Language Immersion in the USA: Characteristics, Challenges, and
Recommendations Related to Teacher Education

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Abstract
Language immersion is a unique form of education as it combines content-based academic instruction, inter-cultural communication, and second language education. During language immersion education, students learn various subjects through the second language medium, thus are highly exposed to the second language and cultural environment. Compared with conventional second language education, language immersion has been proven to effectively improve students' language proficiency, academic performance, and cognitive development. As a result, the number of K-12 language immersion programs in the United States (U.S.) has been growing rapidly since the 21st century. However, language immersion programs in the U.S. are facing many challenges caused by the lack of specialized teacher education programs designed for language immersion teachers. This study focuses on investigating these challenges in the fields of teaching language and content, maintaining a target language environment, and developing cross-cultural communication skills. Such challenges during both pre-service teacher preparation and in-service teacher professional development are reviewed and discussed. The results lead to various recommendations for improving the effectiveness of language immersion teacher education, whose key aspects include curriculum and instruction, field practicum experience, and inter-school collaboration.

Keywords: Language Immersion Education, Bilingual Education, Immersion Teacher Preparation, Immersion Teacher Training

Introduction

Many people believe that acquiring more than one language is an educational and social goal in many countries throughout the world and history (Kinberg, 2001). The proficiency in foreign languages and a deeper knowledge of other countries and cultures help people participate in this new global economy and confront the twenty-first-century challenges (Committee for Economic Development, 2006). To improve foreign language skills and the cultural awareness of the students in the United States of America (USA), research institutions, government agencies, educational organizations, and religious groups requested educational programs that enable students to learn languages other than English (Jackson & Malone, 2009; Pufahl & Rhodes, 2011). The United States Department of Education provided grants to promote foreign language proficiencies by developing the corresponding language programs (Jackson & Malone, 2009; Pufahl & Rhodes, 2011).

Different from traditional foreign language learning programs, language immersion programs use the target language as the medium to teach content knowledge, while students learn their majority subject matter through their second, foreign, heritage, or indigenous language (Johnson & Swain, 1997; Lyster, 2007). Immersion programs also conducted content-based language instructions and taught the school curriculum in the foreign language, so the students would learn both the subject matter and the target language at the same time (Johnson & Swain, 1997). The major goals for immersion programs were developing students' high levels of language proficiencies and academic performances in both native and target languages (Lindholm & Aclan, 1991).

Since the 1970s, immersion education has been proved as a successful tool for early language learning (Genesee, 1978). The first foreign language immersion program was founded in 1965 in Quebec, Canada (Genesee, 1985). Scholars like Genesee (1994), Johnson and Swain (1997) have stated that the initial immersion program aimed to equip English-speaking Canadian children with French proficiency, as French was spoken by the majority of Quebec's population. Later a group of parents promoted this bilingual education, which enabled English-speaking children to receive their entire instructions in French at the beginning of kindergarten and learn their first-language literacy skills starting in Grade 2 (Johnson & Swain, 1997). This model improved the target language proficiencies of the immersion students successfully; thus, immersion programs started to be progressively recognized.

From the experience of the first immersion program and other similar programs in Europe and Asia, foreign language immersion programs became popular in the 1990s in the U.S. (Johnson & Swain, 1997). The concept was extended to younger students, K-12, or even Pre-School-12 programs. In the 1990s and early 2000s, both the federal government and the U.S private sectors began to financially support the development of new programs that used these teaching methods (Reyhner, 2003). In 2011, 448 foreign language immersion programs were registered in the U.S. (Center for Applied Linguistics, 2011).

Literature Review

Language immersion programs have grown rapidly in the U.S. According to The American Councils' Research Center, the United States have more than 3600 dual language immersion programs in 44 states in 2021, among which about 80% percent are Spanish programs (Roberts, 2021). The top states that provide the greatest number of Dual language immersion

programs were California, Texas, New York, Utah, and North Carolina (Roberts, 2021). Note that this data contains only public schools, thus there are also a certain amount of private and charter immersion programs in the U.S. as well.

The common immersion programs are one-way foreign language immersion and two-way bilingual immersion. The one-way (foreign language/full/total) immersion programs enroll the students with zero or minimum immersion language proficiency and aim to achieve students' academically bi/multilingualism and bi/multi-literacy proficiencies (Tedick et al., 2011). To achieve these goals, one-way immersion programs provide lower grades (K-2) students with 100% of the target language instruction time; students are taught in the target language for any given school day (De Courcy, 2002). In detail, teachers acted as monolingual speakers and tend to respond to students in their target language (Campbell, 1984).

Two-way immersion (TWI) programs are also known as bilingual immersion and two-way bilingual programs (Christian et al., 1997). In the TWI programs, half of the class is composed of language-majority (English-dominant) speakers, while the other half comprises language minority (target language dominant) speakers (Met & Livaccari, 2012; Stewart & Livaccari, 2010). TWI aims to help students achieve high levels of proficiency in both native and target languages, high academic performance, as well as cross-cultural understanding by providing the students with content area and language arts instructions in both languages (Christian, 1996; Christian et al., 1997). In the TWI programs, the two languages are used equally for instructions and students learn their new language through natural social interactions.

The Effectiveness of Language Immersion Programs

As indicated before, the language immersion programs aimed to develop students' high levels of proficiency in both native and target languages, academic performance, as well as cross-cultural understandings. This section reviews whether these goals could be achieved, as well as their limitations.

First, research has demonstrated that language majority of students in language immersion programs developed native-like comprehension and fluency levels as well as increased second language proficiency, and in the meantime increased second language proficiency while maintaining and developing their native language (Choi et al., 2018; Fortune, 2012; C. B. Howe, 2012; Met & Livaccari, 2012). Day and Shapson (1996a) found that this was achieved by developing immersion education's curriculum, which was designed to maintain language-majority students' native language academic achievement but using the second language as a medium to conduct instruction. In this case, compared with other forms of foreign language programs, language immersion was identified as the most effective approach for the students to achieve higher language proficiencies and gain more complex-functional second language skills (Fortune & Tedick, 2003; Genesee, 1987, 1994; Met & Lorenz, 1997; Stewart & Livaccari, 2010).

Note that here, language skills included listening, speaking, reading, and writing (Swain, 1998). Within these skill areas, immersion students' listening was the most competent skill, which achieved near-native proficiency. Their reading comprehension was almost equivalent to that of native speakers (MacFarlane & Wesche, 1995; Pawley, 1985). Although the above researchers believed immersion students became proficient in the target language, other

studies also argued that immersion students did not achieve full proficiency in some language skill areas. As Cohen (1996), Cummins (2000), and Pawley (1985) indicated previously, immersion students developed near-native listening and reading skills. However, the same studies also pointed out the gaps in their foreign language speaking and writing skills. Specifically, immersion students' speaking was the weakest in the four skills. Although immersion students gained their language fluency and could communicate in the target language effectively, their usage of the target language contained lexical errors, thus resulting in a lack of grammatical accuracy (Day & Shapson, 1989; Kinberg, 2001; Lyster, 1987). Beyond grammatical accuracy, immersion students' target language lexicon and sentence structure were both reduced and less complex (Cohen, 1996; Fortune, 2012; Pawley, 1985). Moreover, immersion students tended to think and use the words/language structures in their native language by using the line-to-line translations (Cohen, 1996).

Secondly, a substantial amount of research has pointed out the increase in immersion students' academic learning slope and their higher achievement scores compared to the students in regular school programs (Day & Shapson, 1996b; Lindholm-Leary & Howard, 2008). For example, Lindholm-Leary (2011) stated that TWI students' academic performances were at/above grade level, and were also comparable/well-superior to their peers in non-TWI programs. Language minority students could also achieve similar or better scholastic achievement than the language majority students (Day & Shapson, 1996b). However, students' abilities to transfer the subject content from language to language were dependent on their subject matter language proficiencies (Lindholm & Aclan, 1991). Cohen (1996) provided an example of this situation, some of the immersion students pondered in their native language to solve math word problems written in their target language. In this case, students needed satisfactory reading skills in their target language to complete the translation of the tasks (Cohen, 1996). In all, the immersion students must develop full academic language proficiencies in both languages to accomplish the academic achievement that was mentioned previously, as the students' academic achievements were also limited by their subject-matter language proficiencies (Lindholm & Aclan, 1991).

Thirdly, immersion programs aimed to develop students' high levels of psychosocial and intercultural competencies (Lindholm & Aclan, 1991; Met & Livaccari, 2012). Specifically, immersion students developed their social competency and interactional skills in the process of learning the second language (Cekaite, 2017). In the meantime, they also acquired cross-cultural competencies and global perspectives in the immersion setting (Day & Shapson, 1996b; C. Howe, 2012). The same research believed language immersion programs also produced some cognitive benefits beyond fostering students' psychosocial and intercultural competencies. For example, immersion students acquired better cognitive skills in areas of mental flexibility, divergent thinking, inhibitory control, and problem-solving than those obtained by the monolingual students (Bamford & Mizokawa, 1990; Bialystok, 2001; Lazaruk, 2007; Nicolay & Poncelet, 2013; Stewart & Livaccari, 2010; Zhou & Li, 2015). Therefore, immersion programs could shape substantial cognitive foundations for immersion students (C. Howe, 2012).

Challenges of Language Immersion Programs and Teachers

One of the most challenging issues faced by language immersion programs was staffing (Fortune, 2012; Hickey & de Mejía, 2014). It has been repeatedly stated in previous literature that due to the inadequate immersion teacher preparation programs, finding the teacher candidates who were well-prepared for immersion teaching became a difficult task (Met &

Lorenz, 1997; Veilleux & Bournot-Trites, 2005). Therefore, according to these studies, immersion schools were short of language, specialist, and substitute teachers that met the qualifications for immersion teaching. Note that the pre-requisites for qualified early immersion teachers were elementary education background and native/near-native bilingual proficiency in the target language (Bernhardt & Schrier, 1992; Met & Lorenz, 1997). Due to the shortage of immersion teacher candidates who met the academic qualifications and had additional preparations, the immersion programs modified their hiring criteria and gave the priority to hiring teachers with strong language skills instead (Dolson, 1985; Veilleux & Bournot-Trites, 2005; Walker & Tedick, 2000). Admittedly, this compromise caused the struggle of unqualified teachers in immersion teaching even though it temporarily relieved the recruiting crisis.

The language immersion programs in the U.S. had two sources of immersion staff: foreign language teachers trained for secondary schools and native speakers educated abroad (Met & Lorenz, 1997). The foreign language teachers were equipped with target language proficiencies, skills, and cross-grades teaching/curricula knowledge. In the meantime, they understood the students' challenges while learning a new language. However, the foreign language teachers lacked content-related pedagogy preparations to teach subject-matter content (Liao et al., 2017). The teachers hired abroad were native speakers, who brought authentic cultural communications, global perspectives, and various pedagogy practices to the school, as they had experienced different pedagogical training abroad (Met & Lorenz, 1997; Romig, 2009). However, Zhou and Li (2015) claimed that the foreign teachers' distinct pedagogical philosophies and expectations also introduced cultural conflicts in the community.

To better understand language immersion teachers' challenges, researchers believed it was crucial to understand the role of language immersion teachers in their teaching duties. Foreign language immersion teachers supported the notion of building rich target language learning environments in addition to the pedagogy (Day & Shapson, 1996a). As the target language was not accessible to most immersion students beyond the classrooms, immersion teachers should create a target language learning environment and include social tasks/tests to promote the usage of social/academic language by the students (Met & Lorenz, 1998). In this process, the teachers acted in monolingual roles and rarely spoke the students' first language to them in the immersion setting (Dolson, 1985). Immersion teachers were also identified as content and language teachers who were accountable to balance language and content instructions (Cammarata & Tedick, 2012). Specifically, immersion teachers served as constant target language models by integrating language with content. Thus, they can teach in a second language and design their content-based lessons to engage students in utilizing the content to achieve the second language development progress (Potowski, 2004; Stein & Schools, 1999). Note that language instructions included teaching language knowledge and skills, which pre-requested the bilingual immersion teachers to be equipped with native or native-like fluency in the target language to ensure the natural flow in the classroom (Bernhardt & Schrier, 1992; Dolson, 1985; Johnson & Swain, 1997; Swain, 1998). As the students could naturally acquire the target language while being extensively exposed to the content learning, immersion education could emphasize developing students' language and literacy skills systematically during the process of teaching content through the target language (Walker & Tedick, 2000). In this case, immersion teachers needed to design thematic classes and use contextual clues, body language, and manipulatives to achieve the new language acquisition progress (Met & Lorenz, 1998). In addition, they also needed to be equipped with the grammar knowledge to notice students' grammatical errors and provide

feedback (Veilleux & Bournot-Trites, 2005). On the other hand, content instruction consisted of teaching academic content such as mathematics and social studies (Swain, 1998). Therefore, immersion teachers needed to be accountable for the content knowledge or serve as content experts, since they also needed to use the comprehensible input and negotiation of meaning extensively to convey ideas for subject matters (Lyster, 1998).

During the process of balancing content and language, immersion teachers encountered different challenges. The first challenge came from the second language acquisition process. According to the teachers in the two-way immersion programs, immersion students confronted linguistic challenges and frustrations when they failed to understand the target language during the acquisition process (R Howard & I Loeb, 1998). Thus, immersion teachers believed it was essential but challenging to match students' language levels with their cognitive development levels, along with the alignment of curriculum and materials (Walker & Tedick, 2000). The second challenge, according to Freeman-Nepay (2017), was that immersion teachers were accountable to develop students' literacy skills and proficiency levels in the target language. In the meantime, immersion teachers were also obligated to ensure students' success in standardized tests administrated in English within the same period compared to other non-immersion programs (Freeman-Nepay, 2017). To achieve the goals that were mentioned before, immersion teachers struggled with their teaching tasks and demanded more instructional time, planning periods, as well as resources that were well integrated with the content and language. However, it was hard for the immersion teachers to get available support for those struggles (Cammarata & Tedick, 2012; Freeman-Nepay, 2017; Walker & Tedick, 2000). Due to the misunderstandings caused by culture gaps, language immersion teachers identified that working with parents and American partners was another challenge beyond teaching (Wiggins et al., 2007; Zhou & Li, 2015). For instance, the TWI teachers reported their challenges in collaborating with parents, and at the same time, helping the parents understand the progress of achieving the second language proficiencies and academic goals (Howard & Loeb, 1998). The Chinese immersion teachers in the TWI program revealed their disadvantages when communicating with their American partners due to the cultural differences (Zhou & Li, 2015). Immersion teachers also addressed their pressure of external challenges and the feeling of isolation, especially those in the middle or high school immersion programs (Cammarata & Tedick, 2012).

Discussions

After exploring immersion teachers' characteristics and challenges, researchers further revealed the preparation and professional development needs of immersion teachers; these were expected to be addressed in the current immersion teacher preparation and training programs. Erben (2004) claimed that immersion teacher education should consist of (1) the initial preparation programs that provide pre-service teachers professional education, and (2) the professional development programs where in-service teachers can gain competencies in additional areas. Thus, based on the results, it is proposed that the above-mentioned challenges could be addressed from two perspectives, which are teacher preparation and in-service teacher training and professional development targeted specifically to immersion language education.

Pre-Service Teacher Preparation Programs

The growing amount of immersion programs and the demand for "highly qualified" immersion teachers led to the increased need for pre-service immersion teaching programs;

thus, some states required universities to provide this type of preparation for future immersion teachers (Cody, 2009; Freeman et al., 2014; Salomone, 1992). However, even though universities started to develop different immersion preparation programs, the inadequate of these programs still represented a challenge for the field of immersion education (Chen, 2022; Fortune, 2012; Fortune & Tedick, 2008). Note that, according to Cammarata and Tedick (2012), the elementary or secondary subject-matter education programs failed to prepare immersion teachers with critical/meaningful integration of language and content instructions in immersion education. For example, some teachers who were proficient in the target language with elementary teaching licenses started their immersion work with limited immersion pedagogy knowledge, thus making them unqualified (Cody, 2009; Lenker & Rhodes, 2007).

Immersion teacher education programs should provide coherent and distinct instructions to prepare immersion teachers and should not be identified as the extension of foreign language/general teacher education programs (e.g., adding some isolated and mandatory courses) (Day & Shapson, 1993, 1996a; Erben, 2004). For instance, the pre-service immersion teacher training could offer (1) the background and history knowledge of immersion schools, (2) the philosophy and concept of immersion teaching, and (3) the pedagogy and techniques of teaching immersion classes (Collinson, 1989; Erben, 2004; Koshiyama, 1995). Beyond the basic knowledge about immersion education, researchers proposed several key components for the immersion teacher education based on the established immersion education programs in Canada and the prototype immersion teacher training models in the U.S. (Bernhardt & Schrier, 1992; Day & Shapson, 1996b; Erben, 2001; Erben, 2004; Koshiyama, 1995; Lapkin et al., 1990; Majhanovich & Fish, 1988). To summarize, university-level immersion teacher preparation programs could help immersion teachers develop their knowledge in the following three dimensions, 1) Design curriculums to help teacher candidates understand the curriculum and instruction in the immersion setting, 2) Help teacher candidates understand and accommodate the immersion school environments, 3) Offering teacher candidates more field practicum experience in the language immersion settings.

In-service Teacher Training and Professional Developments

Due to the various requirements for immersion teachers and the lack of effective academic pre-service programs, immersion teachers highly demanded the in-service professional development as a form of immersion teacher education (Cody, 2009; De Courcy, 1997; Hickey & de Mejía, 2014; Met & Lorenz, 1997). As immersion teachers received most of their training after they started teaching in the immersion programs, the effective in-service training and mentoring also provided immersion teachers with ongoing support (Hickey, 1997, 2007; Hickey & de Mejía, 2014; Met & Lorenz, 1998).

There was a survey that explored the professional development needs of immersion teachers in Canada, which revealed that 57% of the respondents had considerable demands on the training of teaching L2 language arts. In the meantime, the training in immersion pedagogy was also identified as a requirement for professional development (Cody, 2009; Day & Shapson, 1996a; Erben, 2004). In this case, R Howard and I Loeb (1998) reported that immersion programs could provide more curriculum assistance for these new teachers who taught in the minority. For example, the immersion teachers needed observations, discussions, demonstrations, and coaches for the content-based instructions (Crandall & Tucker, 1990; Koshiyama, 1995). Fortune (2012) noted that the native and non-native immersion teachers

demanded continuous immersion language supports beyond curriculum and pedagogy training.

Hickey and de Mejía (2014) reported that immersion programs could also involve experienced and effective practitioners to share their expertise and provide high-quality and systematic ongoing training to the immersion teachers. For example, to build "well-prepared teaching professionals", qualified in-service teachers could provide contracted coaching services for the pre-service teachers on both classroom instructions and communication to parents (Bissell & Chang, 2012; Chesley & Jordan, 2012). Cammarata and Tedick (2012) claimed that immersion programs could also support teachers by involving expert curriculum staff, such as the curriculum coordinators and instructional coaches, to develop curricular frameworks and mentorship programs. Therefore, it could be concluded that both the immersion teachers and the immersion programs could benefit from improved practice in communication, discussion, and evaluation during peer coaching and team meetings, which agreed with the previous literature (Met & Lorenz, 1998).

In a summary, the shortage of immersion teacher preparation and development programs for qualified and effective teachers in immersion methodology would be a significant challenge for language immersion education in the future (Hickey & de Mejía, 2014).

Conclusions

This review explored the current studies on immersion education, especially those conducted on the characteristic of language immersion education. Language immersion programs encountered difficulties in recruiting qualified teachers who were trained and certified specifically for immersion teaching. To address these challenges, empirical evidence was used to review the key elements in the pre-service and in-service immersion teacher's preparation programs, according to the current immersion teachers' challenges and needs. It was found that most of the existing studies of immersion teachers focused on their challenges, which explained some of the limitations that they faced during their immersion teaching assignments. Limited studies explored immersion teachers' perspectives of their teacher preparation and training programs. This lack of literature suggested that it was necessary to investigate the language immersion teachers' preparedness for their immersion teaching. Such investigation could provide a better understanding of language immersion teachers and help the universities and school administrations understand how to best help language immersion teachers' development in the future. Considering the limited amount of research that has been published on the topic of immersion teachers' preparation and training programs, further research is needed to explore the immersion teachers' perspectives on their teacher preparation and training programs. This will adequately provide further data on the challenges of immersion teaching and will also encourage more discussions and support for immersion teachers' preparation and training programs.

References

Bamford, K. W., & Mizokawa, D. T. (1990). *Cognitive Development of Children in an Additive-Bilingual Program: The Third Report*.

Bernhardt, E., & Schrier, L. (1992). The Development of Immersion Teachers. In *Multilingual Matters* (pp. 113-131). MULTILINGUAL MATTERS LTD.

Bialystok, E. (2001). Concepts and Creativity. In E. Bialystok (Ed.), *Bilingualism in Development: Language, Literacy, and Cognition* (pp. 203-210). Cambridge University Press.

Bissell, J., & Chang, K. (2012). Staffing and Professional Development. In *Chinese Language Learning in the Early Grades, a handbook of resources and best practices for Mandarin immersion* (pp. 24-27). Asia Society.

Cammarata, L., & Tedick, D. J. (2012). Balancing Content and Language in Instruction: The Experience of Immersion Teachers. *The Modern Language Journal*, *96*(2), 251-269.

Campbell, R. N. (1984). The Immersion Approach to Foreign Language Teaching. In *Studies on Immersion Education: A Collection for United States Educators* (pp. 114-143). California State Dept. of Education.

Cekaite, A. (2017). What Makes a Child a Good Language Learner? Interactional Competence, Identity, and Immersion in a Swedish Classroom. *Annual Review of Applied Linguistics*, *37*, 45-61.

Center for Applied Linguistics. (2011). *Directory of Foreign Language Immersion Programs in U.S. Schools*. http://webapp.cal.org/Immersion/

Chen, M. (2022). A Review of the Contemporary Challenges Faced by Chinese Immersion Education and Its Related Teacher Preparations in the United States. *Journal of Education*, *In press*. https://doi.org/10.1177/00220574221075199

Chesley, G. M., & Jordan, J. (2012). What's missing from teacher prep. *Educational Leadership*, *69*(8), 41-45.

Choi, J. Y., Lee, J. S., & Oh, J. S. (2018). Examining the oral language competency of children from Korean immigrant families in English-only and dual language immersion schools. *Journal of Early Childhood Research*, *16*(1), 32-51. https://doi.org/10.1177/1476718x15610597

Christian, D. (1996). Two-way immersion education: Students learning through two languages. *The Modern Language Journal*, *80*(1), 66-76.

Christian, D., Montone, C. L., Lindholm, K. J., & Carranza, I. (1997). *Profiles in Two-Way Immersion Education*. Center for Applied Linguistics and Delta Systems.

Cody, J. (2009). Challenges facing beginning immersion teachers. *American Council on Immersion Education Newsletter*, 1-8.

Cohen, A. D. (1996). How immersed are students in immersion programmes. In T. Hickey & J. Williams (Eds.), *Language, Education & Society in a Changing World* (pp. 196-208). Multilingual Matters.

Collinson, V. (1989). Future trends and challenges in French immersion. *Canadian modern language review*, *45*(3), 561-566.

Committee for Economic Development. (2006). *Education for global leadership: The importance of international studies and foreign language education for US economic and national security*. Committee for Economic Development.

Crandall, J. A., & Tucker, G. R. (1990). Content-Based Language Instruction in Second and Foreign Languages. In S. Anivan (Ed.), *Language Teaching Methodology for the Nineties* (pp. 83-96). SEAMEO Reginal Language Centre.

Cummins, J. (2000). Immersion education for the millennium: What we have learned from 30 years of research on second language immersion. *Retrieved April, 16*, 2006.

Day, E. M., & Shapson, S. M. (1989). Provincial assessment of French immersion programmes in British Columbia, Canada. *Evaluation & Research in Education, 3*(1), 7-23.

Day, E. M., & Shapson, S. M. (1993). French immersion teacher education: A study of two programs. *Canadian modern language review, 49*(3), 446-465.

Day, E. M., & Shapson, S. M. (1996a). A National Survey: French Immersion Teachers' Preparation and Their Professional Development Needs. *Canadian modern language review, 52*(2), 248-270.

Day, E. M., & Shapson, S. M. (1996b). *Studies in immersion education* (Vol. 11). Multilingual matters.

De Courcy, M. (1997). Teaching and learning with different scripts: Cross-cultural conflict in a Chinese late immersion classroom. *Language and Education, 11*(4), 242-259.

De Courcy, M. (2002). Language Learning in Immersion Programs. In *Learners' experiences of immersion education: Case studies of French and Chinese* (Vol. 32, pp. 1-19). Multilingual Matters LTD.

Dolson, D. P. (1985). The Application of Immersion Education in the United States. In *National Clearinghouse for Bilingual Education*. ERIC.

Erben, A. K. H. (2001). *Student teachers' use of microteaching activity to construct sociolinguistic knowledge within a Japanese immersion initial teacher education programme in Australia* Lancaster University]. https://ethos.bl.uk/OrderDetails.do?uin=uk.bl.ethos.289000

Erben, T. (2004). Emerging research and practices in immersion teacher education. *Annual Review of Applied Linguistics, 24*, 320-338. https://doi.org/10.1017/S0267190504000157

Fortune, T. W. (2012). What the research says about immersion. In *Chinese language learning in the early grades: A handbook of resources and best practices for Mandarin immersion* (pp. 9-13). Asia Society.

Fortune, T. W., & Tedick, D. J. (2003). What parents want to know about foreign language immersion programs. *ERIC digest*.

Fortune, T. W., & Tedick, D. J. (2008). *Pathways to multilingualism: Evolving perspectives on immersion education* (Vol. 66). Multilingual Matters.

Freeman, J., Simonsen, B., Briere, D. E., & MacSuga-Gage, A. S. (2014). Pre-service teacher training in classroom management: A review of state accreditation policy and teacher preparation programs. *Teacher Education and Special Education*, *37*(2), 106-120.

Freeman-Nepay, K. (2017). *Creating a Language Immersion Teacher Recruitment Pipeline: Understanding the Needs and Motivation of Prospective Candidates* (Publication Number 10820417) University of Southern California]. ProQuest.

Genesee, F. (1978). A longitudinal evaluation of an early immersion school program. *Canadian Journal of Education/Revue canadienne de l'éducation*, 31-50.

Genesee, F. (1985). Second language learning through immersion: A review of US programs. *Review of educational research*, *55*(4), 541-561.

Genesee, F. (1987). Learning through two languages: Studies of immersion and bilingual education. In. Newbury house publishers.

Genesee, F. (1994). *Integrating language and content: Lessons from immersion* (NCRCDSLL Educational Practice Reports, Issue. https://escholarship.org/uc/item/61c8k7kh

Hickey, T. M. (1997). *Early Immersion Education in Ireland: Na Naionrai*. Institiúid Teangeolaíochta Éireann/Linguistics Institute of Ireland.

Hickey, T. M. (2007). Children's language networks in minority language immersion: What goes in may not come out. *Language and Education*, *21*(1), 46-65.

Hickey, T. M., & de Mejía, A. M. (2014). Immersion education in the early years: A special issue. *International Journal of Bilingual Education and Bilingualism*, *17*(2), 131-143.

Howe, C. (2012). Marketing and advocacy. In *Chinese language learning in the early grades: A handbook of resources best practices for Mandarin immersion* (pp. 48-53). Asia Society.

Howe, C. B. (2012). Marketing and advocacy. *Chinese language learning in the early grades: A handbook of resources and best practices for Mandarin immersion*, 48-53.

Jackson, F. H., & Malone, M. (2009). *Building the Foreign Language Capacity We Need: Toward a Comprehensive Strategy for a National Language Framework.* http://www.cal.org/resource-center/publications-products/building-foreign-language-capacity

Johnson, R. K., & Swain, M. (1997). Immersion education: A category within bilingual education. In *Immersion education: International perspectives* (pp. 1-16). Cambridge University Press.

Kinberg, M. (2001). *Perspectives on foreign language immersion programs* (Vol. 10). Edwin Mellen Press.

Koshiyama, Y. (1995). *A study of the current state and the needs of teacher training in Japanese immersion education in the United States* University of Southern California].

Lapkin, S., Swain, M., & Shapson, S. (1990). French immersion research agenda for the 90s. *Canadian modern language review*, *46*(4), 638-674.

Lazaruk, W. (2007). Linguistic, academic, and cognitive benefits of French immersion. *Canadian modern language review*, *63*(5), 605-627.

Lenker, A., & Rhodes, N. (2007). Foreign language immersion programs: Features and trends over 35 years. *The ACIE Newsletter*, 1-8.

Liao, W., Yuan, R., & Zhang, H. (2017). Chinese language teachers' challenges in teaching in US public schools: A dynamic portrayal. *The Asia-Pacific Education Researcher*, *26*(6), 369-381. https://doi.org/10.1007/s40299-017-0356-z

Lindholm, K. J., & Aclan, Z. (1991). Bilingual Proficiency as a Bridge to Academic Achievement Results from Bilingual/Immersion Programs. *Journal of Education*, *173*(2), 99-113. https://doi.org/10.1177/002205749117300208

Lindholm-Leary, K. (2011). Student outcomes in Chinese two-way immersion programs: Language proficiency, academic achievement, and student attitudes. In D. Tedick, D. Christian, & T. W. Fortune (Eds.), *Immersion education: Practices, policies, possibilities* (pp. 81-103). Multilingual Matters.

Lindholm-Leary, K., & Howard, E. R. (2008). Language development and academic achievement in two-way immersion programs. *Bilingual education and Bilingualism*, *66*, 177. https://doi.org/10.21832/9781847690371

Lyster, R. (1987). Speaking immersion. *Canadian modern language review*, *43*(4), 697-713.

Lyster, R. (1998). Immersion pedagogy and implications for language teaching. *Multilingual Matters*, 64-95.

Lyster, R. (2007). *Learning and teaching languages through content: A counterbalanced approach* (Vol. 18). John Benjamins Publishing Company.

MacFarlane, A., & Wesche, M. B. (1995). Immersion outcomes: Beyond language proficiency. *Canadian modern language review*, *51*(2), 250-274.

Majhanovich, S. E., & Fish, S. B. (1988). Training French immersion teachers for the primary grades: An experimental course at the University of Western Ontario. *Foreign Language Annals*, *21*(4), 311-319.

Met, M., & Livaccari, C. (2012). Basics of program design. In *Chinese language learning in the early grades: A handbook of resources and best practices for Mandarin immersion* (pp. 16-21). Asia Society.

Met, M., & Lorenz, E. B. (1997). Lessons from U.S. immersion programs: Two decades of experience. In R. K. Johnson & M. Swain (Eds.), *Immersion education: International perspectives* (pp. 243-264). Cambridge University Press.

Met, M., & Lorenz, E. B. (1998). Recruitment, preparation, and supervision of immersion teachers. Research and Practice in Immersion Education: Looking Back and Looking Ahead,

Nicolay, A.-C., & Poncelet, M. (2013). Cognitive advantage in children enrolled in a second-language immersion elementary school program for three years. *Bilingualism: Language and Cognition*, *16*(3), 597-607.

Pawley, C. (1985). How bilingual are French immersion students? *Canadian modern language review*, *41*(5), 865-876.

Potowski, K. (2004). Student Spanish use and investment in a dual immersion classroom: Implications for second language acquisition and heritage language maintenance. *The Modern Language Journal*, *88*(1), 75-101.

Pufahl, I., & Rhodes, N. C. (2011). Foreign language instruction in US schools: Results of a national survey of elementary and secondary schools. *Foreign Language Annals*, *44*(2), 258-288.

R Howard, E., & I Loeb, M. (1998). *In their own words: Two-way immersion teachers talk about their professional experiences* (Occasional Reports, Issue. https://escholarship.org/uc/item/9td4m00c

Reyhner, J. (2003). *Native Language Immersion* (Nurturing Native Languages, Issue. http://jan.uc.nau.edu/~jar/NNL/

Roberts, G. (2021). *2021 CANVASS OF DUAL LANGUAGE AND IMMERSION (DLI) PROGRAMS IN US PUBLIC SCHOOLS.* https://www.americancouncils.org/news/announcements-featured-content/arc-completes-national-canvass-dual-language-immersion-programs

Romig, N. A. (2009). *Acculturation of four Chinese teachers teaching in the United States: An ethnographic study* (Publication Number 3395378) Michigan State University]. ProQuest Dissertations Publishing.

Salomone, A. (1992). Immersion teachers' pedagogical beliefs and practices: Results of a descriptive analysis. In *MULTILINGUAL MATTERS* (pp. 9). MULTILINGUAL MATTERS LTD.

Stein, M., & Schools, A. P. (1999). Developing oral proficiency in the immersion classroom. *ACIE Newsletter*, 1-8.

Stewart, V., & Livaccari, C. (2010). The Growth of Chinese Language Programs in the United States. In *Meeting the challenge: Preparing Chinese language teachers for American schools* (pp. 10-16). Aisa Society.

Swain, M. (1998). Integrating Language and Content in Immersion Classrooms: Research Perspectives. *Canadian modern language review*, *52*(4), 529-548.

Tedick, D. J., Christian, D., & Fortune, T. W. (2011). The future of immersion education: An invitation to 'dwell in possibility'. *Immersion education: Practices, policies, possibilities*, 1-10.

Veilleux, I., & Bournot-Trites, M. (2005). Standards for the language competence of French immersion teachers: Is there a danger of erosion? *Canadian Journal of Education/Revue canadienne de l'éducation*, *28*(3), 487-507. https://doi.org/10.2307/4126480

Walker, C. L., & Tedick, D. J. (2000). The complexity of immersion education: Teachers address the issues. *The Modern Language Journal*, *84*(1), 5-27.

Wiggins, R. A., Follo, E. J., & Eberly, M. B. (2007). The impact of a field immersion program on pre-service teachers' attitudes toward teaching in culturally diverse classrooms. *Teaching and Teacher Education*, *23*(5), 653-663.

Zhou, W., & Li, G. (2015). Pedagogical Challenges in Cross-Cultural Chinese Language Teaching: Perceptions and Experiences of Chinese Immersion Teachers in the US. In P. Smith & A. Kumi-Yeboah (Eds.), *Handbook of research on cross-cultural approaches to language and literacy Development* (pp. 159-183). IGI Global.

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