Chinese Dual Language Immersion Education in the United States

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Overview

1. The development of Chinese language and Chinese immersion education in the United States (US)
2. Why and how immersion education works
3. What are the benefits of Chinese immersion education
4. Conclusion
5. Resources

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- Michael Everson, Ph.D.
- Joy Kreeft Peyton, Ph.D.

Collaborators:
- The College Board, Chinese Language and Culture Initiatives
- National Council of State Supervisors for Languages (NCSSFL)
- Chinese Language Association of Teachers of Secondary and Elementary Schools (CLASS)
The Chinese Language Field Is At a Tipping Point

Five Major Trends

1. Development and expansion of the field
2. Growth of early language and immersion programs
3. Standards-based language learning for the real world
4. Recognition of and credit for language proficiency
5. Language learning in non-traditional spaces and with innovative tools
Development and expansion of the Chinese language field

Three Stages of Development

• Stage 1: 1958 – 1970s: Emergence of a new language field

• Stage 2: 1980s – 2000s: Infrastructure and knowledge building

• Stage 3: 2004 – 2014: Growth spurt: Top-down support, grassroots movements

   The study of Chinese is not a fad.

   The field continues to expand.

Post-2016: A new phase that is characterized by bottom up efforts
Estimated enrollment in K-16: **360,000 – 400,000**

Our Study: Estimated Enrollment in K-12: **300,000**
- NCSSFL 15 states in 2012-2014: 78,894
- STARTALK: 5,798 (2013-2014)
- Heritage Language Schools: 150,000 (2012)
- Total reported: 234,692 in 2012-2014 school years
- Plus estimates from all states, private schools, international schools, and online programs: could be at least **300,000**


**Enrollment in Post-secondary Chinese Language Courses**

<table>
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<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Chinese</td>
<td>615</td>
<td>28,456</td>
<td>34,153</td>
<td>51,582</td>
<td>59,876</td>
<td>61,055</td>
<td>53,069</td>
</tr>
</tbody>
</table>

Sources: Language *Enrollment Database, 1958-2016* at [https://apps.mla.org/flsurvey_search](https://apps.mla.org/flsurvey_search)
Growth of Chinese immersion and early language programs

- Influencing factors:
  - Availability of international guest teachers
  - Public attitude change
  - Parental demands
  - Evidence and knowledge base from research
  - Charter school legislation
  - State or district efforts

- Five state examples:
  - Delaware
  - Minnesota
  - North Carolina
  - Oregon
  - Utah
Growth of K-12 Chinese language programs

- 163 (CLASS Survey, 2003)
- 178 (Princeton University Survey, 1999)

2015: College Board-NCSSFL Survey: 20 States

<table>
<thead>
<tr>
<th>Year</th>
<th>Elementary Schools</th>
<th>Middle School</th>
<th>High Schools</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999-2010</td>
<td>19</td>
<td>101</td>
<td>471</td>
<td>591</td>
</tr>
<tr>
<td>1212-2013</td>
<td>123</td>
<td>147</td>
<td>1,494</td>
<td>1,764</td>
</tr>
</tbody>
</table>

Percent Change: +547%  +46%  +217%  +199%
Opportunities for world language education

1. *Language field is endowed with a few well developed and internationally recognized assessment systems that open up more spaces for students to learn languages.*

2. *Language learning and digital tools and platforms bring speakers and their worlds together.*

Implications:
- Think outside the box of a class or classroom.
- Create meaningful projects that tap into knowledge and resources of speakers and learners of a language.

Ask ourselves: Are we aligning our curricula, instruction, and assessment with the needs and skills of digital natives?
Summary: State of the Chinese Language Field

- States and districts are the leaders, not the U.S. Department of Education.

- Program growth and increased student enrollment support the upward trends
  - 80% of participating states have experienced an increase in programs
    - 547% - Elementary
    - 46% - Middle School
    - 217% - High School
    - 223% - Immersion Programs
    - 199% - K-12

- Increase immersion and online learning programs
- Tap into the policies of Credit by Proficiency and Seals of Biliteracy
2. How and Why Does Immersion Education Work?
Language immersion works because…(1)

- **Curriculum, instruction, and assessment** are carefully designed and implemented, focusing on meaning making, comprehension, understanding, and the whole child.

- Double bonus: the teaching and learning are done in **two (or more) languages**.

- Children are challenged to **learn and think** in two languages, making connections between what they know and what they don’t know, and vice versa. So they work harder and develop a habit to think critically.
Language immersion works because…(2)

• Students are able to **transfer** knowledge and skills from one language to another. They become better and more efficient learners.

• However, it **takes time** for immersion education to reach the desired outcomes. Be patient and have faith in your child and the program. Be supportive.
Path of language development

Pre-speech

Speech emergence

Early speech production

Basic interpersonal communication skills

Speech production

Literacy development

Expansion in knowledge and skills in content areas and language

Cognitive academic language

(Adapted from Cummins, 1984)
It gets easier when more languages are learned...

Foundation for languages and learning is expanded and strengthened.
3. What are the benefits of Immersion and Chinese immersion education?
Brain research:
Bilinguals have higher executive function abilities

• Executive function is an umbrella term for cognitive processes such as planning, working memory, attention, problem solving, verbal reasoning, mental flexibility, multi-tasking, inhibition control, self regulation, and initiation and monitoring of actions.

• Important in handling novel situations beyond routines.

In brief series, Harvard University http://developingchild.harvard.edu/
Tap into multiple intelligence

- Linguistic: word smart
- Logical: number/reasoning smart
- Naturalist: nature smart
- Visual-spatial: picture smart
- Musical: music smart
- Kinesthetic: body smart
- Interpersonal: people smart
- Intrapersonal: self smart

(Howard Gardner, 1999)

Teach learning strategies
Develop global competence: A 21\textsuperscript{st} century imperative

- International awareness; 21\textsuperscript{st} century themes
- Appreciation of cultural diversity
- Proficiency in foreign languages
  - Learning and innovation skills
  - Information, media and technology skills
  - Life and career skills

NEA 2010 Policy Brief


Partnership for 21\textsuperscript{st} Century Skills, 2008

www.21stcenturyskills.org
Processes and components of initial English literacy development

- Phonemic awareness
- Alphabet; Sounds
- Anglo-Saxon consonants and vowels
- Compound words; Prefixes and suffixes; Syllable division patterns
- Latin roots
- Greek combining forms
- Cognitive
Processes of Initial Chinese Literacy Development

- Phonological awareness; Tones
- Strokes
- Stroke order
- Morphological awareness
- Pinyin (Chinese Phonics): -Initials (consonants) and -Finals (vowels)
- Sight words; Radicals
- Syllable division patterns
- Cognitive: Noticing, Patterning, Differentiation, Sorting, Classification
- Latin roots’ Greek Radical, phonetic, and other combining forms
As a tonal language, Chinese helps with phonological awareness

• Tones may indicate different characters

• Tones may change the meaning of what is being said

• Tones may be difficult for adults to perceive and produce; they are easy for children to grasp because children’s phonological window is wide open!
Chinese characters offer another way to code and decode sound, form, meaning, and context

- Chinese characters are not randomly made up
- Children love them because they treat Chinese characters as puzzles: seeking patterns, similarities, and differences
Strokes that made up Chinese characters are two-dimensional and sharpen spatial perceptions.

<table>
<thead>
<tr>
<th>Strokes</th>
<th>diǎn</th>
<th>dot</th>
<th>六，白，立</th>
</tr>
</thead>
<tbody>
<tr>
<td>一</td>
<td>héng</td>
<td>Horizontal stroke</td>
<td>两，十，可</td>
</tr>
<tr>
<td>一</td>
<td>shù</td>
<td>Vertical stroke</td>
<td>十，不，个</td>
</tr>
<tr>
<td>一</td>
<td>piě</td>
<td>Left falling stroke</td>
<td>么，人，少</td>
</tr>
<tr>
<td>一</td>
<td>nà</td>
<td>Right falling stroke</td>
<td>人，是，八</td>
</tr>
<tr>
<td>一</td>
<td>tí</td>
<td>Rising stroke</td>
<td>我，冷，打</td>
</tr>
<tr>
<td>一</td>
<td>héng gōu</td>
<td>Horizontal stroke ending in a hook</td>
<td>买，定，卖</td>
</tr>
</tbody>
</table>
Chinese characters help develop learners’ higher order thinking

- **Recurring patterns**: 他, 你 (he, you)

- **Classification/sorting in parts or meaning**: 推, 打, 提, 拉 (push, hit, carry, pull), 狗, 狮, 猴, 猩 (dog, lion, monkey, gorilla)

- **Same or Different? How?** Paying attention 人, 大, 太, 天, 夫 (human, big, too, sky, man/husband)
Students become detectives of radicals (部首) that serve as the signifiers:
Help with Meaning, Derivation, and Classification

女 female: 她 she, 妈 mother, 婆 grandma

木 wood: 树 tree, 林 woods, 森 forest

口 mouth: 吃 eat, 喝 drink, 吹 blow

手 hand, 扌(The “hand” radical): 打 hit, 推 push, 拉 pull, 抓 grab
The graphic representations and stories in Chinese characters help the brain remember

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

Ancient carriage/wagon
modern vehicle/car
Math values are embedded in Chinese numbers

<table>
<thead>
<tr>
<th>数字</th>
<th>汉语</th>
<th>数字</th>
<th>汉语</th>
<th>数字</th>
<th>汉语</th>
</tr>
</thead>
<tbody>
<tr>
<td>一</td>
<td>yi</td>
<td>二</td>
<td>er</td>
<td>三</td>
<td>san</td>
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<tr>
<td>六</td>
<td>liu</td>
<td>七</td>
<td>qi</td>
<td>八</td>
<td>ba</td>
</tr>
<tr>
<td>十一</td>
<td>shiyi</td>
<td>十二</td>
<td>shier</td>
<td>十三</td>
<td>shisan</td>
</tr>
<tr>
<td>五十</td>
<td>wushi</td>
<td>一百</td>
<td>yibai</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Students Learn “How to Learn”

• Learners have two kinds of knowledge: knowledge of their first language and their awareness of learning strategies

• Good learners: identify the best strategy for a specific task; flexible in their approach and quick to adopt a different approach; are confident in their learning ability; and expect and drive to succeed and become motivated

• Implications:
  • Encourage students to recognize and talk about their thinking process
  • Engage them in HOTS (Higher Order Thinking Skills)
Many skills are transferred across languages

- **Sensory-motor skills**: eye-hand coordination, visual memory, discrimination, spatial, and directional skills

- **Common writing system features**: identical/common elements in both languages

- **Comprehension strategies**: main idea, inference, predicting, getting details, using pictures and context clues

- **Study skills**: use reference materials, note-taking

- **Habits and attitudes**: selective attention, feeling capable, persistence, and concentration

(Cloud et al., 2000, p. 90)
A 10 year study of the immersion programs in Portland, Oregon shows…

• Students in PPS immersion programs outperform their monolingually educated peers, even when selection bias (families wanting their child to be in immersion) is taken into account.

• A Rand study that looked at seven cohorts and 26,000 student records found that by grade 5, students in PPS immersion programs advanced in English reading achievement by 7 months and by grade 8, by 9 months, almost an entire academic year.

• In PPS Mandarin immersion, Math outcomes were also significantly higher. These results cut across all student demographics (Steele et al., 2017).
Thomas’ and Collier’s findings: students in dual language education...

• Become proficient in a second language at no cost to their English development

• Expand and enhance thinking skills; their cognitive development and flexibility surpass that achieving through a curriculum delivered in only one language

• Learn to respect and value each other from diverse background as partners in the learning/acquiring process (p.1)

• Develop unactivated brain areas and increase creativity and problem-solving skills when learning through two languages (p.3)

4. Conclusion: Develop the Whole Child!

- Human and cultural capital
- Application: Transferring, Creating
- Real World Experiences
- Personal & familial heritage
- Content knowledge & Cognitive skills
- Curiosity, Exploration
- Identities: Self Concepts, Values, Perspectives, Voices
- Social-emotional well-being
- Health: Physical development
- Physiological
- Happiness: Loving & caring, Empathy, Social capital
- Biliteracy
- Emotional capital
- Application: Transferring, Creating
- Real World Experiences
- Personal & familial heritage
- Content knowledge & Cognitive skills
- Curiosity, Exploration
- Identities: Self Concepts, Values, Perspectives, Voices
- Social-emotional well-being
- Health: Physical development
- Physiological
Take Advantage of the Best in Education From the East and the West

Western: ABILITY

Chinese/Eastern: EFFORT/Grit

DL Immersion Education: Ability + Effort
It Takes A Village to Raise A Multilingual Child!
5. A Resource: Chinese Early Language and Immersion Network CELIN at Asia Society

Shuhana C. Wang  Joy K. Peyton  Ting Shen

http://asiasociety.org/china-learning-initiatives/chinese-early-language-and-immersion-network
Increasing Enrollment, Funding, and Satisfaction

Key Findings from our Evaluation of Asia Society’s Confucius Classrooms Network

Since 2009, Asia Society’s China Learning Initiatives has been building and supporting a network of 100 Confucius Classrooms in K–12 schools in 28 states throughout the United States. During the 2016–17 school year, we conducted an evaluation to determine the effectiveness of the network’s collective efforts. Some of these findings may be of interest to the Chinese language field at large, and the full report will be released later this year. Meanwhile, we’ve compiled highlights with teachers and program administrators in mind.
Chinese Early Language and Immersion Network

CELIN @ Asia Society

As part of Asia Society’s ongoing work to promote the development of Chinese in U.S. schools, we are pleased to announce the establishment of the Chinese Early Language and Immersion Network at Asia Society (CELIN @ Asia Society).
Resources for Educators

From the Chinese Early Language and Immersion Network (CELIN)

On this page you’ll find links to research and resources for educators interested in early and immersion Chinese language education. This is an ongoing effort, and we welcome your contributions and feedback.

Assessment

Experts in the field of Chinese language education answer questions about assessment.
Program Profiles

The Chinese Early Language and Immersion Network (CELIN)

Profiles of specific early language and immersion programs.

FEATURED PROGRAMS

PROFILE

Utah Chinese Dual Language Immersion Program
The Utah Chinese Dual Language Immersion Program is in place in the following 12 districts across the state of Utah.

PROFILE

Barnard Asian Pacific Language Academy
Barnard Asian Pacific Language Academy, located in beautiful San Diego, California, is the only public school in the San Diego Unified School District that offers Mandarin immersion.

PROFILE

Caesar Rodney School District
Located in the suburban outside of the Delaware state capital, the Caesar Rodney School District is home to Delaware's first Chinese immersion program, with almost 300 students in grades K-2 in 2015.

http://asiasociety.org/china-learning-initiatives/program-profiles
Directory of Programs

CELIN’s Online Directory of Chinese Early Language and Immersion Programs Across the U.S.

http://asiasociety.org/chinese-language-initiatives/celin-directory-programs
CELIN专题指南系列
• Three are already online
• Eight new Briefs will be posted online in 2018
• Bilingual in English and Chinese

CELIN Briefs Editors:
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Joy K. Peyton, Ph.D., joy@peytons.us

Find CELIN Briefs at: http://AsiaSociety.org/CELIN
Nine Features of Program Effectiveness

• Feature 1: Program Design, Funding, Governance/Leadership, and Accountability
• Feature 2: Curriculum
• Feature 3: Assessment
• Feature 4: Instruction
• Feature 5: Staff Quality and Professional Development
• Feature 6: Materials, Resources, and Technology Tools
• Feature 7: Program Articulation
• Feature 8: Family Support and Community Engagement
• Feature 9: External Networking and Partnerships

Questions? Comments?

谢谢！Thank you!

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