires a different set of skills, which will be addressed in another CELIN Brief.

### Chinese as a Character-Based Language

The written Chinese language does not employ an alphabet. An alphabet is a system that uses letters or other symbols to represent the sounds and words (form and meaning) of a language. Children learning to read a language such as English spend time in early elementary school learning how letters represent the sounds of the language and how they

combine to form printed words. Chinese, on the other hand, employs what are commonly termed "characters," written symbols that are not "spelled out," as are letters in alphabets. Chinese characters often contain both sound and meaning cues in their overall makeup; however, these cues hint at rather than clearly identify pronunciation and meaning, and learners have to take an extra step to decode them. Over many millennia, tens of thousands of characters have evolved, though many have either fallen into disuse or are used in highly specialized fields such as classical Chinese literature, medicine, history, and philosophy. For native readers of modern Chinese, it is estimated that between 2,000 to 3,000 characters are needed to accomplish most reading functions on a daily basis (Dong, 2014). Chinese children learn 3,500 characters from first to ninth grade, spending hours each day writing and rewriting characters until they are committed to memory. While individual Chinese characters by themselves can be words, most words in Chinese are made up of two characters in combination, such as in the words "huo+shan" 火山 (fire+mountain=volcano) or "da+ren" 大人 (big+person=adult). Therefore, a learner's vocabulary size is much larger than the number of characters learned.

### The Basics of Chinese Character Structure

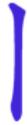
Chinese characters are not composed of randomly drawn elements, but instead reflect a highly evolved system of component parts that recur in various rule-governed configurations. The following terms describe components of Chinese character composition:

### *Developing Initial Literacy in Chinese: Topics Covered*

- Chinese as a Character-Based Language
- The Basics of Chinese Character Structure
  - Strokes
  - Radicals
  - Semantic-Phonetic Compounds
- Simplified and Traditional Characters
- What is Pinyin? When and Why Is It Useful?
- Establishing a Solid Platform for Chinese Literacy Development

# THE BASICS OF --- CHINESE CHARACTER STRUCTURE

# Characters are composed of strokes

	<b>diǎn</b>	<i>dot</i>	六, 白, 立
	<b>héng</b>	<i>Horizontal stroke</i>	两, 十, 可
	<b>shù</b>	<i>Vertical stroke</i>	十, 不, 个
	<b>piě</b>	<i>Left falling stroke</i>	么, 人, 少
	<b>nà</b>	<i>Right falling stroke</i>	人, 是, 八
	<b>tí</b>	<i>Rising stroke</i>	我, 冷, 打
	<b>héng gōu</b>	<i>Horizontal stroke ending in a hook</i>	买, 定, 卖

## Strokes are written in a specific direction

	<b>diǎn</b>	<i>dot</i>	<i>Left to right</i>
	<b>héng</b>	<i>Horizontal stroke</i>	<i>Left to right</i>
	<b>shù</b>	<i>Vertical stroke</i>	<i>Top to bottom</i>
	<b>piě</b>	<i>Left falling stroke</i>	<i>Right to left</i>
	<b>nà</b>	<i>Right falling stroke</i>	<i>Left to right</i>
	<b>tí</b>	<i>Rising stroke</i>	<i>Left to right, bottom to top</i>
	<b>héng gōu</b>	<i>Horizontal stroke ending in a hook</i>	<i>L to R, hook slants L and down</i>

Characters are written in a specific stroke order

一	十	大			
丿	厂	尸	斥	后	后
丨	冂	日	日	旦	早
丿	习	习	习	那	那

Characters are composed of recurring component parts (部件)

- 好 = 女 + 子
- 字 = 宀 + 子
- 湖 = 氵 + 古 + 月
- 想 = 木 + 目 + 心
- 哲 = 扌 + 斤 + 口
- 店 = 广 + 占
- 国 = 口 + 玉

# Recurring parts occur in fixed configurations to form characters

For example:

	她	他	好	们	昨	明	起	期
	学	家	要	星	怎	男	易	各
	湖	做	谢	哪	咖	班	辨	脚
	想	您	然	恕	契	架	怨	热
	前	筷	宿	森	荫	罚	符	茄
	回	图	国	圆	园	因	困	固

Recurring Parts are written in a particular order  
within a character

湖： 氵 古 月

高： 亠 口 冂 口

Some recurring parts are discontinuous:

国： 冂

玉

一

# Types of Recurring Parts

**Radicals (部首)**: Every character has one. Radicals are used to organize characters in a dictionary. Radicals often provide meaning clues.

**Phonetics (声旁)**: 80%+ of characters have one. Phonetics provide pronunciation clues.

**Other recurring parts**: Some recurring parts are neither the radical nor the phonetic in the character.

# Radicals (部首)

**Some radicals are stand-alone characters, e.g.:**

**水** water, **山** mountain, **手** hand, **女** female, **木** wood

**Often, radicals are a component part of a character:**

**扌** (The “hand” radical):

打 hit, 推 push, 拉 pull, 抓 grab

**口** (The “mouth” radical):

吃 eat, 喝 drink, 吹 blow

and also in words that refer to language functions:

吗 yes/no questions, 吧 suggestions, 呢 rhetorical questions

# The Phonetic Component (声旁)

Sometimes the pronunciation of the phonetic and the character are identical or very close:

青 qīng: 请 qǐng, 清 qīng, 情 qíng, 晴 qíng, 静 jìng

Sometimes their pronunciations are relatively close:

门 mén / 问 wèn; 各 gè / 客 kè

But sometimes, the phonetic is not a reliable pronunciation clue:

各 gè / 路 lù

# Composition of characters

Radical alone:

木 *wood*, 火 *fire*, 山 *mountain*, 水 *water*,  
女 *female*, 人 *person*, 日 *sun*, 月 *moon*

Radical + phonetic: 清 *qīng clear* =

氵 *water* + 青 *qīng*

Radical + non-phonetic component(s):

冗 *rǒng* = 宀 *mì* + 几 *jǐ*

Radical + phonetic + non-phonetic component(s):

湖 *hú lake* = 氵 *water* + 古 *gǔ* + 月

# Additional types of characters

Approximately 10% of characters are of the following type:

Pictograms: 山 *mountain*, 川 *river*, 目 *eye*

Simple ideograms: 一 *one* 二 *two*, 三 *three*, 上 *above*, 下 *below*

Compound ideograms: 林 *grove* (2 trees), 森 *forest* (3 trees), 休 *rest* (a person next to a tree)

Phonetic loan characters: A pictogram is used to write a homophonous but semantically unrelated syllable. In contemporary writing, these rarely exist. 來 *mài wheat* 來 *lái come*. *Wheat* is now written 麦.

# Complexity of Chinese Characters (Hanzi)

- Hanzi = Chinese characters
- Cannot be sounded out
- Need to be memorized and reproduced
- Sound, meaning components, only provide some hints for readers
- Often in combination with other characters to form a “word”
- No space between words

# Why Learning Characters is Important?

- Direct impact on reading fluency
- Direct impact on comprehension
- Direct impact on writing
- Cultural understanding



# Characters are also Interesting

- Visual appearance of characters sometimes carry meaning:
  - 伞 (傘)
  - 散 (散)
  - (which one means umbrella? )
- Chinese characters sometimes have patterns
  - 猴 monkey、猫 cat 、猪 pig
  - 狗 (can you guess what this might be?)

# Form “Words”

- Form “compounds” with transparent meanings: 书 book 店 store, 牙 tooth 刷 brush, 绿 green 茶 tea, 火 fire 山 mountain
- Form “compounds” with other meanings: 东西, 点心
- Same Hanzi has different meanings: 右手, 歌手

# Word Spacing, Context, and Meaning

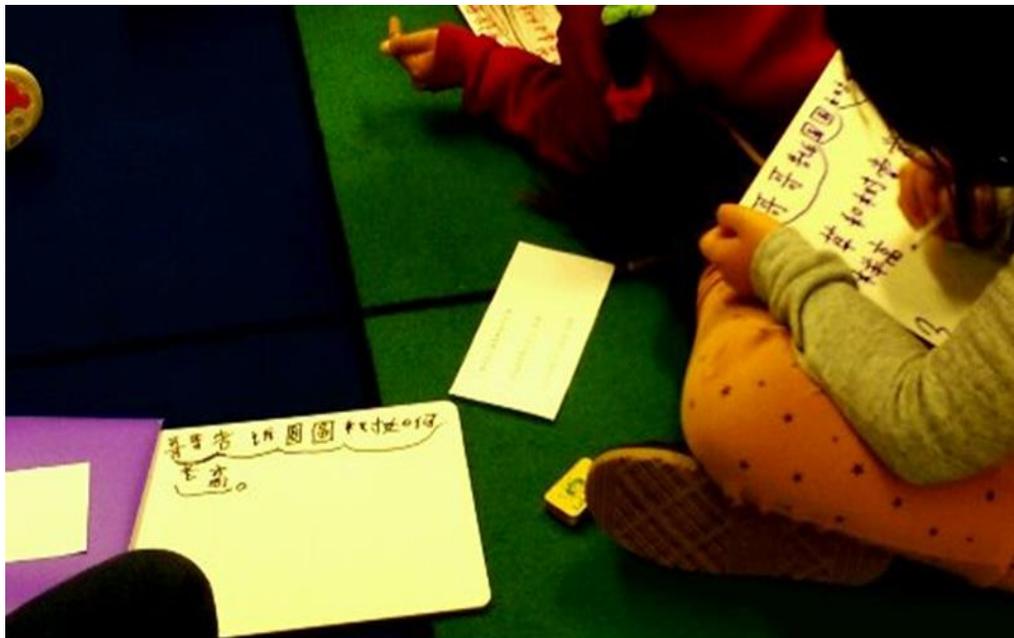
我们要学生生活得有意义。

- 我们要学 **生活得** 有意义。
- We want to learn [how to live a meaningful life].
- 我们要 学生 **活得** 有意义。
- We want [our students to have meaningful lives].

\*Gan, et al., 1996. 'A Statistically Emergent Approach for Language Processing'  
(Provided by Claudia Ross)

# Word Spacing, Context, and Meaning

- Example: \*难过
  - 我们都很**难过**
    - 难过= Sad
  - 日子很**难过**
    - 难 过= hard to go by
    - Life is difficult
- 千万：
  - 他说他有三**千万** (10 M) vs. 你**千万**(absolutely should)别相信他。
  - 我喜欢 一个人



# Progression of Chinese Characters 汉字演变

- <http://www.lbxszx.com/uploadfile/2013/0718/20130718104856137.png>



# Two Scripts: Traditional and Simplified

車 (traditional)

车 (simplified)

傘

伞

鳥

鸟

# Why Characters were simplified

- When: After 1949
- Who: People's Republic of China
- Why: To improve national literacy
- How:
  - Sets of radicals and other components
  - Some basic rules or patterns
  - Some exceptions

# Decision Making

- Simplified: Primarily used in China and Singapore
- Traditional: Primarily used in Taiwan and Hong Kong
- Not all Chinese characters are simplified
- Need to invest time and mental processing to learn Chinese characters
- Recommendation: Start with one form

# What Is Pinyin?

- Readers can sound out words in languages that employ alphabets
- Cannot sound out Chinese words in speaking and writing
- A Romanization system developed by China to help Chinese learners sound out words
- Not real “Chinese Words”

# Why Use Pinyin?

- Impossible to read all Chinese characters
- Tools and symbols to note the pronunciation of the characters throughout history
- Taiwan uses another system
- Pinyin is most widely used
- Faster for learners who already know alphabets
- Helps reading and writing

# Example: Use Pinyin for Note Taking

安琪

## 活动一：问问题

想办法了解他旅行时的需要和习惯：  
○ 告诉你的伙伴：我要帮你设计一个旅行用的包，你要我帮你设计哪一个？行李箱，随身包，手提包，背包

喜欢做的事		不喜欢做的事	
* 看电视 * 跟弟弟玩 * 买东西 * 睡觉		* 人占她的位子 * 人在 personal space * 人出去, 上厕所	
一定要带的东西		想要的样子	
原因		颜色	蓝色
1. 平板电脑: 玩玩游戏, 看电视		形状	圆形
2. 一本书: 读		大小	不太大不太小
3. 耳机: 听音乐		重量	量

# How is Pinyin Used?

- Depends on the stages and purposes of learning
- Use Pinyin to help acquire oral language
- Gradually replaced by Hanzi (characters)
- Use Pinyin as a tool to increase students' ability to read and write more
- Oral language first
- Directly exposed to Hanzi
- Pinyin as a tool

# When to Teach Pinyin in K-5?

- A very controversial topic
- Arguments:
  - Confusion with English alphabet pronunciation
  - Need oral language as foundation
  - Need to establish solid Hanzi knowledge
  - Develop basic reading skills
    - Recognizing words
    - Recognizing language chunks



# Establishing a Solid Platform for Chinese Literacy Development

## Guiding Principle #1

Ensure that **realistic literacy goals** are aligned with the program setting and communicated clearly to the school community



## Guiding Principle #2

Ensure that the curriculum is **standards-based** and that expectations are communicated in meaningful terms about **what students should know and be able to do** as they develop literacy in Chinese



Guiding  
Principle #3

**Situate  
literacy  
instruction  
squarely  
within the  
curriculum**



## Guiding Principle #4

Integrate listening, speaking, reading, and writing skills in classroom activities and tasks in order to foster students' creative, communicative, and cognitive development

Listening

Reading

Speaking

Writing

## Guiding Principle #5

Understand that literacy development occurs in an environment where learners receive **rich amounts of oral language input**



# Guiding Principle #6

Incorporate the **handwriting of characters** in the curriculum



Guiding  
Principles #7

Provide  
adequate  
classroom  
space for  
Chinese  
instruction



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