





Chinese Language Learning in the Early Grades:

A Handbook of Resources and Best Practices for Mandarin Immersion



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Table of Contents

- 3 Preface
 By Vivien Stewart
- 5 Introduction
 By Myriam Met
- 7 Editors' Note and List of Contributors
- 9 What the Research Says About Immersion By Tara Williams Fortune

PROGRAM PROFILE:

- 14 Minnesota's Chinese Immersion Model
- 16 Basics of Program Design
 By Myriam Met and Chris Livaccari

PROGRAM PROFILE:

- 22 Portland, Oregon Public Schools
- 24 Staffing and Professional Development By Jeff Bissell and Kevin Chang

PROGRAM PROFILE:

- 28 Chinese American International School, California
- 30 Instructional Strategies: Successful Approaches to Immersion Teaching By Chris Livaccari

PROGRAM PROFILE:

- 34 The Utah Dual Language Immersion Program
- 36 Curriculum and Literacy
 By Myriam Met

PROGRAM PROFILE:

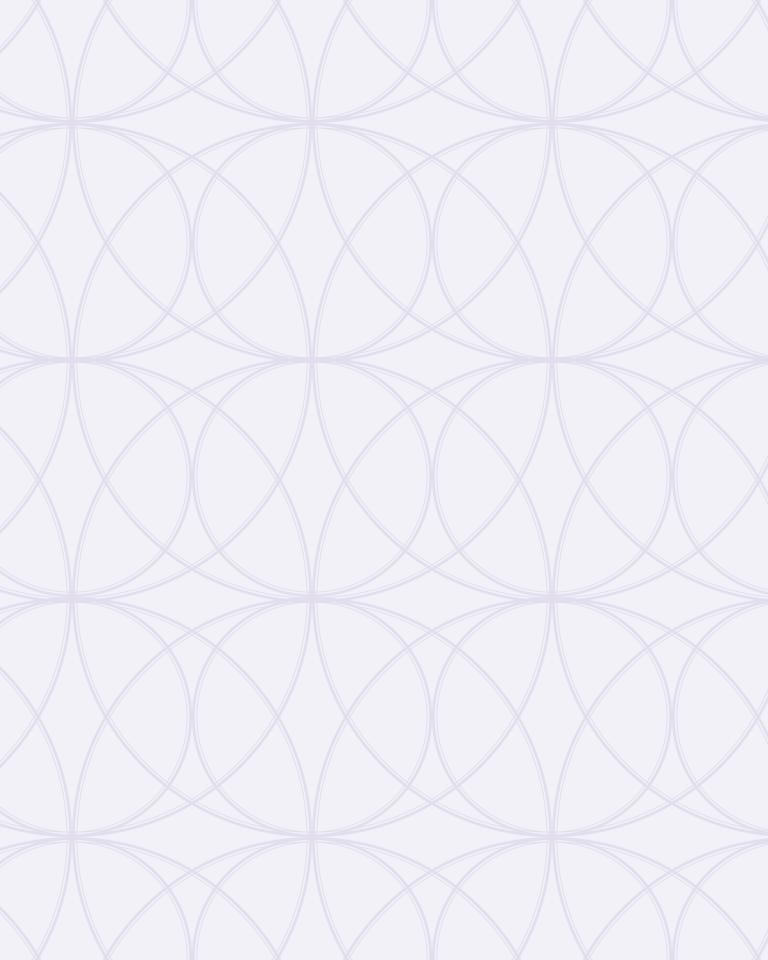
- 40 Washington Yu Ying Public Charter School
- 42 Student Assessment and Program Evaluation By Ann Tollefson, with Michael Bacon, Kyle Ennis, Carl Falsgraf, and Nancy Rhodes

PROGRAM PROFILE:

- 46 Global Village Charter Collaborative, Colorado
- 48 Marketing and Advocacy
 By Christina Burton Howe

PROGRAM PROFILE:

- 54 Pioneer Valley Chinese Immersion Charter School, Massachusetts
- 56 Classroom Materials and Other Resources By Yu-Lan Lin
- 58 Key Information Resources
 By Robin Harvey



PREFACE

Why Language Immersion? Why Now?

By Vivien Stewart

oung Americans growing up in this interconnected world need knowledge and skills that are significantly different from those valued by previous generations. A key priority is the ability to communicate in other languages and across cultures. In today's globalized economy, where much economic growth is increasingly outside the United States, there is a growing need for workers with knowledge of foreign languages and cultures to market products to customers around the world and to work effectively with foreign employees and partners in other countries. Our most pressing challenges also know no boundaries and will only be solved through international cooperation among civil society groups as well as governments. We need to give our students the knowledge and tools to act effectively as citizens in this interconnected world of the future.

Although it is certainly possible to learn a language later in life, studies show that there is a significant advantage for those who have the opportunity to study early. Research on cognition demonstrates that the human brain is more open to linguistic development in the years before adolescence, so children who learn a language early are more likely to achieve native-like pronunciation. Evidence also suggests that an early education in one language makes it easier for students to learn another language later in life. And when students start learning a language in elementary school and continue over several years, they can more easily achieve high levels of fluency than students who do not start a second language until high school. This is particularly important for the increasingly significant yet traditionally less-frequently taught languages such as Chinese and Arabic, which tend to take longer for students to master than European languages.

Moreover, early language learning has cognitive and academic benefits beyond facility with languages. These advantages include increased mental flexibility, improved divergent thinking, and, some studies show, higher scores on measures of verbal ability in the subject's native language. As anyone who has learned another language knows, it also enhances a student's understanding of the structure and patterns of English.

Beyond the language skills acquired, learning a language gives tremendous insight into other cultures. Today's world language instruction goes well beyond rehearsing verb tenses to teaching students about the art, literature, music, history, and everyday life of other countries. In learning about other countries or regions, students come to understand that different languages and cultures use different strategies of communication and they learn to see issues from multiple perspectives. They also develop a set of skills that enable them to adapt (code switch) between different cultural communication strategies, a skill that is useful in our diverse communities as well as internationally. Learning a second language can therefore benefit students even if they do not attain high levels of proficiency.

Polls show that parents are becoming aware of the importance of early language learning. But unlike other industrial countries, where learning languages is a core part of the curriculum and instruction starts in early elementary school, the United States does not yet offer widespread opportunities to learn languages in primary school. Learning opportunities vary in type, ranging from short awareness courses, to a foreign language as a distinct subject three times a week, to immersion pro-



grams in which elementary students spend part or all of the day learning the academic curriculum in a second language. Immersion programs can be either full immersion (all subjects taught in the second language) or partial immersion (part of the curriculum taught in the second language) or two-way, dual immersion, where half the students are native speakers of a non-anglophone language and half have English as their primary language. Study after study has shown that children in these immersion programs can reach far higher levels of language proficiency than those in other programs while showing no decrease in their achievement scores in other subjects, even when the assessment is in English. Immersion programs are common in some other countries, such as in Canada for example, but are relatively rare in the United States.

Building on the encouraging research and growing public interest in early language learning, this handbook addresses the key issues communities need to consider in establishing and sustaining effective early language programs. The handbook draws from research on critical features of program design and the experiences of pioneering programs that are at the forefront of language learning. We hope it will contribute to more opportunities for students in their early years to learn languages, particularly Chinese, a language we as a nation can no longer afford to ignore.

INTRODUCTION

Chinese Language Immersion: The State of the Field

By Myriam Met

ver the last four decades, immersion programs in many languages have seen slow but steady growth in US schools. Research shows that immersion is an especially effective method for language acquisition. Immersion students gain proficiency in a new language without any detriment to progress in their native language or to subject matter achievement.

Chinese immersion programs are among the fastest-growing areas of language education in American schools. Immersion programs are increasingly popular because they result in high levels of proficiency at relatively low cost. Since immersion programs usually start in kindergarten or first grade, they provide ample time within a student's academic career for the development of oral and written proficiency in Chinese.

In previous decades, most immersion programs have offered European languages, with a small number in other languages. Much of what is known about immersion's effectiveness has been gleaned from these programs. Their experiences provide useful guidance about options for program models, teaching strategies, literacy development, and time allocation for both the immersion language and English. While we know a great deal about what works in immersion and why, we are still discovering which aspects of this kind of education can be appropriately applied to Chinese instruction.

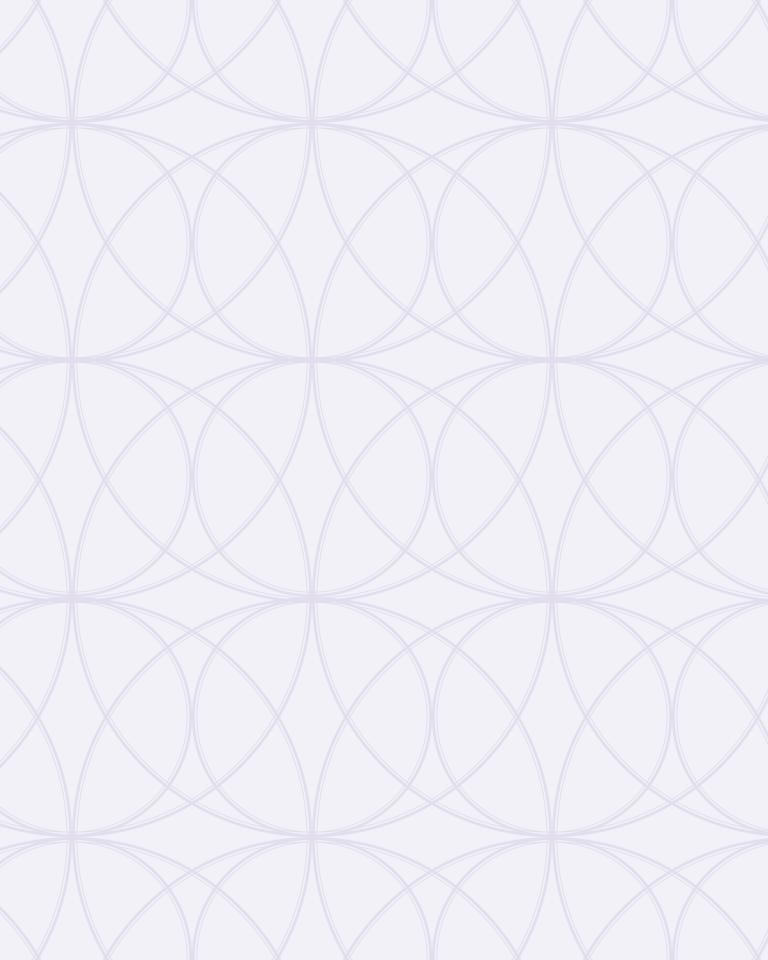
A handful of US programs in Mandarin and Cantonese represent the pioneers in Chinese immersion. Prior to 2000, there were fewer than ten public or private elementary school immersion programs in either Cantonese or Mandarin. These pioneer programs led the way for the approximately seventy new programs now operating, most of which are still in their infancy. These more-established programs have addressed the

same issues that now face their newer counterparts, exploring solutions to common questions such as the following:

- Which type of program model is most suited to Chinese immersion: Most or all of the school day taught in Mandarin, a fifty-fifty division between Chinese and English, or some other distribution of time?
- What are the qualifications for teaching in Chinese immersion? Where can we find highly qualified teachers? What does high-quality Chinese immersion instruction look like?
- What curricula and instructional materials are already available for Chinese immersion?
- How might we approach literacy development in Chinese?

To their credit, the teachers and administrators who have worked in the small number of long-standing Chinese immersion programs generously share their experiences, expertise, and material resources with one another as well as with the newly emerging programs around the country. They answer numerous inquiries made by email or phone, they cheerfully host visitors, and they network with one another and collaborate on important projects.

One of those projects is this handbook. In the pages that follow readers will find the accumulated expertise of veteran Chinese immersion program administrators and teachers. Over time, our understanding of what makes Chinese immersion programs successful will continue to change, just as our thinking about education in general continuously evolves. Thus, while this handbook represents the best of what we currently know about Chinese immersion, it represents only one step in a longer journey.



Editors' Note and List of Contributors

his handbook was a collaborative effort made possible by the contributions of practitioners of Chinese language immersion in the elementary grades. As their programs continue to expand, it is increasingly important for them to share resources, best practices, and successful strategies.

Despite the challenges of this relatively new model of language teaching in the US, the benefits of high-quality immersion programs are sufficiently great that their numbers are growing across the country. In the pages that follow, you will learn about some of the most successful Chinese language immersion programs in the US. You will also learn about the realities of programs that require a high level of commitment among teachers, parents, and administrators. The resources and models in this handbook are meant to help you anticipate the questions you will need to answer as you consider building your program.

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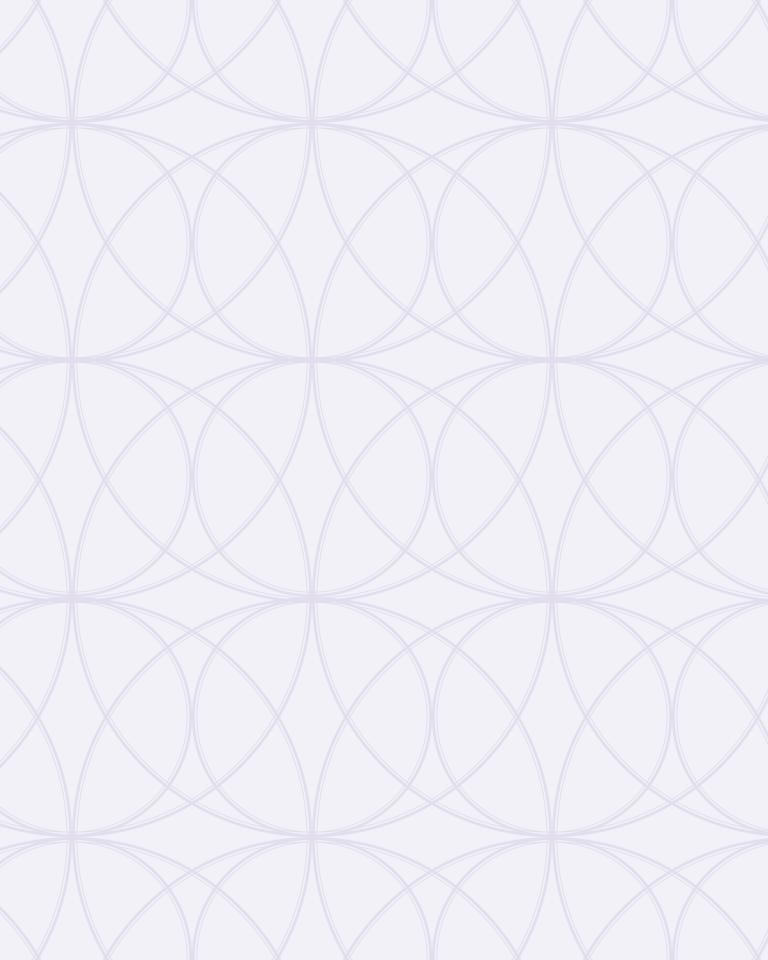
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What the Research Says About Immersion

By Tara Williams Fortune

ver nearly half a century, research on language immersion education has heralded benefits such as academic achievement, language and literacy development in two or more languages, and cognitive skills. This research also exposes some of the challenges that accompany the immersion model, with its multilayered agenda of language, literacy and intercultural skills development during subject matter learning. This chapter outlines key findings for both advantages and challenges.

Benefits of Language Immersion

Academic and Educational

Without question, the issue investigated most often in research on language immersion education is students' ability to perform academically on standardized tests administered in English. This question emerges again and again in direct response to stakeholder concerns that development of a language other than English may jeopardize basic schooling goals, high levels of oral and written communication skills in English, and grade-appropriate academic achievement. The research response to this question is longstanding and consistent. English-proficient immersion students are capable of achieving as well as, and in some cases better than, non-immersion peers on standardized measures of reading and math.¹

This finding applies to students from a range of socioeconomic and ethnic backgrounds,² as well as diverse cognitive and linguistic abilities.³ Moreover, academic achievement on tests administered in English occurs regardless of the second language being learned. In other words, whether learning through alphabetic languages (Spanish, Hawaiian, French, etc.) or character-based languages (Mandarin, Japanese, Cantonese), Englishproficient students will keep pace academically with peers in English-medium programs.⁴

It is important to acknowledge that early studies carried out in one-way total immersion programs, where English may not be introduced until grades 2–5, show evidence of a temporary lag in specific English language skills such as spelling, capitalization, punctuation, word knowledge,

students' performance in literacy and mathematics: Province-wide results from Ontario (1998–99)" in *The Canadian Modern Language Review*, 58 (2001): 9–26. Slaughter, H., "Indigenous language immersion in Hawai'i: A case study of Kula Kaiapuni Hawai'i, and effort to save the indigenous language Hawai'i" in *Immersion education: International perspectives*, eds. R. K. Johnson and M. Swain (Cambridge: Cambridge University Press, 1997), 105–129.

- 2 Bruck, M., G. R. Tucker, and J. Jakimik, "Are French immersion programs suitable for working class children?" in Word, 27 (1975), 311–341. Caldas, S. and N. Boudreaux, "Poverty, race, and foreign language immersion: Predictors of math and English language arts performance" in Learning Languages, 5 (1999): 4–15. Holobow, N. E., F. Genesee, and W. E. Lambert, "The effectiveness of a foreign language immersion program for children from different ethnic and social class backgrounds: Report 2," in Applied Psycholinguistics, 12 (1991): 179–198. Krueger, D. R., "Foreign language immersion in an urban setting: Effects of immersion on students of yesterday and today" (doctoral dissertation, Milwaukee: University of Wisconsin-Milwaukee, 2001). Lindholm-Leary, K., Dual language education. Slaughter, H., "Indigenous language immersion in Hawai'i: A case study of Kula Kaiapuni Hawai'i, and effort to save the indigenous language Hawai'i" in Immersion education: International perspectives, eds. R. K. Johnson and M. Swain (Cambridge: Cambridge University Press, 1997), 105–129.
- 3 Bruck, M., "Language impaired children's performance in an additive bilingual education program" in Applied Psycholinguistics, 3 (1982): 45–60. Genesee, F., "French immersion and at-risk students: A review of research evidence" in The Canadian Modern Language Review, 63, no. 5 (2007): 655–688. Myers, M., "Achievement of children identified with special needs in two-way Spanish immersion programs" (doctoral dissertation, Washington, DC: George Washington University, 2009).
 4 Lindholm-Leary, K., "Student outcomes in Chinese two-way immersion programs:
- i Lindholm-Leary, K., "Student outcomes in Chinese two-way immersion programs: Language proficiency, academic achievement, and student attitudes," 2011. Patterson, M., K. Hakam, and M. Bacon, "Continuous innovation: Making K–12 Mandarin immersion work," presentation at the National Chinese Language Conference, San Francisco, CA, April 16, 2011.

¹ Genesee, F., "Dual language in the global village" in Pathways to multilingualism: Evolving perspectives on immersion education, eds. T. W. Fortune and D. J. Tedick (Clevedon, England: Multilingual Matters, 2008), 22–45. Lindholm-Leary, K., Dual language education (Clevedon, England: Multilingual Matters, 2001). Lindholm-Leary, K., "Student outcomes in Chinese two-way immersion programs: Language proficiency, academic achievement, and student attitudes" in Immersion education: Practices, policies, possibilities, eds. D. J. Tedick, D. Christian, and T. W. Fortune (Clevedon, England: Multilingual Matters, 2011), 81–103. Turnbull, M., S. Lapkin, and D. Hart, "Grade 3 immersion

and word discrimination.⁵ That said, these studies also find that within a year or two after instruction in English language arts begins, the lag disappears. There were no long-term negative repercussions to English language or literacy development.

Does this same finding apply to students in two-way immersion (TWI) settings whose first language is other than English? In the past fifteen to twenty years, U.S. researchers found that English learners' academic achievement also attained the programs' goals. By the upper elementary, or in some cases early secondary grades, English learners from different ethnicities, language backgrounds, socioeconomic levels, and developmental profiles perform at least as well as same background peers being schooled in English only.6Most English learners in TWI come from Latino families whose home language is Spanish. As an ethnic minority in the United States, Latinos are both the fastest-growing student population and the group with the highest rate of school failure.7 Research in Spanish/English TWI contexts points to higher grade point averages and increased enrollment in post-secondary education for this student group, compared to Latino peers participating in other types of educational programs such as transitional bilingual education and various forms of English-medium education.

Although the vast majority of TWI research has been carried out in Spanish/English settings, Kathryn Lindholm-Leary⁸ recently reported results from a study of two Chinese/English TWI programs. Students in grades 4–8 whose home language was Chinese tested at or above their grade level, and the same as or well above peers with similar demographic profiles participating in non-TWI programs. Leary's findings align with those of other TWI programs.

Language and Literacy

The immersion approach first gained traction in North America because educators believed in its potential to move students further towards bilingualism and biliteracy. Immersion language programs took root in areas such as St. Lambert, Canada, and Miami, Florida, where educators felt that more than one language was necessary for children's future economic and social prosperity. Program designers wagered that making the second language the sole medium for teaching core subject content, instead of teaching the second language separately, would result in more students reaching higher levels of proficiency. These early immersion programs started by committing half or more of the school day for teachers and students to work only in the second language. Students were socialized to adopt the new language for all classroom communication and subject learning.

This approach to second-language and literacy development has proven itself to be the most successful school-based language program model available. English-proficient immersion students typically achieve higher levels of minority (non-English) language proficiency when compared with students in other types of language programs. Immersion students who begin the program as English speakers consistently develop native-like levels of comprehension, such as listening and reading skills, in their second language. They also display fluency and confidence when using it. Further, the more time spent learning through the non-English language, the higher the level of proficiency attained.

Initial concerns about the possible detriment to English language and literacy development were eventually laid to rest. English-proficient immersion students who achieved relatively high levels of second-language proficiency also acquired higher levels of English language skills and metalinguistic awareness—that is, the ability to think about how various parts of a language function. Researchers

⁵ Swain, M. and H. C. Barik, "A large scale program in French immersion: The Ottawa study through grade three," in ITL: A Review of Applied Linguistics, 33 (1976): 1–25.

⁶ Christian, D., "Dual language education" in Handbook of Research in Second Language Teaching and Learning, Volume II, ed. E. Hinkel (New York: Routledge, 2011), 3–20. Lindholm-Leary, K. and F. Genesee, "Alternative educational programs for English language learners" in Improving Education for English Learners: Research-Based Approaches, eds. California Department of Education (Sacramento: CDE Press, 2010), 323–382. Lindholm-Leary, K. and A. Hernandez, "Achievement and language proficiency of Latino students in dual language programmes: Native English speakers, fluent English/previous ELLs, and current ELLs" in Journal of Multilingual and Multicultural Development, do i:10.1080/01434632.2011.611596 (2011). Myers, M., "Achievement of children identified with special needs in two-way Spanish immersion programs." Thomas, W. and V. Collier, School effectiveness for minority language students (Washington, DC: National Clearinghouse for Bilingual Education, 1997), www.ncbe.gwu.edu. Thomas, W. and V. Collier, A national study of school effectiveness for minority language students' long term academic achievement (Santa Cruz, CA: Center for Research on Education, Diversity, and Excellence, 2002).

⁷ Fry, R., Hispanics, high school dropouts and the GED (Pew Hispanic Center, 2010): pewhispanic.org/files/reports/122.pdf

⁸ Lindholm-Leary, K., "Student outcomes in Chinese two-way immersion programs: Language proficiency, academic achievement, and student attitudes," 81–103.

⁹ Campbell, R. N., T. C. Gray, N. C. Rhodes, and M. A. Snow, "Foreign language learning in the elementary schools: A comparison of three language programs," Modern Language Journal, 69 (1985): 44–54. Curtain, H. and C. A. Dahlberg, Languages and children: Making the match, 4th Edition (Boston, MA: Pearson Education, 2010). Forrest, L. B., "K-12 foreign language program models: Comparing learning outcomes" (presentation at the American Council on the Teaching of Foreign Languages Conference, San Antonio, TX, November 2007). Forrest, L. B., "Comparing program models and student proficiency outcomes" (presentation at the American Council on the Teaching of Foreign Languages Conference, Denver, CO, November 2011). Lindholm-Leary, K. and E. Howard, "Language development and academic achievement in two-way immersion programs," in Pathways to multilingualism: Evolving perspectives on immersion education, eds. T. W. Fortune and D. J. Tedick (Clevedon, England: Multilingual Matters, 2008), 177–200.

¹⁰ Genesce, F., Learning through two languages: Studies of immersion and bilingual education (Rowley, MA: Newbury House, 1987). Genesce, F., "What do we know about bilingual education for majority language students?" in Handbook of bilingualism and multiculturalism, eds. T. K. Bhatia and W. Ritchie (Malden, MA: Blackwell, 2004), 547–576.

posit that metalinguistic skills positively impact learning to read in alphabetic languages, because they facilitate the development of critical literacy sub-skills such as phonological awareness and knowledge of letter-sound correspondences for word decoding.¹¹ The important relationship between phonological awareness and successful reading abilities is clearly established. However, we now also have evidence that instructional time invested in developing important decoding sub-skills in an immersion student's second language can transfer and benefit decoding sub-skills in their first language.¹²

Research about the relationship between character-based and English literacy sub-skills continues to grow. To date, evidence points to the transfer of phonological processing skills for children whose first language is Chinese and are learning to read in English as a second language. Studies also indicate a relationship between visual-orthographic skills in Chinese, the ability to visually distinguish basic orthographic patterns such as correct positioning of semantic radicals in compound characters, and English reading and spelling. Much remains to be learned in these areas, however, when it comes to English-proficient children in Mandarin immersion programs who are acquiring literacy in Chinese and English.

In TWI programs, research illuminates what Lindholm-Leary and E. R. Howard referred to as a "native-speaker effect." In a nutshell, the "native-speaker effect" describes the tendency of native speakers of a language to outperform second language learners of the same language on standardized measures administered in the native speakers' language. For example, if Spanish proficients and Spanish learners are evaluated using standardized Spanishmedium tools, Spanish proficients outperform Spanish learners. Similar outcomes occurred when tests were given in English and Mandarin. ¹⁶

Bournot-Trites, M. and I. Denizot, "Conscience phonologique en immersion française au Canada" (presentation at the 1er Colloque International de Dediactique Cognitive, Toulouse, France, January 2005). Harley, B., D. Hart, D. and S. Lapkin, "The effects of early bilingual schooling on first language skills" in Applied Psycholinguistics, 7 (1986), 295–322.
 Erdos, C., F. Genesee, R. Savage, and C. Haigh, "Individual differences in second lan-

In general, research finds that immersion students whose first language is not English become more balanced bilinguals and develop higher levels of bilingualism and biliteracy when compared with English-proficient students or home language peers participating in other educational programming. For example, Kim Potowski¹⁷ found that the oral and written language skills of English learners in TWI were only slightly behind those of recent Spanish-speaking arrivals and significantly better than their English-proficient peers. English learners' higher bilingual proficiency levels are also linked to higher levels of reading achievement in English, increased academic language proficiency, and successful schooling experiences in general.¹⁸

Cognitive Skill Development

There's a well-established positive relationship between basic thinking skills and being a fully proficient bilingual who maintains regular use of both languages. Fully proficient bilinguals outperform monolinguals in the areas of divergent thinking, pattern recognition, and problem solving.¹⁹

Bilingual children develop the ability to solve problems that contain conflicting or misleading cues at an earlier age, and they can decipher them more quickly than monolinguals. When doing so, they demonstrate an advantage with selective attention and greater executive or inhibitory control.²⁰ Fully proficient bilingual children have also been found to exhibit enhanced sensitivity to verbal and non-verbal cues and to show greater attention to their lis-

¹² Erdos, C., F. Genesee, R. Savage, and C. Haigh, "Individual differences in second language reading outcomes" in *International Journal of Bilingualism* (September 14, 2010). Genesee & Jared, 2008.

¹³ Gottardo, A., B. Yan, L. S. Siegel, and L. Wade-Woolley, "Factors related to English reading performance in children with Chinese as a first language: More evidence of cross-language transfer of phonological processing," in *Journal of Educational Psychology*, 93 (2001), 530–542. Wang, M., C. A. Perfetti, and Y. Liu, "Chinese-English biliteracy acquisition: Cross-language and writing system transfer," *Cognition*, 97 (2005), 67–88.

¹⁴ Leong, C. K., K. T. Hau, P. W. Cheng, and L. H. Tan, "Exploring two-wave reciprocal structural relations among orthographic knowledge, phonological sensitivity, and reading and spelling English words by Chinese students" in *Journal of Educational Psychology*, 97 (2005), 591–600.

Lindholm-Leary, K. and E. Howard, "Language development and academic achievement in two-way immersion programs," 177–200.
 Lindholm-Leary, K., "Student outcomes in Chinese two-way immersion programs:

¹⁶ Lindholm-Leary, K., "Student outcomes in Chinese two-way immersion programs: Language proficiency, academic achievement, and student attitudes," 81–103. Lindholm-

 $Leary, K.\ and\ E.\ Howard, "Language\ development\ and\ a cademic\ achievement\ in\ two-way\ immersion\ programs,"\ 177-200.$

¹⁷ Potowski, K., "Student Spanish use and investment in a dual immersion classroom: Implications for second language acquisition and heritage language maintenance" in *The Modern Language Journal*, 88, no. 1 (2004), 75–101.

¹⁸ Howard, E. R., J. Sugarman, and D. Christian, Trends in two-way immersion education: A review of the research (Washington, DC: Center for Applied Linguistics, 2003). Kovelman, L., S. Baker, and L. A. Petitto, "Age of bilingual language exposure as a new window into bilingual reading development" in Bilingualism: Language and Cognition, 11, no. 2 (2008), 203–223. Lindholm-Leary, K. and F. Genessee, "Alternative educational programs for English language learners," 323–382. Lindholm-Leary, K. and E. Howard, "Language development and academic achievement in two-way immersion programs," 177–200. Ramirez, M., M. Perez, G. Valdez, and B. Hall, "Assessing the long-term effects of an experimental bilingual-multicultural programme: Implications for drop-out prevention, multicultural development and immigration policy" in International Journal of Bilingual Education and Bilingualism. 12, no. 1 (2009), 47–59. Rolstad, K., "Effects of two-way immersion on the ethnic identification of third language students: An exploratory study" in Bilingual Research Journal, 21, no. 1 (1997), 43–63.

¹⁹ Bialystok, E., Bilingualism in development: Language, literacy, and cognition. (New York: Cambridge University Press, 2001). Cenoz, J. and F. Genesce, "Psycholinguistic perspectives on multilingualism and multilingual education" in Beyond bilingualism: Multilingualism and multilingual education, eds. J. Cenoz and F. Genesce (Clevedon, UK: Multilingual Matters, 1998), 16–32. Hakuta, K., Mirror of language: The debate on bilingualism (New York: Basic Books, 1986). Education, Audiovisual and Culture Executive Agency, "Study on the contribution of multilingualism to creativity (2009), ec.europa.eu/education/languages/news/news3653 en.htm. Peal, E. and W. E. Lambert, "The relation of bilingualism to intelligence" in Psychological Monographs: General and Applied, 76, no. 27 (1962), 22–23.

²⁰ Bialystock, E., "Bilingualism: The good, the bad, and the indifferent" in *Language and Cognition*, 12, no. 1 (2009), 3–11.

teners' needs relative to monolingual children.²¹ Further, bilingual students display greater facility in learning additional languages when compared with monolinguals.²²

While much evidence supports the benefits associated with full and active bilingualism, the relationship between language immersion education and long-term cognitive benefits is less well-understood. Some research does indicate greater cognitive flexibility23 and better nonverbal problem-solving abilities among English-proficient language immersion students.²⁴

Decades ago, Dr. Jim Cummins cautioned about the need for a certain threshold level of second language proficiency before cognitive skills might be positively impacted.²⁵ Accordingly, children who develop "partial bilingualism" in a second language may or may not experience cognitive benefits. While some studies report positive cognitive effects for partial or emerging bilinguals, Dr. Ellen Bialystock concurs that it is bilingual children with a more balanced and competent mastery of both languages who will predictably exhibit the positive cognitive consequences of bilingualism.²⁶

Economic and Sociocultural

Increasingly, proficiency in a second language and intercultural competency skills open up employment possibilities. Many sectors require increasing involvement in the global economy, from international businesses and tourism to communications and the diplomatic corps. Highlevel, high-paying employment will demand competence in more than one language.²⁷ In the United States, world language abilities are increasingly important to national security, economic competitiveness, delivery of health care, and law enforcement.28

21 Lazuruk, W., "Linguistic, academic, and cognitive benefits of French immersion" in The Canadian Modern Language Review, 63, no. 5. (2007), 605–628.

Beyond economics are the countless advantages that biand multilingual individuals enjoy by being able to communicate with a much wider range of people from many different linguistic and cultural backgrounds. Knowledge of other languages enriches travel experiences and allows people to experience other societies and cultures more meaningfully. Besides access to foreign media, literature, and the arts, bi- and multilingual people can simply connect and converse more freely. Becoming bilingual leads to new ways of conceptualizing yourself and others. It expands your worldview, so that you not only know more, you know differently.

Challenges Faced by Language Immersion

Designing, implementing, and providing ongoing support for language immersion education is no easy task. Pressing challenges include staffing, curriculum development and program articulation. Program administrators struggle to find high-quality, licensed teachers who can demonstrate advanced levels of oral and written proficiency in the chosen language. Once teachers are hired, the search begins for developmentally appropriate curriculum, materials, and resources that meet local district and state standards. Elementary-level challenges are met with additional secondary-level issues such as scheduling and balancing students' educational priorities as the program moves up and through the middle and high school years.

Inadequate teacher preparation for immersion programs remains a challenge in this field. Teachers need specialized professional development support to meet the complex task of concurrently addressing content, language, and literacy development in an integrated, subject-matterdriven language program.²⁹ However, teacher educators and immersion specialists who can provide useful and relevant professional learning experiences for the immersion staff are in short supply. In addition to professional development related to curriculum design and pedagogical techniques, both native and non-native teachers report

²² Cenoz, J. and J. F. Valencia, "Additive trilingualism: Evidence from the Basque Country" in Applied Psycholinguistics 15 (1994), 195-207. Sanz, C., "Bilingual education enhances third language acquisition: Evidence from Catalonia" in Applied Psycholinguistics, 21 (2000), 23-44.

²³ Bruck, M., G. R. Tucker, and J. Jakimik, "Are French immersion programs suitable for

working class children?" 311–341. 24 Bamford, K. and D. Mizokawa, "Additive-bilingual (immersion) education: Cognitive and language development" in Language Learning, 41, no. 3 (1991), 413-429.

²⁵ Lindholm-Leary, K. and E. Howard, "Language development and academic achievement in two-way immersion programs," 177–200.

Bialystok, E., Bilingualism in development: Language, literacy, and cognition, 228.
 Fixman, C. S., "The foreign language needs of U.S.-based corporations" in Foreign language in the workplace: Special Issue of the Annals of the American Academy of Political and Social Sciences, eds. R. D. Lambert and S. J. Moore (Newbury Park, CA: Sage Publications, 1990), 25-46. García, O. and R. Otheguy, "The value of speaking a LOTE [Language Other Than English] in U.S. Business" in Annals of the American Academy of Political and Social Science, 532 (1994), 99-122. Halliwell, J., "Language and trade" in Exploring the economics of language, ed. A. Breton (Ottawa, Ontario: Department of Cultural Heritage, 1999). Mann, A., M. Brassell, and D. Bevan, "The Economic Case for Language Learning and the Role of Employer Engagement," educationandemployers.org/media/14563/ll report 1 for website.pdf (December 2011).

²⁸ Jackson, F. and M. Malone, "Building the foreign language capacity we need: Toward a comprehensive strategy for a national language framework," www.languagepolicy.org/documents/synthesis%20and%20summaryfinal040509 combined.pdf (2009).

²⁹ Fortune, T., D. Tedick, and C. Walker, "Integrated language and content teaching: Insights from the language immersion classroom" in Pathways to Multilingualism: Evolving perspectives on immersion education, eds. T. Fortune, D. Tedick (Clevedon, England: Multilingual Matters, 2008), 71-96. Howard & Loeb, 1998; Kong, 2009. Met, M. and E. Lorenz, "Lessons from U.S. immersion programs: Two decades of experience" in *Immersion education: International perspectives*, eds. R. Johnson and M. Swain (Cambridge: Cambridge University Press, 1997), 243–264. Snow, 1990. Walker, C. L. and D. J. Tedick, "The complexity of immersion education: Teachers address the issues," Modern Language Journal, 84, no. 1 (2000), 5-27.

the need for ongoing support for their own proficiency in the immersion language.³⁰

Chinese teachers whose educational experiences took place in more traditional, teacher-centered classrooms are aware of significant cultural differences and participant expectations. For example, US schools place a strong emphasis on social skills and language for communicative purposes. Children expect learner-centered activities with real-life tasks. Chinese teachers often hold a different set of expectations for students and thus, they frequently need support for classroom management strategies and techniques.³¹

Immersion teachers face significant hurdles in the sheer range of learner differences. The impact of students' variations in language proficiency, literacy development, learning support available at home, achievement abilities, learning styles, and special needs grows exponentially when teaching and learning occur in two languages.³² Educators and parents struggle to identify and implement research-based policies and practices for learners who have language, literacy, and learning difficulties. Many immersion programs lack the necessary resources and bilingual specialists to provide appropriate instructional support, assessment, and interventions.³³

Promoting student understanding of more abstract and complex concepts becomes increasingly difficult in the upper elementary grades and beyond. Some upper-elementary immersion teachers, in particular those who teach in partial or fifty-fifty programs, report difficulties in teaching advanced-level subject matter because students' cognitive development is at a higher level than their proficiency in the second language.³⁴ This challenge becomes more pronounced in programs where the immersion language is character-based, since literacy development is more time-consuming and demanding.³⁵

30 Calderón, M. and L. Minaya-Rowe, *Designing and implementing two-way bilingual programs* (Thousand Oaks, CA: Corwin Press, 2003). Fortune, T., D. Tedick, and C. Walker, "Integrated language and content teaching: Insights from the language immersion class-

One of the greatest challenges for immersion teachers is to keep their students using the second language, especially when working and talking amongst themselves. This challenge is particularly pronounced once the children have moved beyond the primary grades. For instance, studies in both one-way and two-way immersion classes point to fifth-grade students using English more frequently than their non-English language. Facilitating student use of the immersion language in ways that promote ongoing language development is an uphill battle for teachers.

Finally, outcome-oriented research reveals that immersion students, especially those who begin the program as native English speakers, don't quite achieve native-like levels of speaking and writing skills. Studies consistently find that English-speaking immersion students' oral language lacks grammatical accuracy, lexical specificity, native pronunciation, and is less complex and sociolinguistically appropriate when compared with the language native speakers of the second language produce.³⁸ Further, students' use of the immersion language appears to become increasingly anglicized over time,³⁹ and can be marked by a more formal academic discourse style.⁴⁰ Even in high-performing immersion programs, advancing students' second language proficiency beyond the intermediate levels remains a sought-after goal.

³¹ Hall Haley, M. and M. S. Ferro, "Understanding the perceptions of Arabic and Chinese teachers toward transitioning into U.S. schools" in *Foreign Language Annals*, 44, no. 2 (2011), 289–307.

³² Genesee, F., "French immersion and at-risk students: A review of research evidence," 655–688. Fortune, T. with M. R. Menke, Struggling learners & language immersion education: Research-based, practitioner-informed responses to educators' top questions (Minneapolis: University of Minnesota, The Center for Advanced Research on Language Acquisition, 2010).

³³ Fortune, T., D. Tedick, and C. Walker, "Integrated language and content teaching: Insights from the language immersion classroom," 71–96. Met, M. and E. Lorenz, "Lessons from U.S. immersion programs: Two decades of experience," 243–264.

³⁴ Met, M. and E. Lorenz, "Lessons from U.S. immersion programs: Two decades of experience," 243–264.

³⁵ Met, M., "Elementary school immersion in less commonly taught languages" in Language policy and pedagogy: Essays in honor of A. Ronald Walton, eds. R. D. Lambert and E. Shohamy (Philadelphia: John Benjamins Publishing, 2002), 139–160.

³⁶ Carrigo, D., "Just how much English are they using? Teacher and student language distribution patterns, between Spanish and English, in upper-grade, two-way immersion Spanish classes" (doctoral dissertation, Harvard University, Massachusetts, 2000). Fortune, T., "Understanding students' oral language use as a mediator of social interaction" (doctoral dissertation, University of Minnesota, Minneapolis, MN, 2001). Potowski, K., "Student Spanish use and investment in a dual immersion classroom: Implications for second language acquisition and heritage language maintenance," 75–101.

³⁷ LaVan, C., "Help! They're using too much English!" ACIE Newsletter, 4, no. 2 (February, 2001), 1–4.

³⁸ Harley, 1984; Menke, M. R., "The Spanish vowel productions of native English-speaking students in Spanish immersion programs" (doctoral dissertation, University of Minnesotra, Minneapolis, MN, 2010). Mougeon, R., T. Nadaski, and K. Rehner, The sociolinguistic competence of immersion students (Clevedon, England: Multilingual Matters, 2010). Pawley, C., "How bilingual are French immersion students?" The Canadian Modern Language Review 41 (1985), 865–876. Salamone, A., "Student-teacher interactions in selected French immersion classrooms" in Life in language immersion classrooms, ed. E. Bernhardt (Philadelphia: Multilingual Matters, 1992), 97–109. Spilka, I., "Assessment of second language performance in immersion programs" in Canadian Modern Language Review, 32, no. 5 (1976), 543–561.

³⁹ Lyster, R., "Speaking immersion," Canadian Modern Language Review, 43, no. 4 (1987), 701–717.

⁴⁰ Fortune, T., "Understanding students' oral language use as a mediator of social interaction." Potowski, K., "Student Spanish use and investment in a dual immersion classroom: Implications for second language acquisition and heritage language maintenance," 75–101. Tarone, E. and M. Swain, "A sociolinguistic perspective on second language use in immersion classrooms," The Modern Language Journal, 79 (1995), 166–178.





PROGRAM PROFILE:

Minnesota's Chinese Immersion Model

or nearly two decades, faculty and staff who specialize in language immersion education at the Center for Advanced Research on Language Acquisition (CARLA)—a Language Resource Center with partial funding from the US Department of Education Title VI-have served as national leaders in the field of immersion education. Together, immersion teachers, program coordinators, principals, and district administrators work with CARLA's university-based educators and researchers to meet challenges, promote best practice, and provide immersion-specific professional development to both a local and national audience. As researchers and teacher educators at the University of Minnesota-Twin Cities, CARLA's immersion projects coordinator Tara Williams Fortune and faculty advisor Diane Tedick have also supported the design and development of new and existing immersion programs across Minnesota.

In 2005, the Yinghua Academy Charter School was founded in Minneapolis, as the state's first immersion program in Mandarin. It opted for the early total world language model and opened its doors to more than a hundred students in grades K-3. Kindergarten and first-grade students enrolled in early total Mandarin immersion, while second- and third-graders participated in a Mandarin language and culture enrichment program. CARLA's immersion specialists and Yinghua's program designers had two reasons for this approach. First, they believed that the time-intensive early total immersion model would help children acquire character-based language and literacy skills. Research had firmly established that this model developed higher levels of second-language and literacy skills when compared to the partial or fifty-fifty approach. Second, they knew that the more time spent learning this second language in the critical early years, the better. Studies show that immersion students are most willing to use their second developing language in the early primary years, and using a language is key to acquisition.

Since then, Mandarin immersion programs in Minnesota have had multiple streams of support, in-

cluding parent and community interest, grant opportunities through the US Department of Education's Foreign Language Assistance Program (FLAP), the Minnesota Department of Education, and the University of Minnesota's Confucius Institute; and new Mandarin-specific professional development offerings through CARLA's summer immersion institutes and STARTALK-funded initiatives. As of fall 2011, seven of Minnesota's sixty-three immersion programs offer immersion in Mandarin for nearly 1,400 students. Yinghua Academy remains the only K-8 whole school program. Two of the seven programs are charter schools (Lakes International Language Academy, Forest Lake; Yinghua Academy, Minneapolis). The remaining five are in four public school districts (Eisenhower Elementary XinXing Academy, Hopkins Public Schools; Scenic Heights Elementary and Excelsior Elementary Mandarin Immersion Programs, Minnetonka Public Schools; Madison Elementary Guang Ming Academy, St. Cloud Public Schools; Benjamin Mays International Mandarin Immersion Program, Saint Paul Public Schools).

All of Minnesota's Mandarin immersion programs implement the early total one-way immersion model, where all core subject teaching and initial literacy instruction occurs in Mandarin. Pinyin teaching practices vary across programs; some intentionally withhold it until first or second grade, so that students learn to interact with characters as meaningful symbols, given the dominant alphabetic print environment of the Midwest. English language arts are introduced in the second semester of second grade or in third grade for forty-five to seventy-five minutes daily, again depending on the program. Time learning through English increases steadily to reach a fifty-fifty balance between the two languages by fifth grade. Middle-school continuation programs in Mandarin immersion will consist of at least two yearlong courses: Mandarin and social studies. At Yinghua Academy, students in grades 6-8 can continue with Mandarin-medium learning for half of the day, taking Chinese language arts, and courses in music, social studies, culture, and literature.

Basics of Program Design

By Myriam Met and Chris Livaccari

esigning a language immersion program requires a level of commitment on the part of the administration, teachers, students, and parents that is far beyond that of many other types of instructional programs. In making the decision of whether and how to begin an immersion program, it is critical to consider a number of key questions and to clarify the purposes and goals of the program, the student population who will be served, and how the program aligns with other programs within the school or school district. While there are many cognitive and academic advantages to providing students with a rigorous and engaging immersion curriculum, it is crucial to design the appropriate type of program that best meets the needs of students, parents, and the school community.

Definition of Language Immersion

First, it is important to clarify some key terms in the field. For the purposes of this handbook, a language immersion program is defined as one that involves the use of two languages as the medium of instruction for academic content for no less than 50 percent of the school day. The goal of a language immersion program is to develop a student's (1) proficiency in English; (2) proficiency in a second language; (3) intercultural competence; and (4) academic performance in the content area, at or above expectations.

For the most part, in this handbook we will refer to one-way or foreign language immersion, which focuses (in the United States) on populations of students who have little or no exposure to the target language (in this case Mandarin Chinese) when they enter the program. There are also two-way immersion programs, which generally involve equal numbers of English-dominant and Chinese-dominant students, and aim to support both groups in building their skills in both languages. All immersion programs are predicated on the concept of additive bilingualism, the notion that, simply put, two languages are better than one.

There is no better way to learn a language successfully in a school context than in an immersion program. Since the language teacher and the content-area teacher are one and the same, students are exposed to a much richer palette of language and a more sophisticated range of concepts than they would be in traditional foreign language programs. Because teachers must function as both language and content teachers, language immersion programs are cheaper to staff than traditional foreign language programs.

Immersion programs differ by student population, entry grades, parent, and community goals, and most conspicuously by their program model. The program model determines what percentage of instruction is done in English and what percentage in Chinese, and how this changes over time and across grade levels.

Three Critical Questions to Answer

There are three critical questions that someone considering an immersion program should carefully consider.

- 1. What is the fundamental mission of the program?
- 2. What Chinese levels (speaking, listening, reading, writing) do students in immersion programs intend to reach?

3. What do immersion programs cost and what needs to be itemized in the budget?

Question 1:

What Is the Fundamental Mission of the Program?

In thinking through this question, there are three steps: (1) identify the audience; (2) decide how students will be able to continue expanding their Chinese proficiency after the elementary grades; and (3) define a program model.

Step One: One-Way or Two-Way Immersion?

Pinpointing your audience is an essential starting point. Will the immersion program principally focus on bringing Chinese to a largely monolingual, Anglophone population of students, or are there large numbers of Chinesespeaking students, or students that are speakers of other languages? In addition to the makeup of your student population, take into consideration other segments of your audience: parents, fellow schools, and other members of your community. Does your community include large numbers of native Chinese speakers or heritage learners? Or will students usually come to the program with no prior exposure to the language?

If your program is primarily focused on students with little or no Chinese background, you will be building a one-way immersion program. If, however, your community includes large numbers of Chinese-speaking students, you will likely want to adopt a two-way model that is structured so that both the English-dominant and

Chinese-dominant students are able to build their proficiencies in both languages over time. In that case, your program design should include opportunities for the two groups to support each other in their language development.

Step Two: How Long Will the Program Last? For student language proficiency, both in terms of bilingualism and biliteracy, it is of course ideal to have an immersion program that begins in pre-kindergarten and extends through university. For many schools, however, that is simply not an option. Also, it is important to remember that any program that builds across grade levels—no matter how successful—will see some degree of attrition. To offset this attrition in later grades, any

program needs to have a large enough number of students in the program in the early grades. For good retention rates, both students and parents need to be satisfied with the quality of the program. They should see clear and definite gains in language proficiency each and every year; students must continue to be engaged in the program.

For schools that do not have the option of building a pipeline beyond the elementary grades, consider whether and how the students might be able to continue to build their Chinese proficiency in middle school and high school. The problem of articulation across grade levels is critical—too many graduates of successful immersion programs move into programs in later grades that do not allow them to continue to develop their language skills.

Step Three: Which Program Model?

At this point, you should consider identifying the appropriate program model. Originally most US immersion programs were modeled after the Canadian immersion initiative in which students were immersed in their new language 100 percent of the school day. English was introduced at grade 2 or 3 and gradually increased to 50 percent of the elementary school day. Later, US programs began to vary how time was allocated to each language. Today, particularly in Chinese immersion, there are a variety of program models. The majority of Chinese immersion programs divide the K–5 school day according to a fifty-fifty model: 50 percent of instruction is delivered in Chinese and 50 percent in English. Other programs



start with 80–100 percent of instruction in Chinese and then offer fifty-fifty in third or fourth grade, for example. (See the Program Profiles throughout this handbook for examples of program models.)

Program planners recognize that each model has its own set of advantages. It is important to note that all programs eventually are fifty-fifty before the end of elementary school.

For further guidance, you may wish to consult some of the following resources:

- Center for Advanced Research on Language Acquisition (CARLA) website: carla.umn.edu/immersion/index.html
- Center for Applied Linguistics, "Dual Language Program Planner: A Guide for Designing and Implementing Dual Language Programs" www.cal.org/twi/index.htm
- Center for Applied Linguistics, "The Two-Way Immersion 101: Designing and Implementing a Two-Way Immersion Program at the Elementary Level" www.cal.org/crede/pdfs/epr9.pdf

Question 2:

What Chinese Levels (Speaking, Listening, Reading, Writing) Do Students in Immersion Programs Reach?

Program Model Goals: Content and Language
Regardless of the program model chosen, all students are expected to demonstrate high proficiency in Chinese, at or above level expectations in English language and literacy as well as subject-matter achievement. However, the grade levels at which students demonstrate these

achievements will depend on the program model chosen. For example, students who are in full-day Chinese immersion will probably lag behind their peers on reading and language arts assessments until English is introduced into their school day. These students are also more likely to demonstrate higher levels of Chinese proficiency than students in fifty-fifty programs. Eventually, regardless of program model, all Chinese immersion students should be at or above grade level in all content areas, including English reading and language arts.

In the matrix below, developed for the fifty-fifty Chinese language immersion programs in Utah, expected performance for students in fifty-fifty programs of Chinese immersion is shown for listening, speaking, reading, and writing. Since Chinese immersion programs are relatively new, there is not yet a significant body of data to determine whether these expectations are appropriate.

It is helpful to set performance expectations in Chinese at the outset of program planning. Knowing what the end result of the program should be—at grade twelve, for instance—allows targets to be set for intermediate milestones, such as at the end of grade eight, then grade five, and grade three. Each milestone then represents appropriate progress toward the next, and is more likely to result in students who meet the intended end-goals of the program. This type of planning, known as backward design, is commonplace in many areas of education—not just immersion

It is important that teachers and program administrators identify ways of determining whether students are achieving program milestones. Some of the measures used will be administered annually, and others less frequently. Some measures will be locally developed tests, teacher observation matrices or rubrics, and student self-reports, such as LinguaFolio. In addition, it is very useful to use periodically, externally developed summative assessments

GRADE LEVEL	LISTENING	SPEAKING	READING	WRITING
1	Novice-High	Novice-Mid	Novice-Low	Novice-Low
2	Intermediate-Low	Novice-High	Novice-Mid	Novice-Mid
3	Intermediate-Mid	Novice-High	Novice-Mid	Novice-Mid
4	Intermediate-High	Intermediate-Low	Novice-High	Novice-High
5	Intermediate-High	Intermediate-Low	Intermediate-Low	Intermediate-Low
6	Advanced-Low	Intermediate-Mid	Intermediate-Low	Intermediate-Low

START-UP COSTS FOR AN ELEMENTARY SCHOOL FOREIGN LANGUAGE PROGRAM

	FLES Assumes 30 minutes daily of foreign language instruction per pupil. Costs are for 1 school.	IMMERSION Includes total, partial, and two-way programs. Assumes 2 startup classes serving 50 to 55 students.	
Teacher salary	1 teacher per 200 students \$ X teachers	None	
Resource Teacher/ Specialist (Optional)	District-determined salary for teacher specialist	District-determined salary for teacher specialist	
Fringe Benefits	\$Xteachers	\$ salary for teacher specialist	
Training	3 days @ \$ per day X teachers Trainers: 3 days @ \$ per day (plus expenses)	5 days @ \$ per day X teachers Trainers: 5 days @ \$ per day (plus expenses)	
Curriculum Development	Prepare scope and sequence for each grade level; identify activities, resources, and assessments. days @ \$ per day X teachers	Prepare instructional guides to support local curriculum; 1 unit lasts 4 days. days @ \$ per day X 2 teachers	
Planning	teachers X 2 hours per week X 36 weeks @ \$ per hour	2 teachers X 2 hours per week X 36 weeks @ \$ per hour	

that provide additional information to students, parents, teachers, and administrators about the effectiveness of the program in achieving its goals.

Immersion students, as mentioned earlier in this hand-book, are expected to attain high levels of proficiency—levels that are higher than can be achieved in more traditional forms of language education, particularly those that begin in the later grades. Providing opportunities for students to demonstrate their Chinese proficiency, such as high school credit by examination, can be a powerful incentive for students to work to achieve the best possible skills in Chinese as well as to continue participating in immersion or continuation courses.

Question 3:

What Do Immersion Programs Cost and What Needs to Be in the Budget?

The chart above is useful for planning your program budget. It is important to note that in immersion programs, every faculty member teaches both language and content, and thus there is no additional cost for language teachers, as there is in FLES programs.

Comparisons Between Chinese and Other Language Immersion Programs

Chinese language immersion programs are conceptually similar to other language immersion programs (Spanish, French, etc.) and there are many commonalities for setting proficiency targets, formative assessments, and curriculum design. There are, however, some practical differences between Chinese and other language immersion programs that relate both to the special characteristics of the Chinese language and to the relatively short history of Chinese immersion. These differences include: a relative lack of engaging, high-quality materials; assessments; and language acquisition research specific to young learners of Chinese.

It is also somewhat harder to find a qualified Chinese language teacher and to help new teachers from China adapt to the cultural differences between Chinese and American schools and classrooms. (For more on this topic, see also Asia Society's report "Meeting the Challenge: Preparing Chinese Language Teachers for American Schools," asiasociety.org/files/chineseteacherprep.pdf.)

There are some notable challenges related to the nature of the Chinese language; the most significant one involves the development of literacy in Chinese. Chinese writing is unique among world languages in its use of a characterbased system that involves both phonetic and meaning elements—almost without exception, all other writing systems in use today rely exclusively on the phonetic.

Developing literacy in Chinese simply takes longer than in any other language, and the difficulty of learning to read and write Chinese is not confined to non-native speakers. It is also true of native Chinese speakers. The other challenge here is that written Chinese (particularly that used for newspapers or other formal communications) combines classical forms of the language with more familiar, colloquial expressions. While written languages tend to be more formal than their spoken counterparts, in Chinese the difference is far more extreme than in most European languages.

In addition to Chinese characters, there is also a phonetic alphabet called *pinyin* that is used to define pronunciations and to help find words in dictionaries. There are different practices for whether and how to introduce *pinyin*, particularly for early learners who are also developing literacy in English. The bottom line is that for most students, Chinese literacy will proceed at a slower rate

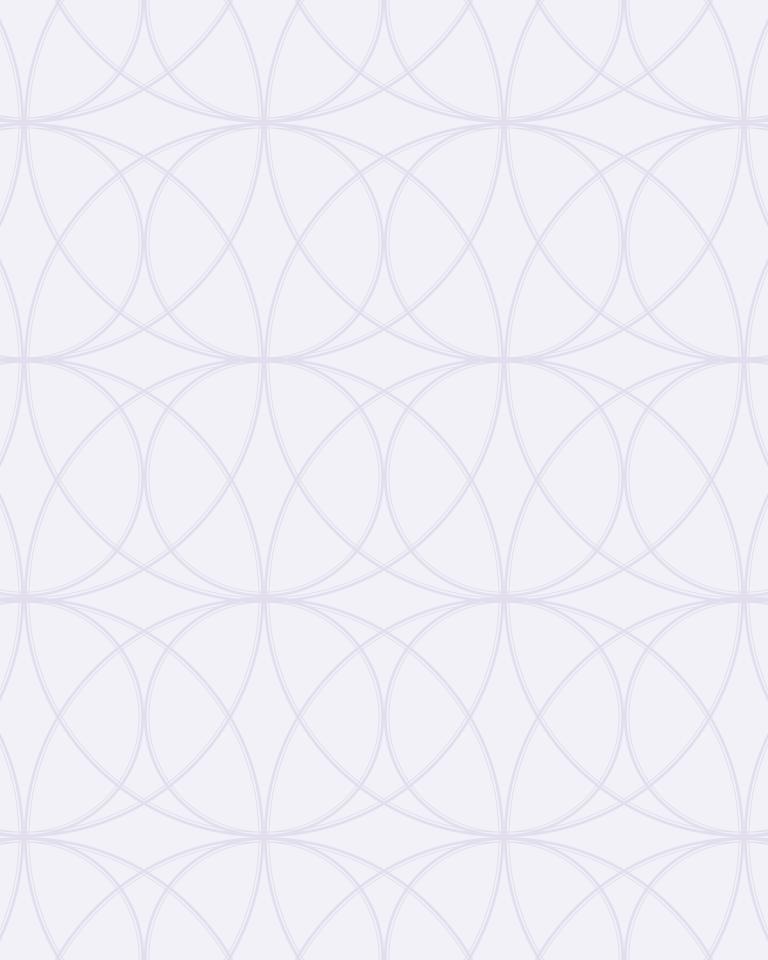
than it would in other languages, especially those languages that are relatively close to English such as Spanish, French, and German.

For more on these challenges, see the chapter titled "Curriculum and Literacy."

Another unique feature of the Chinese language is its use of tones. Mandarin, for example, employs four different tones. This means that if you say the same syllable with four different intonations or pitches (high and flat, rising, dipping, or falling), each tone will change the meaning of the word. While these tones can cause considerable difficulty for learners who come to Chinese a bit later in life, early learners can more quickly assimilate them.

The final challenge related to the nature of the Chinese language relates to vocabulary and expressions. Compared to languages like French and Spanish (or even Japanese), there are far fewer words that are cognate with English, and so accumulating new vocabulary is more difficult. Also, since Chinese has been written copiously for several thousand years, there is a vast number of expressions, classical and historical allusions, and other idioms and references to absorb in order to be truly literate.

While all of these challenges suggest that Chinese may be incredibly difficult, it should be noted that the sooner students are exposed to the language, the less daunting all of this will seem. As complex as written Chinese is, remember that Chinese grammar is relatively simple and involves none of the intricate constructions of verb tense or noun declension that are standard in European languages. In Chinese, you can use the same single word to express "I go" or "I went," "he or she goes," and so on. And you only need to add another word or a particle to form constructions such as "I will have gone," "would have gone," "had gone," "had been going," and "would have been going." In a way, English is actually far more challenging to learn than Chinese!







PROGRAM PROFILE:

Portland, Oregon Public Schools

ortland Public Schools (PPS) nurtures an innovative Mandarin immersion program for grades K–12. Beginning in kindergarten, students spend half of the school day learning in Mandarin and half of the school day learning in English. Students in the program continue their studies in middle school with social studies and language arts taught in Mandarin. In high school, students are offered both face-to-face and blended online courses, incorporating language and content-based instruction. For students at participating schools, International Baccalaureate® (IB), Advanced Placement (AP®), and multiple levels of Chinese as a world language and Chinese as a heritage language classes are also available.

The PPS Mandarin Immersion Program (MIP) began at Woodstock Elementary School (grades K–5) in September 1998. As the program expanded, now entering classes of sixty kindergartners every year, it grew to include Hosford Middle School (grades 6–8) and Cleveland High School (grades 9–12). Students in the MIP learn Mandarin and are exposed to different aspects of Chinese culture as they study various core subjects through developmentally appropriate curriculum and instruction.

In 2005, the National Security Education Program (NSEP) awarded PPS and University of Oregon (UO) with a generous grant and challenging task: to establish the nation's first K–16 Chinese flagship program that not only graduates students who are professionally proficient in Mandarin (at the Superior level based on ACTFL Proficiency Guidelines) but also provides a model for replication by other schools.

The Oregon Chinese K–16 Flagship Program is unique for its continuity and program coordination from the elementary level through college.

The MIP is especially proactive in providing students with real-world experiences. In the eighth grade, MIP students participate in a yearlong capstone project during which they prepare for, experience, and reflect upon living and learning in China for two weeks. PPS's three MIP schools also forged strong relationships and exchanges with sister schools in Suzhou, China. In early 2011, PPS won the National Security Language Initiative for Youth (NSLI-Y) grant, which established the inaugural summer of the PPS Summer Institute in Yunnan (SIY). Through this program, high school students studying Mandarin have the chance to embark on a once-in-a-lifetime journey to Yunnan, China. The itinerary includes field studies, a thirty-eight-hour train ride across China, intensive language classes, community service projects, homestays in both a city and an ancient village, and hiking the Tiger Leaping Gorge along the Jinsha River.

Students graduating from the MIP aim to be qualified to apply for a number of Chinese flagship programs at universities across the country, so that they can pursue their chosen area of expertise while continuing their education in Mandarin. In June 2011, PPS graduated its first cohort of MIP students. Four students were accepted into the Chinese Flagship Program at UO. Currently, there are nearly 500 students participating in the MIP and over 650 students altogether learning Mandarin in PPS.

Staffing and Professional Development

By Jeff Bissell and Kevin Chang

Basic Criteria for Staffing Your Program

hether it be an immersion or other setting, it is imperative to select teachers with the basic qualifications to be effective in the classroom. For more commonly taught languages in the United States (for example, French and Spanish), the teacher pool is a combination of native or heritage speakers of the language and English speakers who major in the language in university studies and become certified to teach it. Less commonly taught languages, such as Chinese and Japanese, have fewer English-dominant teachers, though that situation is changing. Because of the linguistic demands of teaching in an immersion setting, it is extremely important that non-native speaker teachers have a high degree of proficiency and naturalness in Chinese.

An effective Chinese language educator needs to possess the following qualifications:

1. Has a solid background in Mandarin and speaks the standard variety (Putonghua). For all teachers of Chinese, their pronunciation in Mandarin must be Putonghua (the common speech). Different states set different linguistic competency requirements: some require the demonstration of a speaking proficiency in Chinese of Advanced-Low or above on the ACTFL scale of speaking proficiency; some states also require a rating on the ACTFL Writing Proficiency Test, while others require proof of credits or a major in Chinese.

- 2. Has the required teaching certification. Certification requirements differ by state. In most cases, elementary school teachers need to be licensed to teach in the elementary grades, and may not need to hold foreign language certification. For middle school teachers, some states may require both language and content area certification.
- 3. Is well-versed in American foreign language pedagogy. Prospective teachers of Chinese should have credits in foreign language pedagogy courses such as methods of teaching, curriculum design, assessment and testing, second language acquisition, and materials design.
- Is knowledgeable and skilled in managing students in a US classroom.
- Is certified or willing to pursue certification and continuing professional development.
- Is willing to work with the school and community at large.

Teachers of Chinese may include:

- Graduates of American university teachers preparation programs;
- Educated Chinese native speakers already living in the US, who have or might obtain teaching credentials; or
- Chinese nationals who come to the school district on a short-term visa (one to three years) through a visiting faculty arrangement.



Qualifications of a Mandarin Immersion Teacher

Like all flourishing teaching practices, even the newest and most veteran language immersion programs share a common feature—they are works in progress. Like successful leaders in many fields, the best language immersion teachers are able to reflect on and refine their practices to meet changing needs. These teachers' key qualities are flexibility, adaptability, and creativity.

The biggest logistical challenge for any growing program is adapting to mandated requirements. Because all educational institutions (public school, charter school, or private setting) must adhere to strict licensing regulations, teachers need to quickly adjust to new requirements. Immersion teachers must be particularly flexible in their thinking. They must be open to recognizing cultural differences, especially in relation to instructional practices, classroom management strategies, and differentiated instruction.

In an environment where the target language is used less than the first language, immersion teachers must modify age-appropriate academic content for second-language learners. Effective immersion teachers integrate target language instruction into both daily academic curriculum and second language acquisition. They also exude confidence in their reading, writing, listening, and speaking skills. In Chinese language immersion, they should be proficient in the program's chosen writing form (traditional or simplified).

Language immersion teachers are not just foreign language teachers. They have the same responsibilities as mainstream lead teachers to provide a challenging, subject-based curriculum for their students. Language immersion teachers, however, must also work within a learning environment where the dominant language does not match their target language. Because most teaching resources have not yet been amended for language immersion learning, teachers must be creative and resourceful in order to provide a curriculum comparable to learning in the dominant language.

When the target immersion language is Chinese in an Anglophone environment, immersion teachers must

demonstrate confidence in English, since English is the primary means of communication with parents and the rest of the school's English-speaking staff.

Below are a few key questions to consider when selecting Chinese immersion teachers.

- Where do you find teachers?
- Can you sponsor international teachers, provide visas?
 What do you do if your district is unable to provide that funding and support?
- How do different entities at the state and district level handle the certification of immersion teachers? There is a range of practices, and you need to determine what your state allows.
- What are the advantages and disadvantages of hiring guest teachers who are not staying with the program long-term?

When interviewing possible Chinese immersion teachers, be aware of cultural differences and, whenever possible, include an experienced Chinese teacher in the search and selection process. Be careful, too, not to put undue emphasis on English-language interview skills at the expense of Chinese teaching abilities. Interviews should

include a writing sample as well as a demonstration lesson, which may need to be presented via video conferencing.

Areas of Professional Development

Areas of development for all successful immersion teachers include curriculum and instruction, classroom management, social-emotional development, communication, and technology.

Curriculum and Instruction

While a sound curriculum and careful unit and lesson planning are essential for high academic achievement, it's also important to avoid a cookie-cutter approach to instruction. The most successful teachers bring fresh content to their academic material in order to effectively reach students. Chinese immersion teachers must be able to make academic content accessible to students who are learning language through the medium of a new language. Teachers also need to know how to foster language and literacy development in second language learners of Chinese. Two-way programs that also serve heritage students with Chinese proficiency acquired outside the school setting must know how to help these students continue to grow in their Chinese skills.

Classroom Management and Social-Emotional Development

Expert classroom management hinges building a learning environment with a minimum of behavioral issues and distractions. Teachers must be readily equipped to address and handle any issue that may detract from the goal of learning—including the changing landscape of social-emotional development. Each generation of children brings new challenges that might have not been apparent in previous students. Successful teachers are not only cognizant of age-relevant issues, but they also know how to support the development of each student. In addition, immersion teachers from outside the United States must be aware of cultural differences in developing classroom management strategies.

Communication

Beyond individual student—teacher communication, teachers are also responsible for managing an entire class, conferring with parents, collaborating with other teachers, and reporting to directors and head of school. Observing and refining communication methods at each school and community will help teachers work efficiently with these various audiences. Cultural differences affect communication styles, making it important for both English and Chinese faculty to understand one other's culture, thus helping to avoid misunderstandings between teachers, administrators, and parents.

For example, in Chinese cultural behavior, someone may be indirect out of respect and politeness. From an American cultural perspective, though, indirectness can be taken as vague and unclear. In Chinese culture, people in authority and of older generations command significant respect and they are generally addressed conservatively, with acknowledgment of hierarchical roles. In groups, Chinese cultural behavior often leads to a greater sense of reserve, while American customs encourage active expression. With such differences to consider, educators and administrators should work to find a balance of communication and cultural understanding. For instance, Chinese teachers may express themselves more fully in a one-on-one meeting rather than a group session.



Technology

Teaching twenty-first-century learners involves a strong grasp of technology. Having a system in place that supports the integration of technology into the curriculum can help teachers keep pace with ever-evolving options and products. For instance, if a lead teacher is particularly interested in technology, he or she should receive professional development and a chance to help other teachers learn a new program or device.

Finding and implementing technology resources that are both useful and reliable can greatly help teachers and, in turn, students in the classroom. Technology-based tools can assist with researching and testing. There are online translation tools to

introduce, while iPad applications can help students with character learning and writing. Used thoughtfully, technology can help students see their lessons as fun, purposeful, and relevant to their futures. It can extend learning to the world beyond the classroom.

How to Support Professional Development

Consistent efforts to support professional development are particularly necessary in newly launched immersion programs, as both the staff and the community settle into their new arrangements. Professional development should always include opportunities for guided practice, reflection, and review.

Below are some suggestions for professional development.

 Reach out to organizations such as the American Council on the Teaching of Foreign Languages (ACTFL), Chinese Language Association of Secondary-Elementary Schools (CLASS), and the Chinese Language Teachers Association (CLTA). These groups, among others, provide workshops, conferences, and social networking for Chinese language teachers.



- Make an open effort to promote learning about the cultural norms within your community, especially as they touch on communication; responses to the students' strengths and needs; achievement; issues of confidentiality; strategies for discussing behavioral or academic concerns; and the level of need for differentiated instruction.
- Assign a skilled mentor teacher for support with both classroom instruction and communication.
- Development of leadership among Chinese-speaking faculty should be encouraged to help coordinate and improve the curriculum. Leadership can be internally nurtured by involving Chinese program leaders with task forces, projects, and professional development.
- Encourage teachers to attend and present at the annual National Chinese Language Conference (<u>asiasociety</u>. org/nclc).



PROGRAM PROFILE:

Chinese American International School, California

ince its founding in 1981, the Chinese American International School in San Francisco has followed the fifty-fifty model from pre-kindergarten through fifth grade. At the pre-kindergarten level, all children who enter the program are native English speakers.

During the two years of pre-kindergarten and year of kindergarten, students focus on oral language and language/cultural exposure. From first grade through fifth grade, the emphasis shifts to four major areas of learning that include listening, speaking, reading, and writing. The subjects taught in the target language include math, social studies, health, and wellness, with music in the target language included until second grade. Students learn traditional Chinese characters, using proper stroke order. *Pinyin* is introduced in first grade to support students as they learn to read and write sentences.

In sixth through eighth grades, the fifty-fifty model shifts. Thirty-five percent of class time then centers on Chinese literature, cultural studies, and social studies. This middle-school program gives each student a superior experience in the humanities, an experience that is consistent, developmental, and taught in English and Chinese. All students cycle through a three-trimester sequence in each discipline over their three years in middle school: one trimester each year for each of

six subjects. Classes meet for two periods a week. Although these are primarily laboratory, "hands on" classes, the teachers also include some theory and history related to their disciplines. This approach streamlines the curriculum and hones the quality and coherence of the dual-language, dual-culture arts program.

The equal instructional time for English and Chinese has worked successfully for the CAIS program and is widely accepted by the parent community. It provides opportunities for Chinese and English program teachers to collaborate and create a consistent academic and social-emotional environment. Students build strong skills in English, but benefit greatly from their Chinese education as well.

With the goal of students learning Chinese not only in the classroom, but also in authentic contexts and settings outside of class, CAIS students participate in a variety of activities, including educational trips to mainland China and Taiwan, and field trips to San Francisco's Chinatown and its Asian Art Museum. Additionally, there are many educational opportunities for older students to mentor, read with, and tutor younger students in Chinese, creating a connection across grade levels. A newly launched activity involves second-graders using Skype to communicate with children at a Chinese school located across the country.

Instructional Strategies: Successful Approaches to Immersion Teaching

By Chris Livaccari

anguage immersion programs present a range of opportunities and challenges for practitioners. Many language teachers welcome the opportunity to create an immersive language environment in which their students are able to achieve high levels of proficiency and fluency in the target language, and to learn academic as well as everyday language. However, because immersion teachers are not just teaching language but also teaching other academic subjects, they have several extra issues to consider. In any immersion program, language and its

partner subjects are equally important, and the most successful approaches balance them evenly.

In this way, successful immersion teaching is the pinnacle of good instruction. Its form of interdisciplinary learning exemplifies the possibilities of education in general. Immersion teachers start from the assumption that barriers between various subject areas are at some level artificial, and that engaging, dynamic, and effective instruction in all subject areas contains many of the same core elements. By their very nature, immersion programs demonstrate the interconnectedness of all knowledge and experience.



Immersion teachers must first clearly understand what content must be taught at each grade level. They need to be familiar with "comprehensible input," that which emphasizes students should be exposed to new words and patterns in contexts that facilitate comprehension and assimilation. Teachers should consistently weave together familiar language with new words and information, so that students continually develop their language proficiency. In this way, language acquisition in an immersion program closely mimics the natural learning curve for a first language, in

which a child is constantly prompted to assimilate new language and meaning from unfamiliar words and expressions. Immersion also includes more elements of discovery- and inquiry-based learning than do other kinds of instructional practices. Students must constantly and consistently decipher inferences and context clues.

Immersion programs come with a high standard that teachers must reliably meet. Language-immersion instruction consists of language and content lessons, including functional usage of the language, academic language, authentic language, and socioculturally correct language. Unlike a standard foreign-language classroom, the immersion setting provides more opportunities to teach students colloquial versus academic language. Immersion techniques also introduce a language's cultural and social contexts in a meaningful and memorable way. It is particularly important that immersion teachers connect classwork with real-life experiences. For example, students should learn when to say, "what's up" and when to say, "it's a pleasure to meet you, sir." They should grasp when to say, "it's freezing out here" and when to note, "today's temperature is fifteen degrees below the average mean temperature for this time of year." By applying a broad range of communication styles, instructors instill the expectation that students will use the language in reallife situations as well as in their studies.

The Top Five Immersion Teaching Skills

- 1. The ability to use visuals, gestures, body language, expressions, modeling, and movement to complement verbal cues. For students to learn a new language in meaningful contexts, teachers must use every instructional strategy available to them, including the use of actual objects (realia), pictures, videos, and gestures to express meaning. This will allow students to develop comprehension without direct explanation.
- 2. The ability to motivate students to stay in the target language. Students who are still new to Chinese should be encouraged to respond to teacher prompts and questions in English if they are not yet able to express themselves in Chinese. As students get older, however, they should be increasingly encouraged to use Chinese exclusively in all of the classes conducted in Chinese. As students progress toward higher levels of

- proficiency, they should also be discouraged from mixing the two languages, and urged to stay in one or the other language, as appropriate.
- 3. The ability to ask open-ended questions. Effective teachers, no matter the subject or setting, steer clear of questions that elicit only "yes or no" answers. Instead, they challenge students' thinking, nudging their higher-order cognitive skills and giving ample time to articulate each response. In immersion classrooms, it is especially important that teachers encourage students to give longer and more varied replies. For instance, they can ask students to expand upon or support their answers with examples or evidence. Following up in this way helps students practice a wide range of expressions and to keep incorporating fresh words and patterns into their productive repertoire.
- 4. The ability to regularly assess students' comprehension and skills development. Teachers need to monitor students' understanding through questioning techniques and formative assessments. They should also be consistently pushing students to use new words and expressions, more complex language structures, and more culturally appropriate language in their interactions and responses. Teachers should encourage students to use more specific vocabulary, as opposed to generic expressions, as they continue to develop their skills.
- 5. The ability to think strategically about the various types of student interactions and to vary them, promoting a dynamic learning environment. Teachers can mix the following types of interactions: teacher-students, student-student, whole group, and small groups. In small-group and project-based settings, teachers need to carefully evaluate the makeup of the various groups. Each student should work with various people in the class, but there should also be opportunities for long-term and ongoing student interactions.

Voices from the Field: Successful Immersion Teachers Identify Key Qualities and Competencies

Marty Chen, Chinese Dual Immersion Coordinator, Utah State Office of Education

Chen believes that the most important thing for immersion teachers to remember is that "they are not just language teachers, but also elementary teachers. . . . They need to be language teachers, classroom teachers, and also caregivers." She finds that teachers' overall challenge is that "kids do not have a target-language-rich environment after school" and so teachers need to incorporate "social language . . . not just content language." She urges teachers to incorporate social language into their classes, exposing their students to as many varieties of language as possible, or else students will only learn academic language. For example, when performing an action in class, teachers should describe it every step of the way. Teachers can also think out loud, another way of including more casual language. This can be difficult, particularly since a teacher "cannot use language that students cannot understand . . . comprehensible, meaningful input is extremely important."

Still, says Chen, "I don't see a lot of challenges, I see a lot of accomplishment. . . . Kids who go through a Chinese immersion program learn to think, their survival skills are stronger, and they are forced to learn to figure things out on their own. . . . In this environment, kids don't just receive things conveniently . . . and it's very exciting when kids make their own meaning—it totally makes my day when students succeed and kids brainstorm new ideas."

Enthusiasm is also essential: "Teachers also need to be excited about what the students are going to learn. Kids easily perceive your feelings, and they can tell if you love your job or not. If you are creating very surprising environments for students and keep kids guessing all the time, then you won't have many classroom management issues. Also, back to the caregiver issue, if the students know that you care, they will want to perform for you. . . . You need to build up enthusiasm. If I am going to teach something on Thursday or Friday, I need to start building up anticipation on Monday or Tuesday. I want the kids to think on their own and be excited about what they are going to learn and what's coming up."

Yin Shen, Curriculum Specialist, Woodstock Elementary School, Portland Public Schools

Shen explains that she sees classroom management as far more than keeping students well behaved. It's "not just a set of rules and regulations, but really the test of whether or not a teacher can plan engaging, practical activities that keep students engaged," she says.

In order for Chinese language immersion teachers in American schools to understand American practices, careful observation is crucial. "The expectations in a Chinese educational setting are so different," stresses Shen. "It's important to get into an American classroom to watch the interactions between teacher and student. Chinese teachers have their strong points and US teachers have theirs." She recommends that teachers carefully and critically "observe both systems and be aware of both sides' strengths and weaknesses. Classroom management should never be separated from teaching and instruction—they are interwoven."

"Immersion teachers need to talk a lot, and talk about everything. Every little action needs to be carefully thought through and very intentional. You need to keep the language going, and must keep talking about everything—even little things—so that the students will be able to learn naturally," Shen emphasizes. "If you do this, students will learn so much. Their general skill level will improve a lot, compared with other students. Immersion students become more capable and work harder, and the work they produce is of a higher quality. . . . This is why parents in immersion setting are happy, because their students can learn so much. . . . It feels so rewarding as a teacher when kids come knowing nothing of the language and after a year know so much."

Shen sees the benefit in a give-and-take teaching experience. "The teacher-student relationship is like that of a director and actors," she says. "As the director, it's my job to make them shine and a good director can produce a high-quality show. But the shining stars are the students, not the director. . . . If you get close to the students, they won't feel any gap. In immersion classrooms, you need to use songs, stories, dances, all these things. It's sunshine all day long in my class. . . . Immersion teaching keeps you young, energetic, and happy, and the time goes very fast."

Pearl You, Chinese Program Coordinator, Washington Yu Ying Public Charter School

"The biggest difference between immersion teachers and language teachers is that immersion teachers need to focus on content teaching. Immersion teachers spend a lot of time with students and they need to do everything possible to make meaning comprehensible for students," reports You. "Immersion teachers just spend a lot more time with their students. . . . They need to use manipulatives, body language, and visuals all the time." Staying flexible will help keep students' confidence up, while for teachers, You says, "every day is a new day."

Hsiuwen Hsieh, Director of Education, and Aiping Dong, Chinese Language Immersion Teacher, Pioneer Valley Chinese Immersion Charter School

Hsieh and Dong recognize that immersion teachers need to fully grasp the fundamentals of both first- and second-language acquisition. They also underscore the need for empathy, for teachers to put themselves "into their students' shoes and consider how you would feel if you were in their position," to understand "what kind of stress students go through and the best ways to help them cope."

For young students, the Chinese language immersion itself is not as overwhelming as other school experiences. "They are more overwhelmed being separated from their parents than learning a new language," Hsieh and Dong

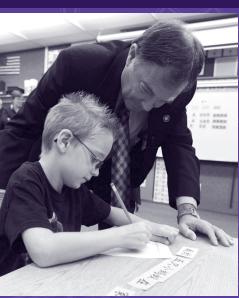
believe. Their students "are not just learning two languages—they are learning a tolerance and respect for other cultures and other points of view." Since learning in two languages adds complexity, "success in an immersion program requires a lot of structure, a lot of discipline, and a lot of hard work."

Hsieh and Dong have found that most effective general teaching strategies can be applied to the immersion setting, so different kinds of teachers can learn from each other: "All the tricks that English teachers use can be used in the Chinese immersion classroom." Effective teachers who use "thematic units and teach in learning centers" won't have as much trouble making the transition to an immersion program. It's about being flexible, creative, and getting the students excited about making meaning in the classroom.

Norman Cao and Yiling Han, Chinese Language Immersion Teachers, Global Village Academy

Cao and Han believe that "the key thing in immersion teaching is to be more open-minded, and to keep learning constantly. It's up to the teachers to constantly make connections to themselves and to what they've learned before, and connections between English and Chinese." Cao notes in particular that students who go through this type of program have "a tonal awareness and ability to speak with native-like intonation," as well as "the ability to comprehend meaning even without knowing specific words in a sentence." He tells the story of one little girl who came into the program with no Chinese background at all, while her classmates had already studied for one year. She spent the first three weeks of school crying all the time. However, she came up to speed within a couple of months—now she is a top student in the class and "the complex sentences she can make are just amazing!"







PROGRAM PROFILE:

The Utah Dual Language Immersion Program

n 2008, the Utah Senate passed the Critical Languages Bill, creating funding for Utah schools to begin dual language immersion programs in Chinese, French, and Spanish. In addition, then-Governor Jon Huntsman Jr. initiated the Governor's Language Summit and the Governor's World Language Council, both with a goal to create a K-12 language roadmap for Utah. These groups aimed to address the needs for language skills in business, government, and education. In 2010, current Governor Gary Herbert issued a challenge to Utah educators to implement one hundred dual language immersion programs throughout Utah by 2015, with a goal of enrolling 30,000 Utah students. Due to the early success of the program and public demand, Governor Herbert has moved the target completion date to 2014, with a continuing goal to mainstream dual language immersion programs throughout the Utah public school system.

The Utah Dual Language Immersion Program uses a fifty-fifty model, in which students spend half of their school day in the target language and the other half in English. Most of the state's programs begin in first grade, with a few starting in kindergarten. All state-sponsored schools with dual language immersion programs are required to implement the fifty-fifty model and use two teachers, one who instructs exclusively in the target language for half of the day and a second who teaches in English for the remainder of the day.

From kindergarten through third grade, the target language curriculum includes literacy study and the majority of the content subjects (math, science, and social studies). The English curriculum focuses on

English language arts and some collaborative reinforcement of the content. Teamwork is essential! The curriculum shifts in the fourth and fifth grades, as most conceptual instruction in math and social science is taught in English. Practical application of these subjects remains in the target language. In the sixth grade, social science shifts back to the target language and science shifts to English instruction. These curriculum changes in the upper grades purposefully allow for more instruction time in the target language, focusing on literacy study and increasing student proficiencies. Specific proficiency goals for every dual language immersion language are set at each grade level in all areas: reading, writing, speaking, and listening.

The Utah Dual Language Immersion Program then offers two courses in grades seven through nine: one content course in the target language and a second course in advanced language study. Participating students are expected to enroll in Advanced Placement language coursework and complete the AP exam in the ninth grade. In grades ten through twelve, students will be offered university-level coursework through collaborative agreements with six major Utah universities. Students are also encouraged to begin study of a third language in high school. Through this articulated K-12 Utah language roadmap, the state's students will enter universities and the global workforce equipped with truly valuable language and cultural skills. For the 2012–13 school year, there will be 25 Mandarin Chinese dual language immersion schools with approximately 3,500 students enrolled in the Utah program.

Curriculum and Literacy

By Myriam Met

mmersion instruction differs from other types of language learning because students are learning multiple subjects in the target language. In a Chinese immersion setting, students will learn content through Chinese, and learn Chinese as they learn content. Balancing these two primary goals of immersion is an important consideration when planning, implementing, and growing an immersion program.

Two sets of curricula will drive what happens in classrooms each day: subject matter (content) curricula and the Chinese language and literacy curriculum. In both cases, decisions about what students should achieve derive from national and/or state standards.

For almost two decades, states and school districts have been guided by national standards in almost every discipline. While national standards have been a powerful point of reference in shaping curriculum content, adherence to national standards has been voluntary. In contrast, many states have developed mandatory standards that closely parallel some, if not all, of the national voluntary standards. State standards set expectations for what all students in that state must know and be able to do. These standards are the basis for state-level assessments that are administered at specified grade levels across the state. Schools and school districts, in turn, have used both the voluntary national standards and mandated state standards as the basis for curriculum documents that spell out what students should learn. Curriculum, therefore, helps teachers know what to teach.

In the past, districts and schools varied their approaches to a specific subject's syllabus at a given grade level. For example, a science unit on plants might be found in third grade in one school district and at fourth grade in another. Mathematics topics such as number sense, multiplication, and division might be taught at the same grade level in two schools, but the level of expectation and the timing might differ. These variances made it difficult for immersion teachers to collaborate and share materials for content area instruction. In recent years, however, almost all states have chosen to participate in a national education initiative that will bring far greater consistency across states, districts, and schools. This new "common core" of content, in turn, will make it more likely that immersion programs will become more consistent, so that students in different locations will achieve similar proficiency levels. Hopefully, these consistencies will facilitate the sharing of Chinese immersion resource materials and instructional approaches.

Content Learning in Chinese Immersion Programs

District- and school-level curricula determine what students need to learn in content areas. The curriculum for content-area instruction is usually not developed by individual teachers, even when content is taught through the medium of a new language, such as Chinese. Immersion students are expected to study the same content-area curriculum and reach the same level of proficiency as do students who are not in an immersion program.

Program designers determine how much time will be spent learning content in English and how much time will be spent in Chinese. In most Chinese immersion programs in the United States, some subjects are taught in English and others in Chinese, although these subjects may vary by grade level. In some programs, program designers have

structured the schedule so that all subjects are taught in both languages. Decisions on which subjects should be taught in which language might include consideration of the following questions.

- Which subjects at a particular grade level are most likely to be accessible to students given their current level of Chinese proficiency?
- Which subjects at a particular grade level present language-rich opportunities for student to develop their oral proficiency in Chinese?
- How heavily does a content area depend on literacy?
 Which subjects are most suitable for students' level of Chinese literacy, so that they learn content-area material at or above expectations? How well does a content area allow for students to improve their Chinese literacy?
- How will the program ensure that students are prepared to deal with academic terminology in English as well as in Chinese so that they are able to demonstrate content-area performance? They will also need to segue to instruction in these subjects taught in English in later grades.
- Are there available resources (teachers, print and non-print instructional materials) to ensure high-quality instruction in these subjects?

Chinese Language and Literacy Curricula

Like the curricula for other subjects, Chinese language and literacy curricula are guided by national and state standards. However, it is unlikely that a curriculum already exists in the school or district that specifically determines what teachers should teach and what students should learn. In fact, many veteran immersion programs in Chinese, as well as in French and Spanish, are just beginning to consider the development of a curriculum for Chinese language and literacy.

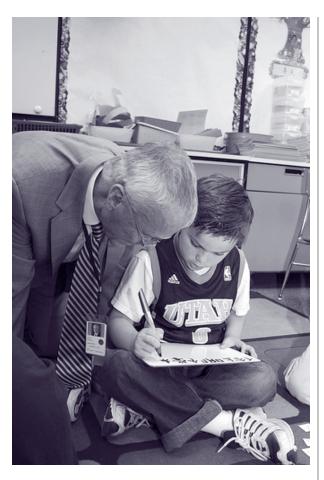
In past decades of immersion instruction in the United States, educators simply used the second language while teaching school content, believing that students would absorb the new language. This was, indeed, successful. However, over time immersion teachers discovered that while students could readily understand lessons and express themselves in their second language, they were not accurate speakers or writers. The ways in which they phrased ideas weren't completely fluent; they didn't communicate as smoothly as native speakers. Immersion educators began to search for ways to improve their model—which was already producing higher levels of proficiency than any other form of foreign language teaching in US schools.

Added to the goals of enhancing current practices in immersion education are the challenges unique to languages that do not use the Roman alphabet as a writing system. With the rapid and recent growth of Chinese immersion programs have come questions about literacy.

- How well should students read and write Chinese?
- How do we set reasonable targets for student literacy within the amount of time in the school day allocated to Chinese?
- What strategies will help English speakers become literate in Chinese?
- How well do the strategies used for teaching Englishlanguage literacy in American schools adapt to teaching literacy in Chinese?
- Which aspects of literacy development can we expect to transfer from Chinese to English and vice versa?

The Interaction of Language, Literacy, and Other Academic Subjects

As discussed earlier, in immersion, academic content is taught to students in their new language, using the same standards and expectations that are used in non-immersion classrooms. Students need to be as proficient as possible in their second language because as they progress through the grades, the content they learn becomes increasingly dependent on language. Students are expected to understand explanations, participate in discussions, explore ideas, and do all this both orally and in writing.



Chinese immersion educators must pay careful attention to developing their students' skills to meet the same high levels as their non-immersion peers. Once students have learned to read, they will use that skill constantly in all subject areas. Reading is, of course, a key way to develop any language. Research shows that how much and how widely students read significantly impacts their vocabulary and grammar. Reading is critical for immersion students because it involves two of the program's most important goals: content learning and language learning. The more language students know, the more easily they can acquire and retain content knowledge.

Literacy involves not just reading, but also writing. Students are expected to use writing in academic contexts. They write to demonstrate what they have learned and write to help themselves remember (taking notes, making outlines). Students write to clarify their thinking—in fact, some researchers suggest that the act of writing itself is thinking.

Developing a Chinese Language and Literacy Curriculum

Currently, most Chinese immersion programs begin in kindergarten or first grade. In their initial years, students learn the rudiments of language at these grade levels. Most of the language they will learn will be embedded in the daily life of the classroom and curriculum content. Students will learn to use Chinese during the routines and lessons in kindergarten or first grade. They will learn to identify themselves (name, age, grade, boy/girl), name their family members, use numbers and colors for math and other classroom tasks, use the calendar, and so on. In these early years, the language and other content that students learn are almost one and the same. Most new programs specify the characters young learners will master (both reading and writing).

New programs are fortunate that at this point, a written curriculum is not an urgent priority. (Although of course, educators will try to ensure that all aspects of the program are well grounded and operating effectively.) New teachers are busy getting to know their students, understanding their work as immersion teachers, learning the local district curriculum, and mastering the local school procedures.

As programs grow beyond their first or second year, the need for a language/literacy curriculum will likely manifest itself, as the curriculum should guide the work of teaching and learning Chinese. For example, each teacher will likely to want to know:

- What oral language should I expect my students to know and be able to use when they come to me?
 When they advance from my grade, which oral language will they use?
- What content terminology do my students need to learn for each content unit I teach? Should students be accountable for every technical term (e.g., larva, pupa, chrysalis) or just high-frequency vocabulary they may encounter in other contexts (e.g., change, caterpillar, butterfly)?
- Should students be able to read and write all the vocabulary they know orally?

- Which characters should students know? When should I teach *pinyin* and how well should my students know it? What is the role of *pinyin* in my classroom?
- What kinds of texts should my students be able to read for comprehension? Are there texts/textbooks that I am expected to use? If there are none, what should I use for literacy instruction?
- How do I set priorities among the literacy skills of making meaning from texts; recognizing and pronouncing characters; producing characters in writing; and selecting the correct character from a computer display when students have input pinyin?

At this point, it is important to consider which options for Chinese curriculum/literacy are most appropriate. Options might include:

- Develop a Chinese language/literacy curriculum that aligns with the local context and needs.
- Coordinate with other schools and districts with similar needs to pool resources and to build a team of curriculum developers with multiple teachers at each grade level.
- Borrow or download an existing Chinese curriculum from another program, then adapt it as needed.

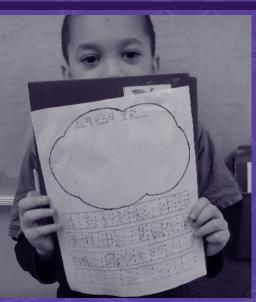
Improving Language and Literacy Outcomes in Chinese Immersion

Recently, immersion educators have found that a combination of strategies results in higher levels of student performance in the immersion language. Their approach is a backward design: setting goals and expectations, determining what will be the evidence that students have met expectations, and then designing instruction to ensure that students can meet the stated learning outcomes.

Immersion programs focused on developing language and literacy curricula carry out some or all of the following steps:

- Setting clearly defined performance targets that align with commonly used metrics at specified grade levels
- For each grade level, describing students' fluency levels in observable and measurable terms and aligning these "can do" statements with the proficiency targets
- Developing a language and literacy curriculum that specifies the language/literacy tools students will learn in order to show that they "can do" what is expected at their grade level
- Showing how these elements of language and literacy (vocabulary, grammar structures, language functions, characters, etc.) will be taught within each content unit taught in Chinese or in a separate language/ literacy lesson
- Assessing students both formally and informally to make sure students are progressing toward the stated expectations

"In immersion classrooms, you need to use songs, stories, dances . . . it's sunshine all day long in my class. Immersion teaching keeps you young, energetic, and happy, and the time goes very fast."





PROGRAM PROFILE:

Washington Yu Ying Public Charter School

ashington Yu Ying Public Charter School aims to foster the development of a strong social conscience among tomorrow's global leaders. Yu Ying employs both Mandarin immersion and the International Baccalaureate Primary Years Programme as its curriculum framework. Students switch classrooms and are instructed by teams of two teachers, on a fifty-fifty model. One day all subjects are taught in English, while the next, all subjects are taught in Chinese. Instruction is differentiated to accommodate learner diversity. Instructional specialists typically "push-in" or "pull-out" to deliver services to students who receive special education or English Language Learning services. These specialists also consult with teachers of those students. In addition to its Primary Years Programme, Yu Ying has several unique programs, such as an after-school program on Chinese language and culture and a passwordprotected resource page for teachers, students, and parents. Of the offerings, two key programs stand out: the detailed Language Arts Program and the easy-to-implement Chinese writing program.

Yu Ying uses data to help inform its instruction. Several aspects of the language arts program help educators gather and analyze data, including: the Chinese Running Records Assessment Kit; the Guided Reading Program that outlines reading skills and teaching strategies; vertically and horizontally standardized reading assessments; a detailed scope and sequence for each grade level; and the various formative and summative assessments that are created by the teachers. Another feature of the Language Arts Program that has been extremely successful is the standardization of the teachers' use of the language arts block. Each grade level is required to have students engage in Word Work, Read to Self, Listen to Reading, Work on Writing, and Guided Reading daily (based on Gail Boushey's book, The Daily Five).

After its first year, the Yu Ying school learned to make a distinction between "handwriting" and "writing." Subsequently, it began devising Writing Program lesson plans for all of its teachers. Each writing plan includes ideas for differentiation, and each trimester the teachers introduce new writing concepts, such as story writing. The practice of writing characters still happens, but it is referred

to as "handwriting" and this skill is practiced at a separate time during the day.

Before Yu Ying's opening, its founders visited a number of immersion schools and listened to feedback from various language experts, teachers, and administrators in existing immersion programs. This feedback led to the use of the fifty-fifty Chinese-English model on alternating days. After three years of using the fifty-fifty model in pre-kindergarten to third grade, the Yu Ying school decided to change pre-kindergarten to a full immersion program. First, this would allow English-only speaking students to have more contact with the Chinese language in an environment where the expectations for reading and writing are not as high. Second, the school could eliminate the developmentally difficult practice of its four-year-old students to change classrooms, languages, and teachers every other day.

Since the students are taught all subjects (math, science, social studies, language arts) in both languages, each teacher is responsible for imparting the same skills and concepts on the same day. This means that if second grade students in a Chinese class are getting their first lesson on subtraction on Monday, it is the responsibility of the second-grade teacher in an English class to introduce subtraction on Monday, also. Yu Ying has addressed this challenge by continuing to have half days on Friday and scheduling team meetings on a weekly basis. Yu Ying teachers also use Google Docs to easily collaborate on lesson plans.

The outcome of teaching all subjects in both English and Chinese has been rewarding for Yu Ying's students. Students have gone from not speaking or reading any Chinese to being able to use Chinese to function in the three modes of communication. They have been able to see tremendous progress in their ability to write and read Chinese short stories and answer comprehension questions regarding these stories. This model also allows teachers to grow as educators by providing them with high-quality professional development, teacher collaboration time, detailed curriculum suggestions, and various assessments to help monitor student progress. Since the fifty-fifty model can be challenging to manage with large class sizes, Yu Ying ensures small class sizes, with no more than seventeen students in each class.

Student Assessment and Program Evaluation

By Ann Tollefson, with Michael Bacon, Kyle Ennis, Carl Falsgraf, and Nancy Rhodes

Student Assessment

arents enroll their children in language immersion programs in order to give them the gift of knowing another language. They also expect that their children will do as well or better in learning the regular curriculum in the immersion language as will children who are learning that content in English. As a result, there are two fundamental strands of student assessment in elementary immersion programs: assessment of student learning in various subjects taught in the language, (e.g., math and reading); and assessment of the student's proficiency in the immersion language. Both are used to evaluate individual student progress, to report to parents and the general community, and to support continual program improvement.

Assessment of General Content Learning

The often-repeated mantra of language immersion programs is "first, do no harm." In other words, children's grade-level and subject-area learning must not suffer because they are in an immersion program.

In most immersion programs, students take the same summative content-area assessments as children who don't participate in an immersion program. Formative assessments throughout the year are generally in the immersion language although care is taken to assure that children have the necessary English vocabulary to do well on the district and state summative assessments they will take in English.

Assessments of Student Proficiency in the Immersion Language

Formative Assessments

Formative assessments are used to monitor day-to-day progress in the target language. They also serve as ongoing checks on the effectiveness of the program, informing planning and instruction. They can include:

- Daily guizzes
- Student projects
- Observation checklists of "can do" statements
- Integrated performance assessments
- LinguaFolio self-evaluation

Summative Assessments

There are few summative assessments for children in grades K–6, which means that programs should try to develop a set of measures that will give a well-rounded picture of student proficiency in the immersion language.

In grades K–2, the only national summative assessments of second language acquisition are based on student interviews. These interviews provide rich language data from which to gauge interpersonal listening and speaking skills, as well as interpretive listening skills. For interview-based assessments, schools need to address issues of affordability, staff training, and time needed to assess students. Many K–2 programs use interview-based assessments in conjunction with other measures of student proficiency in the immersion language, including:



- Assessments embedded within instructional units (Integrated Performance Assessments)
- School and district assessments, ideally analyzed within professional learning communities of teachers
- Observation matrixes or checklists of "can do" statements used on an ongoing basis by teachers to track students' advancement
- Quantitative measures, e.g., number of characters learned by students

For students in grades 3–6, STAMP 4Se is the only online assessment currently available. There are, however, several more assessment tests currently in development.⁴¹

Since there is currently no single, easy way to assess the proficiency of students in elementary immersion programs, the best approach may be to gather data from

41 The American Council on the Teaching of Foreign Language's Assessment of Performance Toward Proficiency in Languages (AAPPL) is an online assessment of the three modes of communication. Its applicability to immersion programs is currently being explored. The Center for Applied Linguistics (CAL) is also developing a computerized student assessment.

several sources, using some data for student assessment and combining it with other data for program evaluation and reporting.

When designing an assessment plan for your students and an evaluation plan for your program, consider the following questions:

- What is your budget for individual student and program assessment?
- What skills are particularly important for your program in case you don't have the budget to assess every child in every mode and skill? For example, if you had to choose, would you choose to assess listening and speaking or reading and writing? Or is interpersonal communication the most important goal for your program?
- If your budget is limited, can you assess all students in a locally produced assessment (such as an observation checklist of "can do" statements)? Can you use your limited resources to assess a statistically significant number of students on a national assessment in order to pinpoint your program's strengths and weaknesses?

SUMMATIVE ASSESSMENTS OF IMMERSION LANGUAGE PROFICIENCY FOR ELEMENTARY IMMERSION PROGRAMS

GRADE LEVEL	ASSESSMENT	SKILLS ASSESSED	DESCRIPTION
Pre-K-2 K-8	Early Language Learning Oral Proficiency Assessment (ELLOPA)* Student Oral Proficiency Assessment (SOPA)*	Interpersonal listening and speaking; interpretive listening	20–30 minute interview in which 2 testers are paired with 2 children. Script is tailored for each program's curriculum. Student samples can be rated by trained teachers or by CAL.
3–6 * The ELLOPA and SO ** STAMP 4Se is availal	STAMP 4Se (formerly NOELLA)** PA are available from the Center for Applied Linguistion of the Center for Applied Linguistic Office for the Center for Applied Linguistic Office for Applied Li	Listening, speaking, reading, writing cs (CAL) at www.cal.org.	Online assessment takes 50–80 minutes. Instant scores for listening and reading. Speaking and writing samples graded by Avant Assessment and usually available within several weeks. With grades 3–5, it is best to conduct this assessment in two different sessions, e.g. listening and speaking in one session, reading and writing in another.

- How much time are you willing to devote to summative assessments?
- Do you have access to technology that would make online assessment productive?
- How soon do you need to see the results of the assessments?
- What combination of assessments will give you the information you need and still allow you to stay within your budget? (There is no one right answer—you have many options.)

Sample Evaluation Scenarios for Student Assessment and Program Evaluation

You have 250 children in your K-6 Chinese immersion program. Your assessment budget is \$2,500, which gives you only \$10 per student, well below what most national assessments cost.

Scenario One

You decide to design and use your own teacher-observation checklists for all children in the program. To broaden your program evaluation and provide outside verification of your internal ratings, you decide to assess the top 25 percent of your students on the STAMP 4Se. That will cost approximately \$1,550 and it should give you a good idea of your program's efficacy for students. You can then combine the two measurements into a matrix that you can use to evaluate and plan for the program's improvement. Those results will also help you report to your community on the program's progress. The remaining budget can be used to bring together teachers to analyze the results and plan for program improvement. Or you can increase the number of students you assess.

costs	BENEFITS	CHALLENGES
Vary widely, depending on who writes the script, conducts the interviews, and/or rates the student performances. CAL has standard scripts that a district can modify to fit its curriculum. If teachers conduct and rate the interviews, the cost is in the training, which can be online or live (see below). If CAL provides the testers, the cost depends on the number of students being tested and travel costs for testers. (Contact CAL for details.)	Interviewers can probe to elicit as much production as possible, giving children a good chance to show what they know and can do in the language. Content and format are adapted to align with a program's focus and intensity. Interviews are recorded. CAL assists schools with the interpretation of assessment results. If teachers are trained in the SOPA, the aligned Teacher Observation Matrix (TOM) can be used as an ongoing formative assessment tool in the classroom.	Schools need to be prepared to allot appropriate time for testing (approximately 30 minutes per pair of students). Interrater reliability needs to be addressed when interviews are rated by teachers. CAL can verify ratings as part of a negotiated contract.
\$250 initial setup fee, which includes 10 tests. There is a per-test fee of \$17.50 for each test beyond the first 10.	STAMP 4Se assesses general social language. It provides reports for teachers on individual students and for program evaluation. The web-based reporting system allows teachers to play back all student oral responses and review the writing responses. A variety of reports are available for program analysis.	Keyboarding skills are required for the writing portion of the test. If students use <i>pinyin</i> they can only score up to the Novice-High level. They must show some control of character use to score into the Intermediate level and they will need to know how to use a keyboard and input Chinese characters into the system to accomplish this.

Scenario Two

You follow the same first steps as in Scenario One, but you decide to do a stratified random assessment on the STAMP 4Se of two low-level, two mid-range and two high-performing students from each grade level or class. Selecting students should be done carefully with clear criteria, such as English test scores. 42

Scenario Three

You decide that you want to develop your internal capacity to assess student proficiency, so you spend your limited resources on training your teachers in administering and using data from the SOPA to evaluate all students in your program. This training is available online. For example, you could train four teachers in designing, administering, and rating the SOPA for \$300 each, totaling \$1,200 for their joining the Moderated Introduction to SOPA course.

over 25 percent of the students in your program.

CAL offers an additional course, Rating the SOPA, for

\$500 per teacher, for additional intensive practice rating

at the different proficiency levels. Through these train-

ing courses, your staff will have a better understanding of proficiency, which can be the basis for the in-house

development of teacher-observation checklists ("can do"

statements) for assessing interpretive and presentational

could assess approximately 65 students, which is slightly

skills, which are not assessed by the SOPA. ⁴³

Scenario Four

As in Scenario Three, you decide to invite four teachers to train for administering and rating for the SOPA, but you reserve some funds to administer the STAMP 4Se to some of your students. With the remaining \$1,300, you

 $^{42\,}$ When using assessments such as the STAMP 4Se, tracking the same students over a number of years provides data for a longitudinal look at your program.

⁴³ If you have sufficient resources, you might want to take advantage of CAL's rating verification services for schools whose teachers do not take the Rating the SOPA course and want to ensure that all ratings are as accurate as possible (\$25 to \$35 per student).





PROGRAM PROFILE:

Global Village Charter Collaborative, Colorado

Global Village Charter Collaborative (GVCC), serving 1,500 K-8 students on three campuses in Aurora and Northglenn, Colorado, developed its immersion program model as part of an overall school reform effort. These reform efforts aim to close two profound achievement gaps. The first gap, between the lowest- and highest-performing students in American schools, was targeted by the federal No Child Left Behind Act. The second and equally important disparity is the global achievement gap between US students and their international peers. The GVCC theory posits that by narrowing the global achievement gap, the domestic proficiency achievement gap will also shrink. On the other hand, focusing solely on closing the domestic gap will not adequately address the global achievement gap.

GVCC considers native languages other than English to be educational assets. Rather than using a strategy of subtractive bilingualism, in which a student's native language is set aside to facilitate the acquisition of English, Global Village Academies employ additive bilingualism. With this approach, fluency in Spanish is used to develop literacy in Spanish, for example. Academic success in another language motivates students to achieve both fluency and literacy in English.

Both Global Village Academies offer full to partial immersion programs. Students choose one of the three languages offered in their program: Spanish, French, or Mandarin in Aurora; or Spanish, Mandarin, or Russian in Northglenn. In kindergarten, students are fully immersed in their chosen language; in first and second grades, 80 percent of their instruction remains in the chosen language, with ninety minutes devoted to English literacy. Third through eighth grades use a fifty-fifty model. All students in each school are language learners, working on both linguistic and cultural meanings of their chosen languages. At the end of each month, an international morning assembly highlights another country's culture. Three school-wide cultural nights also provide global awareness and opportunities for building community. The academies' whole-school model, with three language "villages,"

employs teachers from all over the world and students from a wide array of ethnic, socioeconomic, and cultural backgrounds.

The academies are developing six units per grade level for social studies and for science. These units integrate core content standards and the ACTFL standards for each of the target languages taught. When the curriculum is completed, it will include an academic content sequence, a language framework, forty-two six-week science or social study units, and curricula-based performance assessments. The GVAs' integrated units clearly articulate content and language objectives, and map the academic (obligatory) and non-academic (non-obligatory) language that will be taught in the lesson.

Every day, Global Village Academy students learn math (Singapore Math method) and a lesson in one of the integrated units in the immersion language, in addition to literacy and the same integrated unit in English. To date, student achievement data demonstrates that more time in the target language does not impede performance on state-mandated tests in English. In fact, GVA results indicate very strong growth results for the immersion student cohort, and English language learners in particular.

All classrooms across all languages use a balanced literacy approach, including guided reading, use of leveled readers, and timely progress monitoring. Work focuses on developing clear grade-level performance benchmarks for speaking, reading, and writing in all the languages, with particular attention paid to the critical languages of Mandarin and Russian, where there are limited resources.

The GVCC believes that students should travel as part of developing global competency. Through the support of the Asia Society and the Hanban Confucius Classroom, the academies have forged a partnership with the Beijing Foreign Language School. In the past two years, this connection has facilitated middle-school student exchanges. GVCC plans to develop project-based outcomes as part of these exchanges, allowing students to demonstrate core global competencies such as language proficiency, intercultural understanding, and knowledge in math, science, and the arts.

Marketing and Advocacy

By Christina Burton Howe

our community will be curious and interested in your Chinese language program, but not all stakeholders will understand the need for teaching critical languages and the benefits in using the immersion approach. Community members—teachers, administrators, parents, students, state education professionals, legislators, business members, heritage groups, and funders—will each hold different, and at times conflicting, perspectives. Identifying and understanding these different perspectives is the first step in designing a thoughtful marketing and advocacy plan.

Anticipating the different reactions to your program will help you build a broad base of support during the initial program planning and opening phases, and to sustain that support through the years ahead. Pre-program implementation and ongoing sustainability demand consistent, proactive ways of getting your message out to the community. It is crucial that your district or school take the lead in initiating this dialogue, in branding and marketing your program to potential students and their parents, and in developing an ongoing public relations strategy that engages the different constituencies.

Program Planning Phase

In the pre-program planning phase, your marketing plan should identify the different stakeholders in your community and potential biases or prejudices that might exist. Some questions to consider include:

 How will other language programs in your district benefit from the introduction of a Chinese immersion program? What local, state, and national language associations might be helpful in launching your program?

- How will non-heritage students benefit from learning a critical language? What does the research say about the cognitive, academic, and outlook benefits of bilingualism? How will bilingualism help raise test scores, increase graduation rates, and improve college readiness?
- Are there other successful immersion programs in your district or community? How can your program connect to and build upon their success? Can your program "pipeline" into other academic programs such as a high school, technical institutes, colleges, or universities?
- How does your immersion program strategically connect with other initiatives in your district such as STEM (Science, Technology, Engineering, and Mathematics), International Baccalaureate, English Language Learners, Visual and Performance Arts, or Gifted and Talented programs?
- Will your program reconnect some students with their heritage language and culture and if so, how? What heritage organizations in your community will support your program? How might you partner with these organizations?
- How will your program enhance the local economy?
 What businesses in the community may endorse your program? How will students better be prepared for globalization by increasing their cross-cultural competency and linguistic proficiency?

 Does your community include military bases, international agencies, embassies, Confucius Institutes, or other types of organizations that may support your program? How might you connect to and partner with these agencies in building your program?

Marketing Your Program: Cognitive and Academic Benefits of Bilingualism

The benefits of learning a world language on student's cognitive and academic development are well established, and this research makes an excellent foundation for promoting your

program, especially to prospective parents. It is crucial to explain that an immersion program is not about just learning a new language, but rather it is learning *through*, and being immersed in, a second language.

The earlier and more intensely a child begins language learning the better, with research suggesting that children as young as three years old can benefit cognitively from bilingual education. Numerous studies demonstrate a correlation between the study of languages and increases in higher-order critical thinking and problem solving. Cognitive processing, including perceptual discrimination and organization or spatial reasoning and more advanced verbal processing are demonstrably higher in bilingual students. One study of French immersion students in kindergarten through fourth grade found that the bilingual students had higher I.Q. measures over a five-year period when compared to their peers who had received instruction in one language only. Other benefits of bilingualism include decreased memory loss and other age-related cognitive losses, increased social and problem solving skills, and increased brain function related to attention and inhibition. Given the cognitive benefits of learning a second language, it stands to reason that full to partial immersion models, with their longer sequences, increased proficiency, and intense language instruction are better than traditional FLES models.

In addition to the benefits to cognitive development, learning another language also offers increased academic benefits. Students in immersion programs do as well or bet-

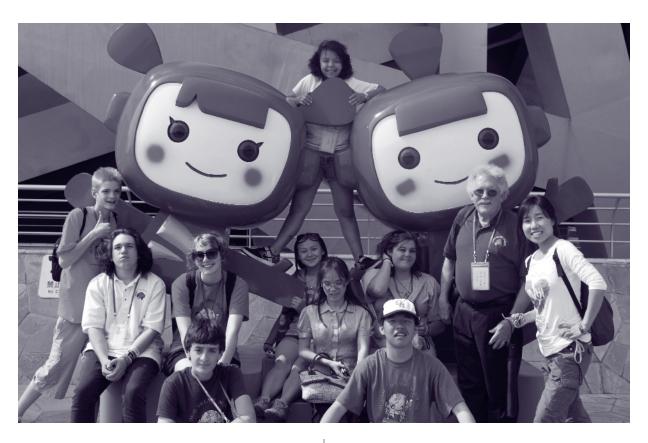


ter than their peers in English-only programs, while also gaining the cross-cultural skills and global perspectives that immersion programs foster. Multiple studies suggest that students who study a second language demonstrate gains in other subjects such as mathematics and English reading. They also do better on college entrance exams than their monolingual peers. Many of the skills learned in studying a language are transferrable and provide students with higher levels of print awareness, metalinguistic understanding, and more sophisticated analytic skills.

While the cognitive and academic benefits can be realized in any immersion program, full immersion is most critical with the Chinese language since Mandarin requires 1,200 instructional hours to reach proficiency versus 600 instructional hours for cognate languages such as Spanish or French. Full to partial immersion models can:

Build solid cognitive foundations at the most beneficial age, when the brain can make the most connections.

- Take advantage of language learning when the child is most open-minded and accepting of studying a foreign language.
- Ensure the highest proficiency in target language.
- Ensure the highest test scores in all subjects; research
 has found the higher the proficiency in a second
 language the higher the child's test scores will be in
 English reading and writing, math, and science.



- Promote more comprehension in higher grades.
- Build long-term advancement in English language acquisition—reading skills translate when learning to read and write in other languages, even pinyin.
- Promote near-native proficiency in reading and listening.
- Ensure children learn to think in the language.

In the case of immersion in Mandarin, there are additional benefits. Mandarin immersion will:

- Increase proficiency in pronunciation of Chinese tones and promote proficiency in both language tones and music note recognition.
- Produce the most right-brain stimulation. Chinese is a right- and left-brain language and learning Mandarin builds connections between both hemispheres of the brain.

As you market your program and promote the benefits of learning through immersion, it's highly likely that parents and other community members will raise concerns about the impact on speaking, reading, and writing English. In your marketing efforts, aim to dispel the myth that less time in English instruction lowers student achievement on English-language state tests. More time in a second language will not decrease a student's ability to learn English, or to master content in English. Additionally, it is important to note that immersion does not have a negative impact on English language learners. Contrary to what many believe, teaching English learners in their native language does not impede their learning of English. While this is counterintuitive to the adult learner, children come pre-wired to learn multiple languages, and plunging into these different languages does not impede them, but rather has demonstrable cognitive and academic benefits, as noted above. Research supports an additive bilingualism approach—one that uses the first language as a building block for teaching the second (or third) language—as opposed to a subtractive approach, which removes the first language and replaces it with English.

The success of your program will rely on your making a strong case for the benefits of bilingualism in your marketing and public relations efforts. By explicitly describing the cognitive and academic research on language learning in parent meetings, community presentations, and professional development sessions, as well as in distributed print materials, you can build understanding of the benefits of immersion and consequentially, wider support for your program.

For a comprehensive review of the cognitive and academic benefits of immersion, see Myriam Met's essay "Elementary School Foreign Languages: What Research Can and Cannot Tell Us," in *Critical Issues in Foreign Language Instruction* (1991), and Deborah Robinson's essay "The Cognitive, Academic, and Attitudinal Benefits of Early Language Learning" in *Critical Issues in Early Second Language Learning: Building for Our Children's Future* (1998). Another good resource is "What Research Shows" on the website actfl.org.

Marketing Your Program: Creating a Global Workforce for the Twenty-First Century

While neurological research supports the learning of multiple languages, Americans should also consider learning a second language as essential preparation for keeping up with what journalist Thomas Friedman calls "the flat world." This concept crystallizes a hyper-connected marketplace where individuals have the power to impact each other, and the world they live in, like never before. According to Friedman, "this new flat-world platform is, in effect, blowing away our walls, ceilings, and floors—all at the same time. That is, the wiring of the world with fiber-optic cable, the Internet, and work flow software has blown down many of the walls that prevented collaboration. Individuals who never dreamt they could work together, and jobs no one ever dreamt could be shifted from country to country, are suddenly on the move, now that many traditional high walls are gone." There is little doubt that this new level of "collaboration" will require our students to speak multiple languages and work effectively with cultures different from their own. Increasingly, learning a second language will be integral to understanding different cultures and perspectives, and in being productive across geographical boundaries. American students fluent in Chinese will have an international advantage and the confidence to work in a global economy.

The flat world is everywhere. In developing your immersion program, strategically connecting the impor-

tance of thorough language learning to the economic realities of your local community will ensure that your program is seen as relevant and responsive. There is no doubt that companies in your community are importing and exporting products. Workforces are becoming more and more culturally diverse. Hospitals, court systems, and businesses are clamoring to hire bilingual professionals who are culturally sensitive and proficient in communicating and solving problems from multiple perspectives. Explicitly drawing these connections in your marketing materials is one way to demonstrate why a Chinese language immersion program is important. Don't assume that the connections are obvious, or that the community understands the benefits of Chinese immersion programs (or immersion programs in general).

Building Family and Community Support

Advocating Your Program: The Need for Strong Leadership

While all program development in schools requires strong leadership, implementing a Chinese immersion program especially requires leaders who can clearly articulate the value of language learning to students, their parents, and the greater community. Leaders will need to lead the communication effort, guide program development, and serve as the primary advocate during start-up, all the while remembering the context in which the program is being developed.

Promoting critical language learning is not value-neutral. Rather, it is precisely because language and culture are so interwoven with personal identity and values that conflicts will inevitably arise. For example, one principal reported that a member of her school accountability committee asked her, "Are you going to teach anything American?" A strong leader will be able to guide the community through the different questions and concerns that arise, yet steer the focus back to the cognitive, academic, and attitudinal benefits that Chinese immersion programs give students. It also helps to keep a sense of humor!

School and district leaders will need to intentionally develop a sense of community that is supportive of the immersion program across the school and district. Create buy-in from all faculty, not just the immersion faculty, by fostering grade-level team support, both vertically and horizontally among grades. Connect students, parents, and teachers by sponsoring school- or district-wide events that engage both the immersion and non-immersion pro-

grams in schools. Cultural or arts events, a model United Nations student forum, or a digital initiative will help students connect across content and language areas.

Ideally, program advocates should keep their message straightforward, consistent, and transparent. Address faculty concerns, and demonstrate how everyone in the school and district will benefit from adding an immersion program. Use concrete examples of how language immersion has worked in different programs, providing specific student success stories. Outline expected academic and language standards and outcomes. In your presentations and print materials, include slides with specific data related to increased student achievement, graduation rates, and advanced placement testing results. (Sources for comparative data include ACTFL, CAL, and CARLA.)

Community Outreach

To reach out to your community, turn to a high-quality marketing and advocacy plan with specific communication strategies to reach different target audiences, including parents, teachers, and administrators in the school and district, as well as the community at large. Be transparent and accessible, providing translated materials in both print form and online. Following are key elements in a successful marketing plan.

- Brand your program by creating a logo, byline, and messaging focus.
- Include a number of community information meetings and focus groups with parent-teacher organizations, school accountability teams, neighborhood associations, boards of education, state education agencies, chamber of commerce groups, and local newspapers.
- Invite your language teachers to make educational or cultural presentations, and to work alongside nonimmersion teachers in developing curriculum and special events.
- Use the power of students as ambassadors for your program.
- Issue press releases at strategic points during program development.

- Target radio and television opportunities for interviews related to China and the importance of teaching critical languages.
- Consider doing a direct mailing to families in major demographic areas of your community. Or think about producing a creative commercial. One school, for example, created a short, ten-second advertisement featuring students speaking different languages; these clips played as previews at local movie theaters.
- Meet directly with district administrators and state and federal legislators in your community to let them know about your program.

In addition to a written marketing plan that includes your message and communication strategies, program leaders also need a written recruitment plan that clearly explains the enrollment process and requirements. Be prepared to discuss the specifics of your program, including questions like the following.

- What is the enrollment process? Where can parents find an application? What are the deadlines for enrollment?
- What grade levels will be opened in which year? How many students will be in each class, and will students be admitted after a certain grade level?
- How will enrollment preferences be determined: by zip code or "first come, first served"?
- What are the proficiency requirements in upper grades? How will these be determined?
- What amount of time will be spent in immersion, in which subjects, in which grade levels?
- How will heritage students be included in the program?
- If offering Mandarin, will simplified or traditional characters be taught?
- What happens if a student leaves the program and transitions to another school?

- How can parents support their student with homework?
- Where can parents find supplemental materials or tutoring?
- How will parents know if their child is succeeding in the program?

Parents will also appreciate supportive data on stages of second-language acquisition and how the brain learns another language. When digging into these larger issues, include information on the practical and cultural differences in Chinese and American educational systems. This background knowledge will help mitigate misunderstandings during parent—teacher conferences, or communicating about discipline or special needs.

Sustaining Community Support for the Long Term
As your program grows and students mature, your marketing and advocacy plan must develop as well. Your program may be more familiar, but this does not mean public relations will take a backseat. From the program's third year onward, sustain its public profile with efforts such as the following.

- Create a strong parent support group that can serve as advocates for your immersion program, particularly during times of funding cuts.
- Continue to issue press releases about your successes.
- Identify forums where you can share with your community your growth data across all subjects, as well as students' language development.
- Initiate student and teacher exchanges with a partner school in the country where your target language is spoken.

- Use technology to allow students to build friendships with students overseas.
- Sponsor short summer language experiences so that other students in the community can sample immersion learning.
- Participate in target language speech contests, field trips, and other cultural programs.
- Continue to reach out to your business and legislative community to form partnerships and exchanges.

While marketing and advocacy may take a different form as your program grows, the need to actively share your story will not diminish. Don't assume that your program is understood, even after you are well established. As George Bernard Shaw once said, "the single biggest problem in communication is the illusion that it has taken place." While it is easy to believe that your successes will speak for themselves, thoughtful marketing and advocacy are essential for continued recognition and respect for your program.





PROGRAM PROFILE:

Pioneer Valley Chinese Immersion Charter School, Massachusetts

he Pioneer Valley Chinese Immersion Charter School (PVCICS) is a regional public charter school that provides grade K–8 students with a rigorous course in English and Chinese. It is the first Chinese immersion school in Massachusetts. PVCICS aims to have its students graduate with excellent scholarship, high proficiency in Mandarin and English, and sensitivity to multiple cultures.

PVCICS uses a one-way immersion model, meaning most students enter the program in kindergarten or sixth grade, with no prior knowledge of Chinese. Chinese language acquisition occurs naturally by using Chinese as the language of instruction during a portion of the day. This approach is very popular because it produces high academic outcomes and bilingual and biliterate students.

PVCICS's curriculum is aligned with the Massachusetts Curriculum Frameworks. PVCICS students receive instruction in core subjects (mathematics, English language arts, science, and social studies) and in art, music, health, and physical education. Students also study Chinese language arts and culture. PVCICS has an extended school day to allow for enough time to develop students' proficiency in all subjects.

In kindergarten and first grade, 75 percent of the daily instruction is in Chinese and 25 percent in English. In grades 2–5, half of the daily instruction is in Chinese and half in English. In grades 6–8, 25 percent of the daily instruction is in Chinese, with 75 percent in English. English language arts are taught in English by a teacher with native English proficiency. Subjects taught in Chinese are taught by a bilingual Chinese/English teacher with native or near-native proficiency in Chinese. Art, music, health, and physical education are taught in English or Chinese.

Classroom Materials and Other Resources

By Yu-Lan Lin

n an immersion program's grades K–6, three things happen simultaneously. Understanding these three areas will help educators develop curricula and identify the materials and resources they'll need to support the program. First, content knowledge develops, including core concepts in math, science, social studies, and so on. Second, students learn content areas in Chinese; their academic language and social language are introduced at the same time. Third, students undertake pre-reading and pre-writing, then reading and writing.

When educators identify materials, they should keep another rule of three in mind: materials should be appropriate for age, grade, and language level. For instance, some materials developed for native Chinese children could be age-appropriate but too difficult for American students to read. Of course, in a school setting there should be a variety of books, graded reading materials, longer books, and independent reading materials.

Articulation, Alignment, Authenticity, Adoption, and Adaption

Before finding suitable materials an immersion school must have well-articulated curricula in place. Regardless of the entry point or ending point, an uninterrupted, sequential curriculum that connects from the lowest to the highest level of the program needs to be secured. This articulation of the school curriculum needs to be based on a solid alignment with the standards set for each subject area, as well as for language development in both Chinese and English.

Today, many states are aligning with the newly developed Common Core State Standards in English language and mathematics. Some states are also aligning their social studies, science, and world languages standards. In the next few years, all curriculum areas will need to align with not only the national standards, but also the Common Core State Standards.

Once an aligned and articulated curriculum is in place, an immersion school can begin to identify teaching materials and resources. Authentically Chinese language materials make a big impact—by authentic, we mean material that is created by native speakers for native speakers. If teachers find something that's too difficult for students' current use, they should examine it to see if the content, topic, or text merit adapting. When adopting and subsequently adapting such materials, conscientious teachers should select content based on their students' readiness, interest, and learning styles.

Selection Criteria

Whether purchased or prepared by program teachers, the materials for immersion students should meet the following criteria.

- Rich content, including subject specific content such as math, science, biology, people and places near and far, and so on
- Engaging and interesting content
- Stories with an English equivalent
- Stories that connect with students' lives

- Material that reflects Chinese culture and other cultures
- Reading that has specific language learning objectives
- Reading for study and for pleasure

There are several strong advantages to teachers making their own materials. Since teachers understand the curriculum best, they will carefully match the materials to the students' needs. Teachers will have a satisfying sense of ownership, and they can continue to refine the materials for the next round of teaching. Since most materials can be saved and shared digitally, teachers can pool their resources and even organize a group to share their materials.

It's also possible to buy materials from publishers based in Singapore, Hong Kong, and China, which often have editions for Chinese language learners. While this sounds like an easy solution, it does involve some potentially expensive trial and error. There is no way to guarantee finding materials of the right content, age-appropriateness, and level of difficulty for your students. Sometimes, a school purchases a lot of materials in order to find something useful. Textbooks are a safe though limited bet; support materials can be the most time-consuming to trace.

Textbooks

When selecting textbooks, there are many considerations. Some districts require the same textbook be used by both Chinese and English classrooms. In this case, the materials need to be translated by the Chinese teacher. Some programs teach the same content twice, in Chinese with one textbook, in English with another. Immersion teachers who have done translations might be willing to share their work.

If existing materials are designed for a long sequence over many grades, it's the teacher's responsibility to choose the appropriate content at the right time, and not be bound by the order and sequence laid out in the textbook itself.



Technology

As in so many fields, effective use of technology can make a major impact on a Chinese immersion program. As teachers take the lead in adopting new programs or digital offerings, they should think of how these new tools will capture students' interest, improve their listening comprehension, improve their stroke order while writing, and expose them to authentic voices. The sheer variety is helpful, as different students respond to different activities. Below are some possibilities to consider.

- Individual whiteboards, combined with transparent sleeves can be an inexpensive way to efficiently engage students, as with Sudoku, pair work, and group work.
- iPads have a lot of potential to supplement or even replace technologies like SmartBoard.
- Multimedia or cartoon websites and apps aid literacy and comprehension.
- Free technology like Skype can be brought in to connect students.

Key Information Resources

By Robin Harvey

hile many resources are available for immersion educators, little research has been done on Chinese immersion programs, and few resources are available. In this section you will find lists of and links to (1) Chinese-specific resources and professional development and training; (2) articles and tools for understanding and advocating for immersion programs; (3) national and regional organizations which focus on immersion education; (4) directories of immersion programs; and (5) bibliographies of resources for immersion education.

Chinese-Specific Resources and Professional Development

The Center for Advanced Research on Language Acquisition (CARLA) Summer Institutes

carla.umn.edu/institutes/index.html

CARLA's Summer Institute offerings include "Immersion 101 for Chinese and Japanese: An Introduction to Immersion Teaching." CARLA's website offers online access to Minnesota Mandarin Immersion Collaborative (MMIC) Engineering is Elementary® Units, which are Science, Technology, Engineering, and Math (STEM) units developed originally by the Boston Museum of Science and then repurposed with permission for elementary Mandarin immersion programs.

STARTALK Summer Training Programs

startalk.umd.edu

STARTALK, an initiative of the National Security Language Initiative (NSLI), funds summer training programs across the country for Chinese immersion teachers.

The Mandarin Institute

mandarininstitute.org

themandarincenter.org

The Mandarin Institute provides training and support for Chinese immersion and foreign language teachers and programs, and supports The Mandarin Center, an online site for networking and resources.

Chinese Language Flagship Programs

thelanguageflagship.org/k-12-programs
A national consortium led by the Brigham Young
University Chinese Flagship program and Utah
Chinese Dual Language Immersion is developing an
articulated model for immersion education in the early
grades followed by "enhanced language instruction" in
the later grades.

State and local resources may also be available as Chinese immersion programs become more prevalent. The programs already listed in this guide are generally willing and able to share their expertise, including:

Utah Chinese Dual Language Immersion utahchineseimmersion.org

Portland Public Schools Chinese Immersion www.pps.k12.or.us/departments/immersion/1138.htm

In addition to these immersion program resources, Chinesespecific support and resources (though not necessarily immersion support) may be available in the following places:

Chinese Language Teachers Association (CLTA), both national and regional chapters

Confucius Institutes (most often housed at universities)

NYU's Project for Developing Chinese Language Teachers steinhardt.nyu.edu/teachlearn/dclt

Publications and Online Guides to Immersion Education

These selected resources provide a place to start your research into dual language immersion education. These are tools for understanding the principles of dual language education, and may guide you in selecting the appropriate program type, advocating for it with parents and community, and developing and assessing your program.

What Is Dual Language?

dual-language.org/what_is.htm

The NDLC online primer to dual language immersion education.

Guiding Principles for Dual Language Education www.cal.org/twi/guidingprinciples.htm

Glossary of Terms in Dual Language Education www.cal.org/twi/glossary.htm

What Parents Want to Know About Foreign Language Immersion Programs

www.cal.org/resources/digest/0304fortune.html

Elementary Immersion Learning Strategies Guide nclrc.org/eils/index.html

Implementing Two-Way Immersion Programs in Secondary Schools

carla.umn.edu/immersion/acie/vol6/bridge-6%283%29.pdf

Two-Way Immersion Toolkit www.cal.org/twi/toolkit/CI/QA/intro.htm

Evaluator's Toolkit for Dual Language Programs www.cal.org/twi/EvalToolkit

Organizations Providing Resources for Immersion Education

American Council on Teaching Foreign Languages (ACTFL)

www.actfl.org

ACTFL hosts a Dual Language Immersion Special Interest Group for members (additional \$5 per year), an annual conference offering presentations on immersion education (including Chinese immersion), and a project to align the ACTFL National Standards for foreign language education to the new Common Core standards.

The Center for Applied Linguistics (CAL)

www.cal.org/twi

The CAL website provides research findings and resources for two-way immersion programs.

The Center for Advanced Research on Language Acquisition (CARLA)

carla.umn.edu/immersion/index.html

The University of Minnesota's Immersion Research and Professional Development Project at CARLA provides resources and professional development for immersion educators, through the following programs:

- Summer Institutes
- American Council on Immersion Education (ACIE) is a network for immersion educators and all those interested in immersion education; the ACIE website hosts the extensive archives of the ACIE newsletter, including a theme issue on Mandarin immersion education.
 - carla.umn.edu/immersion/acie/theme issues/2008.pdf
- International Conference on Language Immersion Education
- Struggling Immersion Learners Resources

Many state and regional organizations also provide professional development and resources for immersion education, including:

Public Schools of North Carolina

seclang.ncwiseowl.org/resources/dual_language_ immersion_programs

Public schools of North Carolina developed a standards-based K–5 dual language curriculum, intended for use in any modern language immersion program; the curriculum is available online.



Dual Language Education of New Mexico dlenm.org

The Illinois Resource Center thecenterweb.org/irc

Two-Way CABE twowaycabe.org

Directory of Immersion Programs

CAL maintains directories of immersion programs in K–12 schools in the United States:

- Directory of Foreign Language Immersion Programs in US Schools
 - www.cal.org/resources/immersion
- Directory of Two-Way Bilingual Immersion Programs in the United States www.cal.org/twi/directory

In addition, many states maintain their own directories of immersion programs.

Bibliographies on Language Immersion Education

CAL Bibliography of Two-Way Immersion Research Literature www.cal.org/twi/pnb.htm

CARLA Bibliographies

carla.umn.edu/immersion/bibs/search.php

- One-way Language Immersion
- Two-Way Bilingual Immersion
- Indigenous Immersion
- Struggling Learners and Language Immersion Education

