
Viewing Diversity of Subject Matter: The Case of Reading in Chinese

Michael E. Everson, The University of Iowa

Abstract

The recent trend of schools introducing non-European languages such as Chinese into their curricula suggests a different dimension of diversity that might be termed “diversity of subject matter;” in that these languages present unique learning, teaching, and administrative challenges that must be addressed if these programs are to be successful. By using learning to read in Chinese as its primary example, this article explores diversity of subject matter from the viewpoint of a number of stakeholders in the overall Chinese language learning endeavor, and stresses the importance of the various partnerships that must be formed if Chinese programs are to thrive in our nation’s schools.

Introduction

Within the field of first (L1) or second (L2) language learning, the notion of diversity brings to mind the differences in our learners, running the gamut of many complex issues such as ethnicity, socio-economic status, or cognitive capabilities, just to name a few. Such a focus on diversity is not only appropriate but critical to consider if we are to prepare all of our nation’s children to construct and participate in a thriving democracy. Yet, what often gets lost in the shuffle is the fact that a variety of foreign languages are currently rising in demand as subjects that should be taught in our schools, languages of non-European origin that have been marginalized and largely ignored in traditional mainstream American education. Consequently, we often lose sight of the fact that the subject matter that we wish to teach in our schools can be as diverse as the learners who are trying to master it. This article will attempt to show how the diversity of subject matter in the K-12 environment can have ramifications for many stakeholders involved in foreign language education, stakeholders who must be informed about the latest developments in how this subject matter is both learned and presented. By highlighting learning to read in Chinese as an example of this diversity of subject matter, we come to understand that the challenges presenting themselves to students, teachers, administrators, and colleagues are unique, especially in a time when demand for Chinese language learning programs is on the rise. Teachers of Chinese, for example, must understand the research in reading if they are to design effective pedagogical measures for their students who have never learned a language that differs so

Michael Everson (Ph.D., The Ohio State University) is Associate Professor of Foreign Language Education at the University of Iowa. His research has focused on foreign language reading development especially among Chinese and Japanese learners. He is also interested in the professional development process of teachers of these and other less commonly taught languages.

markedly from English or from foreign languages more commonly taught in the K-12 curriculum. Administrators must also be aware of the issues germane to successful program development, particularly in terms of the complexity of the unique pedagogical knowledge their Chinese teachers need to master if students are to succeed in learning to read in this particular language and how best to forge partnerships to better understand and account for this complex process. Lastly, language educators in the more commonly taught languages must be given a perspective on what the challenges facing teachers of Chinese. In concert with this volume's theme "The Many Views of Diversity: Understanding Multiple Realities," it is hoped that all those who interact with the process of teaching Chinese will gain an understanding of the multiple realities that Chinese presents, both as subject matter to be learned by students and as pedagogical knowledge that needs to be mastered by its teachers if they are to be integrated seamlessly into our profession. It seems that not a day goes by without the appearance of a newspaper story or news account trumpeting the demand for Chinese language learning in the United States (for samples, see *In the News*). Yet, for the high school or even college learner who decides to take Chinese, there are a number of issues to signify that learning to read in this language will be different from anything else they have tried to master. Chinese is one of the four languages (along with Korean, Japanese, and Arabic) that is classified by the U.S. government language training community as a Category IV language, or one that takes American learners longest to learn. Besides the issues of linguistic code and sociopragmatics, Walton (1992) noted that the Category IV languages required additional time for American learners because of the time necessary to master their non-alphabetic writing systems. Chinese, for example, does not employ an alphabet, but instead uses "characters," or written symbols that are based not on an alphabetic principle of letters or letter groups representing sounds or phonetic elements, but instead is termed a "logographic" script whereby characters represent words or morphemes. In spite of the fact that Chinese characters have long had the reputation of being "ideographs" or "pictographic writing," it is estimated that approximately 80-90% of modern characters are compound characters (Taylor & Taylor 1995), that is, characters that contain elements that to varying degrees of precision hint at the sound (termed "phonetics") or meaning (termed "radicals") of the character. Given the fact, then, that beginning students cannot give an accurate or approximate pronunciation of a character by looking at it as they could if they were learning a language that employed a Roman alphabet, students first learn a "helping" language termed "romanization" that actually represents Chinese sounds with the roman alphabet. Although there are different romanization systems available, *pinyin* is the most commonly used system in teaching Americans and is the same system used to teach initial literacy to Chinese children on the Chinese mainland. Various pedagogical strategies and opinions are held as to the "best time" for students to begin learning Chinese characters. Some educators have advocated for learning a large amount of spoken Chinese via romanization before attempting to learn characters as it is thought that a firmer spoken base will make the transition to learning characters easier. Regardless, the one thing that research indicates is that beginning learners employ a variety of creative and labor-intensive memorization and practice strategies to cope with the demands of this new system. In addition to difficulties learners encounter in trying to come to terms

with the visual, semantic, and phonological aspects of Chinese characters, the mere notion of what constitutes a “word” in Chinese is not a straightforward issue even among Chinese linguists. While an individual Chinese character can indeed stand alone to form a one-character “word,” the majority of words in modern Chinese are formed by having two characters combine with one another to form multi-character words (Hoosain, 1992). One problem for learners of Chinese, however, is that these demarcations are not represented in Chinese text; that is, there are no spaces between words or word units that are displayed in Chinese text. This stands in contrast to alphabetic systems whereby word boundaries are clearly displayed for readers in the actual text.

Research Findings

It should come as no surprise that the research base investigating how Western learners go about the process of learning to read in Chinese is somewhat limited, though it has gained attention during the last two decades. This interest is probably not unconnected with a corresponding research interest in foreign language reading in general, a topic that gained prominence during the late 1980's and early 1990's as witnessed by the release of influential works dedicated solely to the field of foreign language reading (Barnett, 1989, Bernhardt, 1993; Swaffar, Arens, & Byrnes 1991). As well, the field of reading was energized during this time by theory and models taking on a more schema-theoretic view of reading, or models that emphasized the role of background knowledge and other “inside the head” factors that took the theoretical emphasis away from factors highlighting aspects of print perception notable in so-called “bottom up” models of reading. In spite of this trend, Bernhardt (1986) in her highly influential NECTFL article stressed that: perceptual questions are particularly relevant to *research with readers who must switch orthographic or logographic system in acquiring reading skills*. A credible hypothesis is that the apparent inherent difficulties in the learning of non-Western languages and of languages in non-Roman alphabets may be due partially to a set of developmental, perceptual stages through which readers must progress in order to reach a level of preparation for comprehension. (p. 97) Indeed, this idea would prove to be portentous, as many of the research studies conducted among learners of Chinese clearly demonstrate that readers are greatly challenged at all proficiency levels by so-called “lower level processes” such as word recognition and aspects of the orthography that present obstacles to effortless and efficient processing during reading.

In addition to the interest generated among the FL and ESL reading community, there has also been remarkable activity in the field of L1 literacy research describing how Chinese children learn to read, again with the publication of excellent volumes discussing the Chinese script and how it is processed, as well as how literacy is acquired in various societies who learn to read in Chinese in different ways (Hoosain, 1992; Li, Gaffney & Packard, 2002; McBride-Chang & Chen, 2003; Wang, Inhoff, & Chen, 1999). This convergence has been beneficial to the L2 reading field in leading to more general volumes recently published that are more careful and inclusive in dealing with reading in situations that are cross-orthographic (Grabe & Stoller, 2002; Koda, 2005) thus putting reading in non-Roman scripts on the map as a factor that can no longer be ignored in the L2 reading landscape.

With regard to initial research conducted into how learners of Chinese begin their task of learning Chinese characters, there has been a variety of research techniques used to investigate this area. Survey research, for example, has been an important means of understanding from our learners what they do when faced with the challenge of learning a writing system that differs so markedly from the alphabet used to represent their native language. McGinnis (1999) conducted a study among learners in an intensive beginning nine-week program which discovered that students used a variety of character learning strategies. Among these memorization strategies were rote repetition, creating idiosyncratic stories about how the characters looked or how they were pronounced, and using the character's semantic or phonetic information in the character's components. Interestingly enough, this latter strategy was not one that was favored by the students, who instead favored making up stories or memorizing the characters by rote means. Ke (1998) also sought to investigate the learner strategies of beginning Chinese students, and found that learners indeed valued the use of character components in learning the characters; however, they stated that learning the characters wholistically through repeated writing of characters was an important strategy, especially practicing characters as parts of two-character compounds that comprised much of their vocabulary, rather than practicing characters individually. Perhaps the most important finding was uncovering a relationship between valuing and understanding Chinese character components and character recognition and production, indicating that students early on appreciate the principled structure and composition of Chinese characters as an aid to memorizing them.

Although these findings may seem contradictory, it is important to view them within the context of developing proficiency. The McGinnis (1999) study was conducted among learners who had been studying Chinese for just four weeks, while Ke's (1998) study involved students who had been learning Chinese for a year. It seems that the extra time devoted to learning characters by the latter group of students gave them a beginning sense of orthographic awareness, or a sense that there is a principled and systematic structure to how Chinese characters are constructed. This seems to indicate that learners must be exposed to enough characters to discern examples of different character components used in different ways, thus making them aware of the systematic nature of Chinese orthography. Without these experiences, students will feel that Chinese characters are constructed in a random and haphazard fashion, thus requiring them to learn characters through rote memorization for a specific period of time. In fact, Ke's (1996) model of orthographic awareness speaks to this idea, thus predicating that learners develop specific and measurable thresholds of character understanding.

To carry this investigation further using more precise statistical analysis and learner samples of greater proficiency, Shen (2005) designed three different survey instruments to collect strategy data over three samples of learners at the university level (1st, 2nd, and 3rd year). Her first survey questionnaire contained open-ended questions to elicit from learners the types of strategies they used for learning characters so that a more thorough inventory of strategies could be constructed. A second questionnaire using a Likert-scale was developed to determine how frequently the learners used the strategies in the inventory, with a third questionnaire developed to rate the students percep-

tions about how useful commonly deployed strategies were across the different learning levels. Shen's (2005) research differed somewhat from the studies mentioned previously in that her goal was to detect a commonality and set of patterns among the strategies that learners indicated they used. Factor analysis facilitated achievement of this goal, with a total of eight factors being derived from the 30 commonly used strategies as chosen by students. Importantly, the most heavily loaded factor was that of the use of orthographic knowledge, described as employing graphic structures of characters, connecting with previously learned characters, visualizing graphic structure, and using semantic and phonetic radicals. A total of 24.5% of the variance was explained by this factor, far more than even the second most commonly chosen factor, that of preview and review. A second important finding of the study was that among cognitive strategies, learners considered those represented in Factor 1 to be most useful, with this perception increasing as learner proficiency increased. These three studies when viewed together seem to indicate that the understanding and use of the principles that make up the Chinese writing system are not only good to know for background information, but that they actually become part and parcel of a Chinese language learner's reading development. Moreover, it might just be that this knowledge is integral for our learners if their proficiency is to increase. One study that attempted to investigate this was conducted by Shen (2004) when she tested whether using character presentation strategies would have an effect on short and long term retention of new two-character words. In this study, Shen would introduce 10 new two-character words in three different sessions over three days under one of three conditions to three separate groups of second-year Chinese language learners. In all conditions, the ten words were shown on an overhead projector with their English meanings and pinyin pronunciations. In one condition, termed rote memory, the students were repeatedly introduced to the words by the instructor through presentation and pronunciation of the pinyin and English meaning by overhead projector, with the student asked to name the sound and meaning. Under the condition of self-generated elaboration, students were told to use whatever strategies they wanted to learn the words, and to write down in English what these strategies were; in the last condition, instructor-guided elaboration, the researcher introduced the words through etymological aids and radicals, and used the words in context. After a 20-minute learning period, the students handed in their lists of words. This activity was followed by a 20-minute grammar review period, where the newly acquired target words were not reviewed or studied. After this period, the students were given the list of new two character words they had learned during the first 20 minute learning period and asked to write their pronunciation in pinyin and their meaning in English. The students were also required to perform this same task with these same two-character words 48 hours later.

Among the many findings of this study were that rote memory learning resulted in consistently less retention of the sound and meaning of characters than the two elaboration conditions. Regarding the two elaboration conditions, retention of sound and meaning of the characters was superior for the instructor-guided elaboration condition than for the student self-generated condition for the first 20-minute interval of retention, but the advantage dissipated for retention at the 48-hour period. Shen (2004) theorized that the processing of the characters was deeper under the instruc-

tor-guided condition because it draws more heavily on concept-driven processing. The elaboration required in concept-driven processing requires students to associate prior knowledge of orthographic structure with the new items in the vocabulary list, thus promoting the creation of new and unique information based upon knowledge already stored in memory. This theory holds that the students often are unable to access this old information by themselves, thus depriving themselves of its access. Through instructor-guided elaboration, however, students are able to receive consistent instruction about the various orthographic principles of Chinese characters, as well as how this knowledge can be linked and elaborated when learning new characters.

Think-Aloud Protocols

As can be seen, the research methodologies used to determine learners' strategies have relied largely on some basic survey methodology, as well as the creation of strategy inventories to determine the factors that these strategies seem to comprise. Another approach involves the use of think-aloud protocols, a method whereby the learner talks about what he/she is actually doing while they are reading, so that the researcher can obtain a window into their problem solving strategies as they make their way through a text. In applying this methodology to Chinese learners, Everson and Ke (1997) were interested in seeing what Chinese learners verbalized when they were reading a portion of a Chinese newspaper text. They used two samples in their study, one composed of learners that had completed two years of university Chinese and one with two learners of Chinese who were advanced graduate students, each having studied Chinese for about five years. Among the many findings in the study was the observation that the learners who had studied Chinese for two years still experienced problems dealing with their lack of vocabulary, as well as issues dealing with word knowledge and word formation. The advanced learners, on the other hand, were particularly skillful in figuring out words and characters which the think-alouds revealed they did not initially know when they began the reading task. For the purposes of this study, it is important to note that the data clearly show that the advanced learners consistently attempted to pronounce unknown characters based on the phonetic element that was present, and in some cases, used the semantic element to identify certain classes of characters. Given this impressive evidence of breaking down of characters into their constituent elements to try to solve word recognition problems, the advanced students were able to rely on the different elements of the characters as trusty sources of information.

In conclusion, different types of research methodologies have given us some unique insights into how learners of Chinese at different proficiency levels deal with word recognition and reading. It seems that an understanding of how Chinese characters are constructed develops quickly, and is used and valued as a strategy for word recognition as proficiency of the learner increases. Initial research also indicates that there is promise in presenting vocabulary in the Chinese classroom in ways that highlight the orthographic structure, and that this information may indeed be one of the important building blocks for providing a sound foundation for later Chinese reading proficiency. It should be pointed out, however, that this review was presented not so much to highlight what we know about how learners read or begin to learn to read

in Chinese, but to highlight how little we actually know about this process and how much more research needs to be done. This point is emphasized because given this small knowledge base, a series of initiatives is currently moving forward which indicate that perhaps at no time in our nation's history has our society been more serious about the learning of the Chinese language. Perhaps this is the way of it with diverse subject matter—it remains highly specialized, the domain of a small group of experts used to professional conversations only amongst one another. Yet, this conversation has widened considerably in the past few years, with Chinese language specialists involved in activities on a much larger scale.

Surveying the Landscape: Then and Now

Whether this sudden interest in Chinese language learning is due to the terrorist attacks of September 11 giving us, in Congressman Rush Holt's words, "a Sputnik moment" (National Language Conference, 2005, pg. 2) akin to the Soviet Union's satellite launch which so startled our society in 1957, or whether there is a confluence of The Case of Reading in Chinese 14 other factors involving China such as their economic and potential military rise in the future, the perception of the importance of Chinese language learning is striking. Indeed, several initiatives are afoot that are good news for those involved in Chinese language education, and present us with challenges and opportunities to understand this diverse subject matter in numerous ways. In January of 2006, the Department of State announced the National Security Language Initiative (2006), "...a plan to further strengthen national security and prosperity in the 21st century through education, especially in developing foreign language skills..." with languages such as Chinese specifically named as requiring attention from kindergarten through university. The three goals as stated in the program are for "critical needs languages" to be started at younger ages, for an increase in the number of advanced-level speakers of these languages, and for an increase in the number of foreign language teachers and the resources needed to develop them. This initiative is notable for the number of programs and extent of financial resources the government will be expending to realize these goals.

Recognizing the need for greater competence in language and regional area skills, the Department of Defense published its Defense Language Transformation Roadmap (2005), establishing four goals for language transformation. These goals include: 1.) creating foundational language and cultural expertise in the officer, civilian, and enlisted ranks for both Active and Reserve Components; 2.) creating the capacity to surge language and cultural resources beyond foundational and in-house capabilities; 3.) establishing a cadre of language specialists possessing a level 3/3/3 ability (superior reading/listening/speaking ability); 4.) establishing a process to track the accession, separation and promotion rates of language professionals and Foreign Area Officers (FAO's). While these two initiatives hold enormous potential for increasing interest and facilitating the learning of Chinese from a strategic standpoint, two other ongoing ventures also address the "nuts and bolts" of Chinese at a more operational and curricular level, and again share with the other initiatives the goal of taking learners to higher language proficiency levels. The first is the Oregon Flagship K-16 Chinese Language Program (Oregon Flagship, 2005), a joint venture between the University of

Oregon's Center for Applied Second Language Studies (CASLS) and the Portland Public School District who were joint recipients of a grant from the National Security Education Program. An ambitious program, implementing Chinese language learning from kindergarten to university (K-16), it "...is structured on the total language learning approach incorporating content-based curriculum, explicit language instruction, and experiential learning practices."

The other initiative important to mention is the development by the College Board of the AP Chinese Language and Culture course for secondary schools (Draft: AP Chinese language and culture course description, 2006). Approved in 2003, the course is designed to be equivalent to fourth semester college/university level courses in Mandarin Chinese, with coursework reflecting Intermediate range proficiencies according to the American Council on the Teaching of Foreign Languages (ACTFL) Proficiency Guidelines. For the purposes of this discussion, the draft objectives are very specific in their targeting of ambitious goals in the area of reading where learners will progress from an exposure to highly contextualized texts "...through careful readings of more densely written texts excerpted or adapted from newspapers, magazine articles, contemporary literature, letters, and essays." Authentic materials will be used that include "... newspapers, fiction and nonfiction books, plays, poetry, films, and Chinese educational system textbooks."

These four initiatives are among a host of efforts currently underway that reflect a renewed and more focused interest in Chinese language learning. They are included here to show the seriousness of government and education to explore largely uncharted territory in the commitment to longer sequences of learning and proficiency-based curricular development and assessment. The last two efforts also target Chinese in the K12 (or K-16) curriculum, and provide a basis from which we can make recommendations about how teachers, administrators, and colleagues can facilitate the introduction of a language that represents diversity of subject matter into the curriculum in a principled manner.

Lessons Learned, Lessons Applied

But first, we might want to ask ourselves what we already know that can help us move forward with teaching a subject matter that is as diverse as the students who will eventually learn it. Our first lesson for all stakeholders is perhaps in the area of teacher education, in that if we are ever to put Chinese language and reading programs into our classrooms, we must approach the project now in a systemic way. At this point, we are fortunate to have at least some research that has provided a basis for understanding some of the challenges facing our learners when they attempt to start reading in Chinese. The settings where this occurs in the K-12 world are, however, less understood and less researched. Fortunately, a study conducted by Moore, Walton, and Lambert (1992) was pivotal in investigating a large array of issues in Chinese language education at that time, thus providing key data as to the strengths and weaknesses of selected high school efforts in Chinese which were funded by the Geraldine R. Dodge Foundation. Given the fact that such high school Chinese initiatives were largely pioneering and experimental, the research findings were not all that surprising. Their survey indicated a lack of consensus among teachers in a variety of key areas such as

curriculum, which Chinese characters and grammatical patterns should be taught, and how the teaching of Chinese culture should proceed. This disagreement among teachers is a serious consideration as the school principals who were surveyed in the study stated that "...the quality of the teacher is viewed not only as a safeguard against the demise of a program but as an essential ingredient in its success." (p. 25). In his prescient NECTFL article dealing with a variety of issues concerning less commonly taught languages, Walker (1989) stated that when evaluating less commonly taught languages as different and distinct entities, "...not all the difficulty derives from the obvious linguistic or orthographic distance from the background of the English-speaking learner. One source of the discord may be the teacher himself" (p. 118). Walker's point was that at that time less commonly taught languages such as Chinese and the instructors were considered somewhat "exotic." This lack of pedagogical understanding prevented these languages from being fully integrated into the school's curriculum. This marginalized or "boutique" status also had the deleterious effect of preventing true integration of these programs into the fabric of the school's culture, thus leading to their being cut at the first sign of enrollment slippage. Moreover, for the purposes of this paper focusing on Chinese reading as diverse subject matter, Walker (1989) noted that to native teachers of languages such as Chinese, Japanese, and Korean, "...the writing system often embodies the very image of their language" (p. 119).

What, then, are some of the ramifications that introducing "diverse subject matter" into a school, especially for administrators who are often in a position to determine whether the program survives or dies? First, from the point of view of the learner, it is important that we do not underestimate how long this subject matter takes to master. Taking students up through novice and intermediate proficiency levels will not happen overnight, so some of the objectives as foreseen in the AP curriculum may be more difficult to achieve than is anticipated. Administrators and parents, then, should have patience with the program and understand that achieving these sequences will take time, and that the important thing is for learners to achieve realistic goals that are appropriate for their age and for the number of hours they are exposed to the subject matter.

Second, administrators must understand that sending untrained teachers into the Chinese language classroom is a recipe for failure. Teacher education is a "pay me now or pay me later" proposition, with administrators needing to understand that the problems which can eventuate later, due to having a poorly trained instructor in the classroom after the program is launched, can far outweigh the time and preparation that should be put into the care of selecting a teacher initially. In order to teach this diverse subject matter, teachers will need to understand Chinese-specific pedagogy for teaching the language and culture to American learners within the constraints of the American school system at age-appropriate levels. All too often, this balancing act has been difficult to accomplish, but the last few decades have indicated through research and experience a greater understanding of the processes in play among our learners, which we must translate into lessons learned for better curriculum development.

Moreover, given the current interest in starting Chinese language programs, The Asia Society has written an excellent report that asks the question, "what would it take to have 5% of American high school students taking Chinese in 2015?" (Stewart & Wang,

2005). One notable conclusion in their recommendations is that the current infrastructure for delivering the necessary cadre of certified teachers is woefully inadequate. In discussions about how to deliver teachers, it is clear that institutions with teacher certification programs for the specific licensure of Chinese teachers are rare, and so must be expanded. In addition, ways are being investigated to “fast track” teachers in the certification process, though pathways to alternative certification vary greatly from state to state. Additionally, it is an attractive alternative to consider “retooling” native Chinese ESL teachers to teach their own language, but caution should be exercised in embracing this model without question. Clearly, it is reassuring that these teachers are trained in, presumably, the latest methodologies for classroom language instruction. In one case, however, Bell (1995) documented in a first-person descriptive research study that although her Chinese teacher was a trained ESL instructor, she reverted to teaching strategies that she encountered as a young girl learning to write in Chinese, strategies that were incompatible in Bell’s mind with efficient and measured learning and progress. While the cultural attitudes towards writing that were manifested by the native Chinese teacher were not necessarily “wrong,” they were clearly at odds with what Bell felt was appropriate for a foreign language learner of Chinese. Clearly, these types of issues have to be discussed in teacher education programs if there is to be an appropriate meeting between the teacher and student in the Chinese language classroom.

Thirdly, administrators must try to integrate Chinese language instructors into foreign language departments as full-functioning professional members instead of marginal, part-time help. Success in this area will not only be contingent upon administrative leadership but also willingness on the part of other foreign language teachers to accept and aid in the professionalization of their fellow teachers. Fortunately, there is now more of a common metric in the development of Chinese language teachers which will give them shared professional grounding with colleagues in more commonly taught languages. That is, work has begun to train teachers in more communicatively-oriented methodologies, introducing them to movements such as the National Standards in Foreign Language Education, as well as initiating an AP curriculum. Until enrollments are built up and stabilized in K-12 programs, it may be the fate of Chinese teachers that they are itinerant and thus remain somewhat marginalized from the cultural fabric of the schools in the eyes of their colleagues and their students. Administrators and fellow language teachers, however, should heed the research into start-up programs in less commonly taught languages which indicates that variables such as physical location of classes and the institutional support expected by these teachers can serve to undermine their ability to achieve a sense of place within the greater educational mission of the school (Schrier & Everson, 2000).

Lastly, administrators must try to facilitate the conduct of research if we are to understand how best to configure our reading programs so they are carried out in a principled manner. At present, most of the research that has been done in the area of Chinese reading involves adult learners, mostly in post-secondary environments. Rarely have we had opportunities available to us to conduct research in Chinese programs available in elementary or high school settings. Rarer still are opportunities for research in programs attempting to connect even longer K-16 sequences such as the flagship program in

Oregon. Such venues can give us research into what foreign language educators have wanted and have advertised as the best possible route to language mastery: long sequences of language instruction. Additionally, this presents a golden opportunity to study bilingual literacy development in both alphabetic and logographic writing systems, thus providing researchers a laboratory to study a unique literacy development setting. With this overall systematic approach to teacher development, program support, and research opportunities, subject matter such as the reading of Chinese will have a far greater chance for successful integration into the curricula of American schools.

In conclusion, it is hoped that the suggestions put forth in this article can serve as a model for how to conceptualize the teaching and administration of other less commonly taught languages. While languages such as Chinese and Japanese have enjoyed at least some success in making themselves accessible to an increasing number of learners, languages such as Arabic and Hindi are attracting interest and deserve more visibility in our nation's schools. These languages will present their own sets of challenges in terms of diversity of subject matter, and therefore are entitled to the care and attention owed all forms of diversity if they are to be welcomed as partners within the field of foreign language education.

I. The author wishes to thank the two anonymous reviewers for their helpful comments and suggestions. The section of this article pertaining to research in Chinese as a foreign language was presented at the conference "Hanzi Renzhi: How Western Learners Discover the World of Written Chinese" on August 25, 2005, at the School of Applied Linguistics and Cultural Studies, Johannes Gutenberg University Mainz, Germansheim, Germany.

References

- Barnett, M. A. (1989). *More than meets the eye—Foreign language reading: Theory and practice*. Washington, D.C.: Center for Applied Linguistics.
- Bell, J. S. (1995). The relationship between L1 and L2 literacy: Some complicating factors. *TESOL Quarterly* 29 [4], 687-704.
- Bernhardt, E. B. (1986). Reading in the foreign language. In B. Wing (Ed.), *Listening, reading, and writing: Analysis and application*. (pp. 93-115). Middlebury, VT: Northeast Conference.
- Bernhardt, E. B. (1991). *Reading development in a second language*. Norwood, NJ: Ablex Publishing Corporation.
- Defense Language Transformation Roadmap (2005)*. Available: www.languagepolicy.org/dodlangroadmap.pdf
- Draft: AP Chinese language and culture course description (2006)*. Available: http://www.collegeboard.com/email/ap_chinese_n5764.html
- Everson, M. E. & Ke, C. (1997). An inquiry into the reading strategies of intermediate and advanced learners of Chinese as a foreign language. *Journal of the Chinese Language Teachers Association* 32 [1], 1-20.
- Grabe, W., & Stoller, F. L. (2002). *Teaching and researching reading*. Harlow, England: Pearson Education. The Case of Reading in Chinese 24.
- Hoosain, R. (1991). *Psycholinguistic implications for linguistic relativity: A case study of Chinese*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- In the news*. Retrieved July 7, 2006 from <http://www.askasia.org/chinese/news.htm>

- Ke, C. (1998). Effects of strategies on the learning of Chinese characters among foreign language students. *Journal of the Chinese Language Teachers Association* 33 [2], 93-112.
- Ke, C. R. (1996). *A model for Chinese orthographic awareness*. Unpublished manuscript.
- Koda, K. (2005). *Insights into second language reading: A cross-linguistic approach*. Cambridge University Press.
- Li, W., Gaffney, J. S., & Packard, J. L. (2002). *Chinese children's reading acquisition: Theoretical and pedagogical issues*. London: Kluwer Academic Publishers.
- McBride-Chang, C., & Chen, H. C. (Eds.). (2003). *Reading development in Chinese children*. Westport, CT: Praeger.
- McGinnis, S. (1999). Student goals and approaches. In M. Chu (Ed.), *Mapping the Course of the Chinese Language Field* (pp. 151-188). Kalamazoo, MI: The Chinese Language Teachers Association, Inc.
- Moore, S. J., Walton, A. R., & Lambert, R. D. (1992). *Introducing Chinese into high schools: The Dodge initiative*. Washington, D.C.: The National Foreign Language Center. The Case of Reading in Chinese 25.
- National Language Conference. (2005). *A call to action for national foreign language capabilities [white paper]*. Washington, D.C.: Office of the Undersecretary of Defense (Personnel and Readiness). Available: <http://www.nlconference.org>.
- National Security Language Initiative (2006). Available: www.languagepolicy.org
- Oregon Flagship (2005). Retrieved July 7, 2006, from <<http://casls.uoregon.edu/ORflagship/faq.htm#1>>
- Schrier, L. L. & Everson, M. E. (2000). From the margins to the new millennium: Preparing teachers of critical languages. In D. W. Birckbichler & R. M. Terry (Eds.), *Reflecting on the past to shape the future* (pp. 125-161). Lincolnwood, IL: National Textbook Company.
- Shen, H. H. (2004). Level of cognitive processing: Effects on character learning among nonnative learners of Chinese as a foreign language. *Language and Education* 18 [2], 167-183.
- Shen, H. H. (2005). An investigation of Chinese character learning strategies among non-native speakers of Chinese. *System* 33, 49-68.
- Stewart, V. & Wang, S. (2005). *Expanding Chinese-language capacity in the United States*. New York: Asia Society. Available: <http://www.askasia.org/chinese/publications.htm>
- Swaffar, J. K., Arens, K. M., & Byrnes, H. (1991). *Reading for meaning: An integrated approach to language learning*. Englewood Cliffs, NJ: Prentice Hall. The Case of Reading in Chinese 26.
- Taylor, I. & Taylor, M. M. (1995). *Writing and literacy in Chinese, Korean, and Japanese*. Amsterdam: John Benjamins Publishing Company.
- Walker, G. (1989). The less commonly taught languages in the context of American pedagogy. In H. S. Lepke (Ed.), *Shaping the future: Challenges and opportunities* (pp. 111-137). Middlebury, VT: Northeast Conference.
- Walton, A. R. (1992). *Expanding the vision of foreign language education: Enter the less commonly taught languages*. Washington, D.C.: The National Foreign Language Center.
- Wang, J., Inhoff, A. W., & Chen, H. C. (Eds.). (1999). *Reading Chinese script: A Cognitive Perspective*. Mahwah, NJ: Lawrence Erlbaum Associates.