

Making Middle and High School Mandarin Immersion Work

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Introduction

Effectively engaging adolescents and nurturing their academic, cognitive, and social development is a challenge for any educational program. Doing so in a bilingual program can even be more challenging. With over 200 Mandarin immersion programs emerging in elementary schools over the past decade in a variety of contexts (Weise, 2018; also see CELIN Online Directory of Student Programs, <https://asiasociety.org/china-learning-initiatives/find-or-document-program>), a virtual tidal wave of Mandarin immersion students are moving into the secondary school grades (6-12). During this transitional time, many Chinese immersion programs are struggling to retain students, keep them focused on school, and continue to develop a high level of language proficiency, cultural knowledge, and ability to grapple with more abstract and rigorous content in both languages (Chinese and English).

This Brief first describes the challenges of Mandarin immersion education in the middle and high school years, in keeping adolescents engaged and motivated to continue their immersion language studies and moving to the advanced level of proficiency. By examining two different school districts' efforts to articulate a K-12 Mandarin immersion program, this Brief provides examples and guidance on how secondary school

Mandarin immersion can overcome the challenges and reach the goals that educators and families aim to achieve.

Developing Immersion Programs in Middle and High School

Beginning a Mandarin immersion program at an elementary school generates significant and focused excitement and energy. Parents making the decision to enroll their five-year-old child in a program that promises a unique bilingual educational experience, with long-term cognitive, academic, and economic benefits, clamor to complete lottery applications. Staff at both the school and district level dedicate considerable time to developing the curriculum and overall program. Community members and organizations, possibly along with the local media, heighten awareness of and interest in this innovative educational program that moves away from a conventional monolingual approach to language learning to an international and forward-looking investment in the community's future. English-speaking parents are awed by how quickly and easily their children seem to acquire this difficult tonal and character-based language. Chinese-speaking parents are thrilled that their children are learning the academic language and literacy skills of their home language/mother tongue.

However, this novelty wears off over time. As students begin to transition into adolescence, they (and sometimes their families) begin to question and resist what was “cute and fun” in elementary school and wonder whether continuing with the immersion program is right for them. This is also a developmental time, when young students are growing cognitively and emotionally. Middle and high school students, who are developing into abstract adult-like thinkers, complain that they can no longer speak Chinese as fluently as they did when they were in elementary school.

The challenges of continuing a Mandarin immersion program, and maintaining student engagement and motivation during this time span, increase dramatically. For various reasons, middle and high schools struggle to offer more than one to two periods of Mandarin classes a day. Less time focusing on the language leads to slower language development. The learning of subject matter in the language requires greater amounts of reading and academic vocabulary, which makes finding linguistically and developmentally appropriate curriculum and materials incredibly difficult. Adopting textbooks from China is inappropriate, given state and district standards and the level of language used in the textbooks. Adolescents naturally push back and test the accepted norms in learning to become an adult. Sometimes, having “immersion siblings” (students in the same grade level learning the language, which can become like family) supports a positive learning environment, and sometimes it does not. In the world of Mandarin immersion, these compounding challenges can lead to student and teacher frustration, lack of proficiency development, and high levels of attrition, which can jeopardize the stability of the middle and high school portion of a K-12 Mandarin immersion program.

Despite these seemingly overwhelming challenges, middle and high school Mandarin immersion can work and can result in the outcomes originally expected by the school and parents. Reflecting back on the successes and challenges of designing, planning, and implementing middle and high school Mandarin immersion programs, two educational leaders from vastly different contexts share their stories and lessons

learned. The first description focuses on the Mandarin immersion program in a suburban school district in the Midwest (Minnetonka Public Schools). The second describes experiences at a major urban school district in the Northwest (Portland Public Schools).

Minnetonka Public Schools

Context and Overview

Minnetonka Public Schools is a mid-sized suburban school district located approximately 20 minutes west of Minneapolis, Minnesota. The district serves 10 small communities, with a population of slightly more than 10,000 students. Launched in grades K and 1 in the 2007-2008 school year in two of the district’s six elementary schools (the other four launched Spanish immersion programs), Minnetonka opted for full-immersion, school-within-a-school Mandarin programs. Each year, another grade was added in which Mandarin or Spanish was offered. The only time during the instructional school day in grades K-2 when students are taught in English is during specials (Physical Education, Art, Music, etc.). When students reach grade 3, they begin to receive approximately 60 minutes of English instruction each day. In addition to achieving high levels of Mandarin or Spanish language fluency, based on the American Council of Teachers of Foreign Languages (ACTFL) Proficiency Guidelines (2012), Minnetonka’s immersion students regularly perform better than students in the English-only program on traditional reading and math benchmarks. In the inaugural years of immersion in Minnetonka, approximately 25% of all kindergarten enrollments were in the immersion programs; in the 2017-2018 school year, over 50% of the district’s 800 kindergarten enrollments are in the immersion programs.

In the initial planning and implementation years, district leaders faced significant resistance from segments of the community who did not see the value of language immersion. However, they overcame these challenges by ensuring that the program shift would better prepare students for a global future. Furthermore, they ensured community members that

the curricula used in both Chinese and Spanish immersion classes would align tightly with the curricula in the English classes. They emphasized that additional taxpayer dollars would not be spent on the immersion programs. In that spirit, the district does not employ an Immersion Coordinator or an Immersion Director. Instead, members of the Teaching and Learning team provide leadership and professional development for immersion teachers that parallels the English program. In every way, immersion is a core part of the instructional program in Minnetonka.

Both of the district’s middle schools introduced language immersion in the 2012-2013 school year, and the high school welcomed its first cohort of Spanish and Chinese immersion students in the 2015-2016 school year. At the secondary school level, students reach an age of maturity when they are more involved in academic decisions and may want to spend more of their academic day mixing with students from other programs. After significant discussion and debate about the appropriate amount of time for target language instruction, the district chose to design a middle school immersion program with one period of Immersion Language Arts/Social Studies that would extend into an advisory period. This extended period would allow the teachers to cover two content areas in what would essentially be only one instructional period. The prevailing theory was that middle school students would leave the immersion program unless they believed that they had ample time to mix socially with non-immersion students. Although it is difficult to know whether or not this theory has been proven to be true, target language achievement has continued to grow, and enrollment in the program has stayed constant.

Over the past five years, despite the reduction in instructional minutes in Mandarin and Spanish from elementary to secondary school, middle school academic performance in these languages has produced results, by taking the STAMP test (<https://stamp4s.avantassessment.com/avant/do/samplelogin>), that match or exceed the benchmarking goals in writing, listening, and speaking provided by the American Council of Teachers of Foreign Languages (ACTFL). An example of this benchmarking can be

seen in Figure 1 (8th Grade Chinese Immersion Cohort – Listening and Speaking) and Figure 2 (8th Grade Chinese Immersion Cohort – Reading and Writing). These figures focus on the performance of Minnetonka’s current Chinese Immersion cohort, tracking their progress from 6th grade to 8th grade and comparing them to the ACTFL national benchmark.

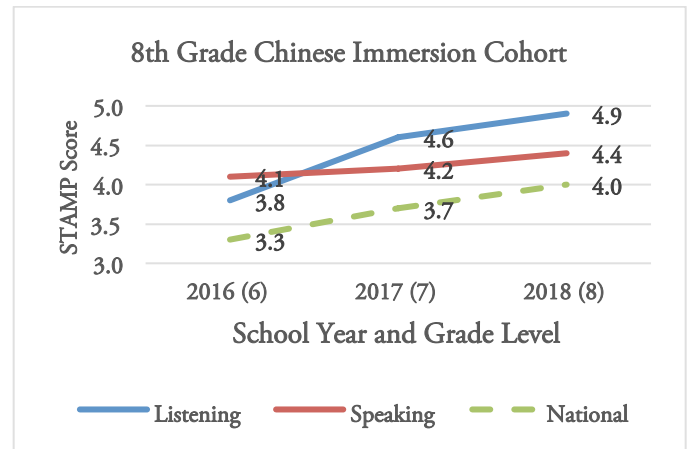


Figure 1. Minnetonka’s 2016-2018 Mean Score Sub-Test Results for Chinese Immersion Grade 8 Cohort, Listening and Speaking

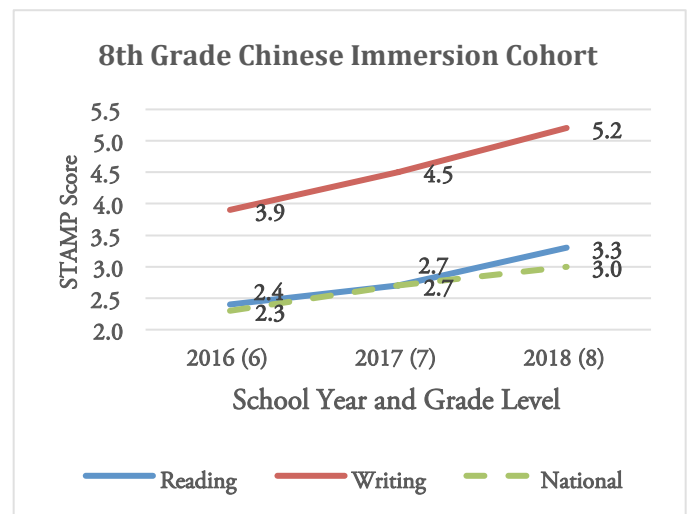


Figure 2. Minnetonka’s 2016-2018 Mean Score Sub-Test Results for Chinese Immersion Grade 8 Cohort, Reading and Writing

In Figures 1 and 2, the green dotted line shows the target identified by ACTFL (2012) for Level 4 complexity languages such as Mandarin. Minnetonka students in 8th grade have consistently performed at

or above ACTFL's standard. As this cohort of students moved from 6th grade to 7th grade, performance in the area of speaking provides evidence of a drop in proficiency compared to listening performance. Student performance in reading aligns with the ACTFL standard, but is the lowest of the four strands for Minnetonka students. In writing and listening, Minnetonka students perform as much as two proficiency levels above the ACTFL standard, a significant accomplishment.

During the 2015-2016 school year, Minnetonka's language immersion program entered Minnetonka High School (the district's only high school), with a cohort of approximately 120 Spanish immersion students and 60 Chinese immersion students. As the immersion program extends into the high school years, district staff are continuously challenged by the complexity of the scheduling process and the high demands of staffing and competing student interests. High school students can choose between a wide range of engaging and impactful opportunities, including the VANTAGE program (a profession-based immersive program where language immersion students have the opportunity to use their target language skills as they work on authentic business problems provided by local and national corporate partners), performing and visual arts programs, and the Minnetonka Research program. Throughout their high school years, students choose between their immersion coursework and these other attractive options. Therefore, expansion into high school required a number of improvements and additions, including designing and launching three new courses at Minnetonka High School in each language, Mandarin and Spanish. In addition to this expansion, the program was improved through the refinement of curriculum and assessments and introduction of new immersion staff members.

Making Learning Meaningful, Purposeful, and Real

Minnetonka's immersion team is committed to building a highly engaging and empowering set of experiences at the secondary school level. When students reach middle school, the learning environment shifts toward application of learning and production for authentic audiences. In addition to these instructional enhancements, immersion team members promote opportunities for secondary school students in the areas of state, national, and international recognition for their target language skills. Finally, the immersion team meets regularly with students to gain feedback on the current menu of elective course options and to learn about ways to improve the student experience at the secondary level. The following opportunities are available to immersion students in middle and high school.

Study-Abroad Opportunities

In an effort to engage immersion students on a social and cultural level and to make learning meaningful, purposeful, and real, study-abroad options were introduced during Spring Break at the middle schools. These opportunities provide students with the chance to deepen their understanding of and appreciation for the countries where the immersion language is spoken. At Minnetonka High School, an elective course was designed that aligns with a summer study-abroad opportunity. This course offers Chinese immersion students the opportunity to continue their language learning experience in a context abroad, while earning credit toward graduation. In previous years, immersion students have had opportunities to travel abroad and use their language in an authentic context, but they did not complete coursework, produce a final project, or receive credit for the travel experience. The change to offering a credit-bearing course makes the prospect of a travel component in the high school immersion program unique and different from the elementary and middle school travel experiences.

Minnesota Bilingual Seal

In addition to the new courses added to the catalogue, Minnetonka's immersion students are also eligible for the State of Minnesota Bilingual Seal and are strong candidates for the International Baccalaureate program IB Bilingual Diploma. Minnetonka High School counselors work with the immersion students to help them design a four-year plan that best suits their skills and interests. In June 2015, the Minnesota

Bilingual and Multilingual Seals were legislated. In 2009, the Minnesota World Language Proficiency Certificate was created as an official recognition by the state of Minnesota. The seals are awarded for multiple reasons. The Bilingual Seal is awarded for proficiency in another language in addition to English, while the Multilingual Seal is awarded for proficiency in two or more languages in addition to English. Figure 3 shows the criteria for earning the different levels of the Bilingual Seal, using the STAMP test.

Award Type	ACTFL Proficiency Levels (STAMP Test)	AP Language Exams	IB Diploma
MN World Language Proficiency Certificate	Intermediate Low (STAMP score 4)	Intermediate Low (AP score 3)	Intermediate Low (IB score 3 on Standard Level exam)
Gold Seal	Intermediate High (STAMP score 6)	Intermediate High (AP score 4)	Intermediate High (IB score 4 or 5 on Standard Level exam)
Platinum Seal	Advanced Low (STAMP score 7)	Advanced Low (AP score 5)	Advanced Low (IB score 4 or above on Higher Level exam) (IB score of 6 or 7 on Standard Level exam)

Figure 3. Criteria for Earning the Bilingual Seal in Minnesota

Bilingual IB Diploma

The Bilingual International Baccalaureate (IB) Diploma provides the opportunity for students to showcase their language abilities in more than one language. A Bilingual IB Diploma is awarded to a successful candidate who fulfills one or both of the following criteria:

- Completion of two languages selected from group 1 (Literature). The candidate must attain a grade 3 or higher in both.
- Completion of one of the subjects from group 3 (Individual and Societies) or group 4 (Sciences) in a language that is not the same as the candidate's group 1 language (Literature). The candidate must attain a grade 3 or higher in both the group 1 language and the subject from group 3 or 4.

In the 2017-2018 school year, 28% of the IB Diplomas awarded globally were Bilingual Diplomas. This diploma is especially appropriate for students who are bilingual, with prior knowledge of two or more languages, and can be advantageous for non-native speakers of a non-English language who are applying to study at universities that require evidence of proficiency in the language of instruction. As noted in the section above, however, the challenges associated with Chinese immersion students achieving the Bilingual IB Diploma are two-fold: Secondary school students have a range of other options when they reach high school and are often forced to choose between top interests; and the rigor of the courses reaches levels that require a high degree of focus and commitment.

Chinese Immersion Elective Courses at the High School

As families continue to seek out the full-immersion experience found in Minnetonka’s elementary schools, it is important that the secondary schools (Minnetonka Middle School East, Minnetonka Middle School West, and Minnetonka High School) continue to offer world-class opportunities for immersion students who have reached a high level of target language fluency. During the 2016-2017 school year, Minnetonka added new immersion courses to the high school catalogue, and new opportunities have been identified for students to not

only grow in their immersion language but also to apply their learning in different content areas.

IB Language and Literature SL & HL, Language A, Chinese Immersion is a two-year standard level (SL) course that provides the option to test at the high level (HL) at the end of year two for advanced students. This course is a continuation of the Chinese Language Arts course offerings at Minnetonka High School and is designed to follow Immersion AP and Humanities courses in the Language Arts track. It is available for Chinese immersion students during their junior and senior years. Figure 4 shows Chinese Language Arts Offerings in grades 9-12 and Elective Offerings in grades 10-12.

Chinese Language Arts Offerings			
Grade 9	Grade 10	Grade 11	Grade 12
AP Chinese Language and Culture →	Chinese Humanities Honors → Elective options	IB Chinese Language & Literature SL (year 1) → Elective options	IB Chinese Language & Literature SL (year 2) Elective options
Chinese Immersion Language Arts 9 (CHILA 9) →	AP Chinese Language and Culture → Elective options	Chinese Humanities Honors → IB Chinese Language & Literature SL (year 1) → Elective options	IB Chinese Language & Literature SL (year 2) Elective options
Elective Offerings Open to Chinese Immersion Students, Beginning in Grade 10			
<ul style="list-style-type: none"> Chinese Film and Culture (1 semester) Introduction to Chinese Politics (1 semester) Chinese Conversation and Composition (1 semester) MHS Immersion Program Abroad - China (½ credit, 2nd semester - June travel) 		VANTAGE - The company project in the following courses will be completed in Chinese. <ul style="list-style-type: none"> Business in a Global Economy Marketing 	

Figure 4. Chinese Language Offerings in High School – Minnetonka Public Schools

Setting Clear Targets and Empowering Students

Each year, the language fluency of the students in the immersion program is measured against the ACTFL Proficiency Guidelines and is reported to students and families, compared with established district benchmarks. Minnetonka’s focus on fluency targets allows the district to communicate clear performance and proficiency expectations and to report regularly on achievement aligned with those expectations. Although this is an important component of the district’s commitment to continuous improvement, it also sets a high standard for ensuring that all students reach grade-level goals. The district uses the following assessment tools for the Chinese immersion program. (Links to these and other assessment tools used in Chinese immersion programs are provided in the

CELIN Brief, *Mapping Chinese Language Learning Outcomes in Grades K-12*, p. 12

<https://asiasociety.org/files/uploads/522files/2016-celin-brief-mapping-chinese-language-learning-outcomes-in-grades-k-12.pdf>.)

- Grades 4, 5, 7, 8, 9, 10 - Hanyu Shuiping Kaoshi, HSK
- Grades 3-5 - ACTFL Assessment of Performance Toward Proficiency in Languages (AAPPL)
- Grades 6-8 - Avant Standards-Based Measurement of Proficiency (STAMP)
- Grades 9-12 – College Board Advanced Placement (AP) and ACTFL Oral Proficiency Interview (OPI)

AP Exam Results

Chinese immersion students in Minnetonka typically take the AP Chinese Language Exam in grade 9, although some students take an extra year of study (in grade 10) before taking the exam. Results of the most recent exam show that Minnetonka mean scores have trended similarly to the Global means. Chinese immersion students improved from 2016 to 2017, increasing the mean score from 3.68 to 3.78, while the Global mean increased from 4.31 to 4.35 on a scale of 1-5. Typically, Minnetonka students score above the Global mean, so the current status of AP Chinese Language Exam scores is a point of concern.

To add further perspective, Chinese immersion students in grade 9 (N=35) earned a 4.1 average exam score, and grade 10 Chinese immersion students (N=6) earned an average score of 3.0 on the AP Chinese Language and Culture Exam. Grade 9 students were within two tenths of a point from the Global average on an exam that is taken primarily by high school juniors and seniors worldwide. One potential solution is to delay the administration of the AP Chinese Language Exam for one year, so that students are older and more mature when they take the test. More detailed results in 2016 and 2017 are shown in Figure 5.

Score	2016 MHS N	2016 MHS %	2016 Global N	2016 Global %	2017 MHS N	2017 MHS %	2017 Global N	2017 Global %
5	5	16.1	8,261	62.6	13	28.9	9,396	68.1
4	11	35.5	2,166	16.4	12	26.7	1,622	11.8
3	15	48.4	1,908	14.5	17	37.7	1,689	12.2
2	0	0.0	348	2.6	3	6.7	444	3.2
1	0	0.0	508	3.9	0	0.0	642	4.7
Total	31	100.0	13,191	100.0	45	100.0	13,793	100.0
Mean	3.68		4.31		3.78		4.35	

Figure 5. Minnetonka High School (MHS) Chinese Immersion Chinese Language and Culture Exam Results

Integrated Performance Assessments

An important improvement in measuring student progress in language fluency has been the use of integrated performance assessments (IPA). This performance-based approach to assessing language fluency is aligned with ACTFL Proficiency Guidelines and provides important information about individual student performance. The emphasis on demonstration of integrated reading, writing, listening, and speaking skills allows the immersion teacher to be efficient with instructional time, and professional development for staff helps to align their instruction with the ACTFL guidelines.

On an IPA, students are assigned three to five tasks that are aligned within a single theme or content area, reflecting the manner in which students naturally acquire and use the language in the real world or the classroom. Each task provides the information and elicits the linguistic interaction that is necessary for students to complete the task, as seen in the sample in Figure 6. These performance-based assessments include scoring rubrics that rate performance in terms of whether it meets expectations, exceeds expectations, or does not meet expectations for the task

STANDARDS-BASED INTEGRATED PERFORMANCE ASSESSMENT PLAN: SPRING

Grade Level – Proficiency Level – Sequence in Year	Grade: Kindergarten	Targeted Proficiency Level: Novice Low/Mid	Sequence in Year: April/May
Theme and Topic	Farm Animals (Language Arts & Social Studies)		
Essential Question	What is a farm? What are farm animals?		
Content/Culture Goals <i>What should students know and be able to do by the end of the unit?</i>	<ul style="list-style-type: none"> Identify the vocabulary words: I, see, farm, cow, cat, dog, horse, pig, chicken, sheep, duck, goat Name the vocabulary words: I see, farm, cow, cat, dog, horse, pig, chicken, sheep, duck, goat Copy the vocabulary sentence: I see a... farm, cow, cat, dog, horse, pig, chicken, sheep, duck, goat Write "I see a _____." 		
Performance Assessment <i>Do these tasks allow students to demonstrate how well they have met the goals of the unit? The performance assessment tasks are designed to be integrated throughout the instructional unit. The interpretive tasks are designed to inform the content of the presentational and interpersonal tasks.</i>	<p style="text-align: center;">Interpretive Task (Listening and Reading)</p> <ul style="list-style-type: none"> Recognize the pictures with prompt from teacher and match the words to pictures. Material: Identify/Matching worksheet. Directions: For Listening, the teacher says the name of a farm animal on the worksheet and student points to picture of that farm animal. For Reading, the student reads the word and draws a line to the corresponding picture. <p style="text-align: center;">Presentational Task (Speaking and Writing)</p> <ul style="list-style-type: none"> Writing Task 1: Copy the phrase "I see a..." Writing Task 2: "I see a..." open write and draw Material: ClipArt Farm Picture & Writing Worksheet Directions: Put ClipArt Farm Scene on SmartBoard. Ask students to write the phrase "I see a...". Encourage them to write as many farm animals as they can. Speaking Task: Present Student-Made Farm Scene to the class <p style="text-align: center;">Interpersonal Task (Speaking)</p> <ul style="list-style-type: none"> Teacher shows the ClipArt Farm Picture and student describes the picture to the teacher (one-on-one). The teacher can ask "What is this?" and "What do you see?" 		
Connections to Common Core			

Figure 6. Minnetonka Sample Integrated Performance Assessment: Kindergarten in April/May

Program Challenges

Despite its numerous high-quality components and successes, the Minnetonka Public Schools immersion program faces a number of challenges.

Recruiting and Hiring Secondary School Teachers

As the immersion program has moved into the secondary schools, Minnetonka has struggled to find highly qualified teachers in core content areas who are also highly proficient in the immersion languages. This has resulted in personnel changes in each of the six years that the program has been implemented at the secondary school level. In Year Four, the district has finally reached a high level of satisfaction with the team of immersion teachers who deliver instruction at the secondary school level. As the program grows, however, and eventually reaches 400-500 immersion students (1/3 of whom are Chinese immersion) at each grade level, the district will require more than twice the number of secondary school immersion teachers than it currently employs.

Providing a Wide Range of Pathways for Diverse Learners

As students move into the secondary school years, the range of ability levels widens, as well as competition with other interests for academic time slots. Therefore, Minnetonka has made it a priority to differentiate instruction in the middle school classes and to offer a range of pathways at the high school. District administrators work closely with students to determine their satisfaction with specific elective courses and pathway options, so that improvements can be made and new opportunities can be created. As much as possible, Minnetonka focuses on the student experience and makes adjustments based on student input.

Helping All Students Achieve Desired Outcomes

As noted above, Minnetonka's Chinese immersion students are not yet achieving the level of success on the AP Chinese Language Exam that district leaders expected they would achieve. Throughout the K-12 journey, target language fluency is carefully mapped in all four modes (reading, writing, listening, speaking), and immersion staff will continue to analyze the internal benchmarks to locate areas for improvement. During the district's 11 years of commitment to immersion language development, there have often been moments of sub-optimal outcomes followed by analysis, retooling, and improvement.

Summary

As Minnetonka adds the final year to its K-12 Chinese immersion scope and sequence in the 2018-2019 school year, district leaders are optimistic about the future of the program while also being committed to addressing the ongoing challenges. The three challenges described above -- targeted teacher hiring, engaging and rigorous elective coursework, and globally competitive AP exam scores -- will continue to be the focus of district efforts to realize the dream of a robust K-12 Chinese immersion program.

Without question, the program has become a destination for young families seeking a unique and impactful global learning experience for their children, and this type of program has the potential to offer the same reward to other districts that have the same courageous vision. Minnetonka's model shows that a K-12 Chinese immersion program is not only possible, but that it can transform learning for students in a way that is highly valued by the community and strongly aligned with 21st century student success.

Portland Public Schools

Context and Overview

Portland Public Schools (PPS) is an urban district that enrolls over 50,000 students in grades PreK-12 and is the largest school district in Oregon. PPS initiated its first immersion program over 30 years ago and now operates 16 immersion programs in five different languages. Three of these programs are Mandarin immersion. Over 20% of PPS students entering kindergarten now enroll in immersion programs across the city, and over 11% of all students in grades K-12 are enrolled in immersion programs. The first of the Mandarin immersion programs began in 1998, as a fledgling program of 24 grade K-1 students and was one of the first public school Mandarin immersion programs in the country. In 2006, the federally funded Language Flagship program awarded the University of Oregon (UO) and PPS a grant to articulate a K-16 Chinese Flagship program that would result in university graduates with superior or professional proficiency in Mandarin Chinese. With the support of this grant, PPS continues to build and refine the secondary school program (grades 6-12) while also expanding the K-5 portion of the program, with over 40 PPS graduates entering the UO Chinese Flagship program to date. Approximately 738 students are now enrolled in Mandarin immersion in grades K-12, with enrollment expected to increase significantly for many years to come.

Making Learning Meaningful, Purposeful, and Real

Initially, the middle school years of the Mandarin immersion program in PPS were rough. PPS had virtually no other Mandarin immersion programs to learn from or partner with. Low enrollment from the beginning of the program at Woodstock Elementary School resulted in unsustainable numbers of students matriculating into grade 6 and forcing the creation of blended age groups as the program pushed through middle and into high school. After many teachers' trials and errors, the language proficiency of the students in the "pioneer" class was limited and not nearly as high as needed to handle the rigor of the

content of grade-level Social Studies classes. Finding a teacher who was certified in both Mandarin and Social Studies, the two targeted content areas for immersion instruction, proved daunting, and the first teacher stayed only one year. Students and parents frequently complained about the lack of engaging curriculum and instruction, which led to a disruptive learning environment. How do you engage and motivate these adolescents in continuing to improve their proficiency in a language and literacy that is considered one of the most difficult for native English speakers living in the United States?

With the support of the Language Flagship grant, PPS began to research and identify ways to engage and motivate these learners. Motivation research clearly showed that all learners, especially adolescents, are motivated when the learning tasks are meaningful, connected to their lives, and performed for a real audience (Dornyei, 1997; Ngeow, 1998; Noels, Clement, & Pelle, 1999; Swain & Lapkin, 1998; Yoeman, 1996). Focusing on error correction and the stroke order of individual characters does not compel most adolescent learners to improve, let alone become excited about learning. Accuracy with language is critical, but decontextualized learning does not motivate students or build their proficiency. With this fundamental premise on motivation as a guide, the PPS Mandarin immersion team worked with students, parents, and colleagues from other PPS immersion programs to revamp the curriculum and instruction.

The team developed a powerful capstone experiential learning opportunity for students in grade 8: the China Research Residency (CRR). This two-week, in-country academic experience, which integrates language, culture, and content learning, embodies the very essence of meaningful and real-life learning. A critical part of the learning experience is that beginning in grade 7, students and parents are involved in designing and planning the CRR for grade 8, in collaboration with the teacher. Empowered to set participation criteria, identify and implement fundraising activities, make travel arrangements, and consider other possible activities, students develop a real sense of ownership. In-class academic activities are articulated to develop both skills and knowledge that allow students to negotiate

the day-to-day life of modern China. Student-centered, inquiry-based projects, focused on comparing and contrasting cultures, bring great purpose to the daily class. While in China, students are not provided a tour guide or put on a tour bus, but instead are expected to use their learned language and cultural skills to go from the base city of Suzhou to various surrounding field study sites. They study maps, purchase train or bus tickets, and ask for directions when lost or unsure as they head out each day of the CRR to a new destination. Once at the field study site, they work through a series of tasks and probing questions that require them to engage with the people and places to learn about the local customs, history, and foods. An adult chaperone accompanies them, but the chaperones have been trained to be merely “guides on the side” to ensure safety and success. Most chaperones do not speak the language and are often traveling to China for the first time themselves.

The CRR does not end when the students are back in Portland. Students reflect on and synthesize their in-country learning experiences in culminating bilingual presentations for their younger peers in the program, teachers, administrators, family members, and guests, who provide a real audience. The inquiry-based project results and cultural insights gained, coupled with the sense of responsibility and confidence demonstrated after the CRR, impress the most skeptical of adults and often kindle in students a renewed sense of purpose and a reason to continue to study and learn this challenging language and culture into high school and beyond. With this highly engaging and powerful capstone project that culminates the K-8 Mandarin immersion experience, both teachers and students in the middle school program leverage it to bring a sense of purpose and meaning to the daily learning in the four walls of the classroom. The CRR moved into its 11th year in the spring, 2018.

The success of the CRR with grade 8 students then led to an even longer and more intensive high school in-country experiential learning component that is an optional summer program: Summer Institute in Yunnan (SIY). Appropriately, high school students are provided a greater sense of autonomy as they navigate

and negotiate both rural and ethnically diverse parts of southern China and find great purpose in spending a week in in-service learning that ranges from teaching children with disabilities to helping construct a school in an impoverished rural community. The SIY, offered every other summer, provides an authentic and amazing connection to Chinese language and culture, which results in significant language proficiency development. More important, it often propels students into a commitment to continuing their Mandarin language and cultural studies at the UO Chinese Flagship or other universities with high-level Chinese language programs. Some students continue expanding their language, cultural, and literacy proficiencies through study or work in China or Taiwan.

Beyond these intensive in-country experiences, teachers and parents collaborate to conduct local field trips, volunteer in the local Chinese speaking community, and facilitate hosting the sister school groups from China that help make the continued learning of Mandarin meaningful, purposeful, and real.

Setting Clear Targets and Empowering Students

Probably the greatest intrinsic motivator for adolescents, as well as any individual, is being empowered to have an impact on your language proficiency development and know when you are making progress. When immersion programs, including PPS programs, first began, little attention was given to the partner language and literacy development. Putting faith in the natural language acquisition process, many people believed that students starting at such a young age would just “naturally acquire” the language and attain native speaker-like proficiency. If students lived in the country of the language and culture, this kind of language development might be plausible, but the reality is that in most U.S. public school contexts, the focus on English language and culture dominates both schools and society in general. Students in immersion programs can and do develop impressive language proficiency, well beyond those merely studying the language in a FLES or World Language program, but it is not a given.

After learning hard lessons and building on the work of assessment guru Rick Stiggins (2005) and Jan Chappuis' book, *Seven Strategies of Assessment for Learning* (2015), PPS took the approach that students need to be empowered to be more in control of their language learning through effective assessment strategies. Teachers at the secondary school level worked for two years in a Professional Learning Community (PLC) to set clear proficiency targets for grades K-12, clearly articulate those with specific reference to the ACTFL Proficiency Guidelines and an aligned scoring rubric, provide students clear and specific feedback based on the rubric, and, most importantly, empower them to regularly evaluate and reflect on their own progress.

Over a two-year period, PPS Mandarin immersion students in middle school improved, on average, two sub-levels on the ACTFL Proficiency Scale in speaking and writing, with over 80% of students meeting the 8th grade proficiency target (Intermediate Mid) or higher for more than four consecutive years on the STAMP 4S test (Avant Assessment, <https://avantassessment.com/stamp4s>), an ACTFL

proficiency-aligned assessment that tests the four skill domains (reading, writing, speaking, and listening). As one Mandarin immersion teacher stated, "Students no longer ask what grade or points they got on a writing or speaking performance task. They now come to me and say, 'I think I performed at the Intermediate-Mid level, because I spoke in connected and complex sentences.'" Engaging in critical thinking and content-based language learning is still important, but language proficiency development in an immersion program cannot be something that simply happens to students. In order to make continued improvement, especially when there is a reduction in time spent in the language and their cognitive development far outpaces their Mandarin language development, students need to know how well they are doing and how to improve. Explicit and specific standards-referenced feedback is key. Figures 7 and 8 provide that evidence of students in PPS secondary Mandarin immersion attaining the high proficiency targets on STAMP 4S in 8th grade and on official ACTFL OPI and WPT assessments in 12th grade.

Immersion students reach intermediate partner language proficiency by grade 8

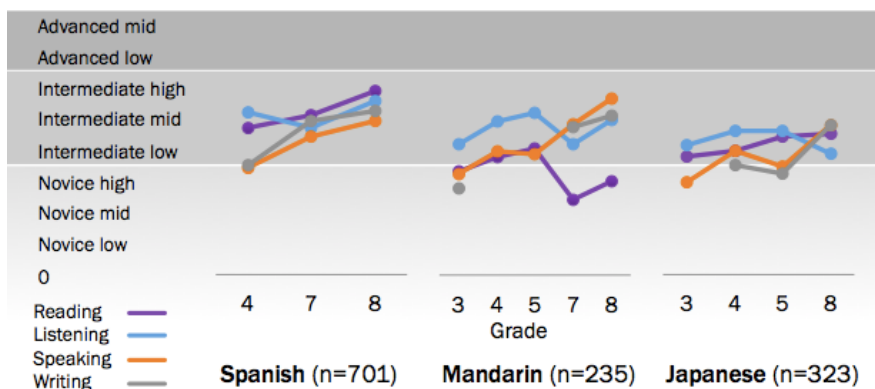


Figure 7. PPS Partner Language Proficiency Results for 7 Cohorts (2008-2015) Based on STAMP 4SE (grade 4) and STAMP 4S (grade 8)

Grade 12 Proficiency Results	OPI (2018)	WPT (2018)
Percentage Meeting or Exceeding Target (IH/AL)	61%	55%

Figure 8. Mandarin Immersion Grade 12 Results on ACTFL OPI and WPT Assessments in 2018

Explicit Milestones and Tangible Rewards

Along with setting grade-level proficiency targets and providing specific feedback, PPS also aligns clear milestones and subsequent tangible rewards that play a key role in keeping adolescent immersion students engaged and motivated to continue their learning of Mandarin. In grade 8, all immersion students now take the STAMP 4S. In addition to providing a valid external assessment of students' language proficiency development, by district policy, the STAMP 4S acts as a way to earn credits by exam by offering students the opportunity to earn up to four full-year high school world language credits prior to entering high school. Teachers in the PPS Mandarin immersion middle school program proactively inform students and parents about this targeted outcome, starting at grade 6 orientation. Integration of curriculum-embedded and weekly ACTFL proficiency-aligned performance tasks from grades 6 to 8 provides consistent and regular feedback to students and families on how a student is progressing toward this meaningful and tangible outcome.

As the program moved into high school, the PPS Mandarin immersion team also realized that success on the Advanced Placement (AP) Chinese test, a test that can result in students earning significant university credit prior to entering college, required the articulation of AP topics, starting as early as grade 6 to ensure high-level performance. Furthermore, the format of the AP test requires teachers to provide ample opportunities to practice a similar test format (timed responses to texts) that might not necessarily occur in the scope of a typical immersion content-driven curriculum. Students in the PPS Mandarin immersion program, as are all immersion students, are expected to take the AP test by grade 10, a highly appropriate time, given the proficiency targets. A 4 or 5 on the test also allows them to earn the Oregon Seal of Biliteracy. Similarly, the International Baccalaureate (IB) program, which is in place in high school, made it necessary that the high school teachers articulate the curriculum and build a specific course to ensure that Mandarin immersion students are successful on this critical college credit-bearing course. Both the AP and the IB document a student's progress and, more importantly, validate and

recognize their hard work over many years of developing a high level of proficiency, possibly resulting in their receiving university credit.

Ultimately, one of the most important outcomes for students and families is successful academic performance on state standards-based assessments in English, in core content academic subjects. Students in PPS immersion programs, including Mandarin immersion, outperform their monolingually educated peers, even when selection bias (families wanting their child to be in immersion) is taken into account. A study conducted by the Rand Corporation, looking at seven cohorts and 26,000 student records, found that by grade 5, students in PPS immersion programs advanced in English reading achievement by 7 months and by grade 8, by 9 months, almost an entire academic year. In PPS Mandarin immersion specifically, Math outcomes were also significantly higher. These results cut across all student demographics (Steele et al., 2017). Clearly, becoming bilingual does not come at a cost to academic performance in English; rather, being bilingual enhances academic outcomes.

Program Challenges

Despite significant progress in building an immersion continuation program in grades 6-12, PPS continues to face challenges in ensuring that high school students remain engaged and motivated to complete all four years of Mandarin immersion and reach the ambitious target of Advanced-level proficiency in all four skill domains. In high school, students can take only one advanced-level Mandarin language course per year. Due to budget cuts, there is currently only one teacher who teaches all four immersion courses. Large classes also make differentiating the curriculum and instruction challenging, when working with students at a wide range of proficiency and motivation levels.

To address this situation, PPS is employing a number of strategies. In collaboration with the University of Oregon's (UO) Chinese Flagship program, PPS is piloting a program that employs university Flagship Scholars as mentors, who work weekly with two or three students outside of the school day via Skype.

The purpose is to increase speaking time in the language and provide individualized instruction and more personal connections with the language and the UO Flagship program. The high school teacher provides a foundational reading assignment and prompts for students to read and then discuss with their Flagship scholar mentor. This pilot began in the winter of 2018 and will be closely monitored by both UO and PPS staff to determine its effectiveness.

Starting in the 2018-2019 school year, PPS will begin implementing a capstone project for high school juniors and seniors in the program that aligns with the Global Competencies developed by EdSteps (<http://www.globalcincinnati.org/wp-content/uploads/2017/12/education-matrix.pdf>). The concept is for students to use their language and cultural skills to design, plan, research, and implement an action research project that involves having an impact on others and the world. Students will have the option of conducting their project either locally, in the Chinese community in the Portland, Oregon area, or by participating in an in-country exchange, such as the Summer Institute in Yunnan. Projects are student-centered and self-selected. They may include topics such as childhood obesity or overfishing of the seas, but they must include a take-action component that involves communicating in Chinese both orally and in writing. UO Flagship Scholars will act as mentors, and the culminating capstone project presentation will involve seniors presenting their projects to UO Chinese Flagship professors, Flagship Scholars, and Chinese community members. The intent is for the capstone project to serve as a portfolio for applying for the UO Chinese Flagship or other Flagship programs in the United States.

Summary

Making secondary school Chinese immersion work for all students will continue to be a challenge for PPS. However, through commitment by and partnership with students, families, teachers, and school administrators, PPS has graduated many students who have enrolled in university Chinese language programs, with over 40 going into the Flagship program at UO. The goal of the Language Flagship grant project was not to create the perfect Chinese immersion program; it was, and continues to be, to create a learning model. Through this learning model, PPS has learned that committing to a long-term vision; engaging students in meaningful, purposeful, and real language and cultural learning activities; setting clear proficiency targets; and empowering students to be in control of their language learning are all keys to student and program success. Many lessons remain to be learned.

Conclusion

Making Mandarin immersion work at the secondary school level presents challenges for any program or district. With the conventional structures and practices of middle and high schools limiting the amount of time spent learning Chinese while students attempt to move from Intermediate to Advanced level proficiency, which requires far more time and intensity than moving from Novice to Intermediate, challenges with motivation and language proficiency development are inevitable. Finding effective teachers, who not only possess the necessary linguistic and content knowledge and skills but also can build positive relationships with and engage adolescents in high-level critical thinking in language and content lessons, is essential and yet quite difficult, especially

for schools and districts with few Chinese speakers in the community. Competing for time and focus in a busy adolescent's day to take the learning of Chinese language and culture outside the classroom and personalize the experience to make it real and meaningful presents many obstacles. The challenges are many, but they are not insurmountable.

Taking the lessons learned in Minnetonka and Portland Public Schools, Mandarin immersion educators looking to build effective Mandarin immersion continuation programs in grades 6-12 should consider the following recommendations:

- Set clear proficiency targets in line with the ACTFL Proficiency Guidelines and use regular formative and summative proficiency assessments to provide feedback to both learners and teachers.
- Articulate a long-term vision and program plan, to be shared with all stakeholders, especially with students.
- Re-examine the structures and course offerings of secondary schools and consider ways to provide learning opportunities (via courses or extracurricular activities or study abroad) that are attractive, meaningful, and doable for adolescent learners.
- Design or select courses, projects, materials, and resources that are authentic, language-, culture-, and content-rich, and appropriate for

the ages, cognitive abilities, and proficiency levels of students.

- Empower students to become independent language learners by making proficiency targets explicit and teaching them how to evaluate and reflect on their own language skills
- Make learning student-centered and individualized (e.g. inquiry-based projects, Skype tutors).
- Establish tangible rewards that are connected to attained proficiency development (e.g., high school credit, AP or IB, state Seal of Biliteracy), and intentionally prepare students to obtain those rewards.
- Build real-world and meaningful connections for students to use their language and cultural skills outside of the classroom.
- Identify, recruit, and support teachers who can make secondary Mandarin immersion successful for their students.

Finally, the Minnetonka and Portland cases illustrate that, when educators and district leaders commit to articulating and implementing a K-12 Mandarin immersion program, success is within reach. The determination and investment in developing multilingual and globally competent citizens will lead to innovative thinking and practices that empower all stakeholders.

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