



ISSN 2161-6248  
DOI:10.17265/2161-6248

From Knowledge to Wisdom

# US-China Education Review

**B**

Volume 6, Number 2, February 2016

Education Theory

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# **US-China Education Review**

## **B**

Volume 6, Number 2, February 2016 (Serial Number 57)



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[www.davidpublisher.com](http://www.davidpublisher.com)

**Publication Information:**

*US-China Education Review B* (Earlier title: Journal of US-China Education Review, ISSN 1548-6613) is published monthly in hard copy (ISSN 2161-6248) by David Publishing Company located at 616 Corporate Way, Suite 2-4876, Valley Cottage, NY 10989, USA

**Aims and Scope:**

*US-China Education Review B*, a monthly professional academic journal, covers all sorts of education-theory researches on Higher Education, Higher Educational Management, Educational Psychology, Teacher Education, Curriculum and Teaching, Educational Technology, Educational Economics and Management, Educational Theory and Principle, Educational Policy and Administration, Sociology of Education, Educational Methodology, Comparative Education, Vocational and Technical Education, Special Education, Educational Philosophy, Elementary Education, Science Education, Lifelong Learning, Adult Education, Distance Education, Preschool Education, Primary Education, Secondary Education, Art Education, Rural Education, Environmental Education, Health Education, History of Education, Education and Culture, Education Law, Educational Evaluation and Assessment, Physical Education, Educational Consulting, Educational Training, Moral Education, Family Education, as well as other issues.

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**Editorial Office:**

616 Corporate Way, Suite 2-4876, Valley Cottage, NY 10989, USA

Tel: 1-323-984-7526, 323-410-1082

Fax: 1-323-984-7374, 323-908-0457

E-mail: [teacher@davidpublishing.com](mailto:teacher@davidpublishing.com); [teacher@davidpublishing.org](mailto:teacher@davidpublishing.org); [education1548@hotmail.com](mailto:education1548@hotmail.com); or [edu1658@yahoo.com](mailto:edu1658@yahoo.com).

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**Abstracted/Indexed in:**

|  |  |                              |
|--|--|------------------------------|
| Database of EBSCO, Massachusetts, USA  | Universe Digital Library Sdn Bhd (UDLSB), Malaysia | CiteFactor, USA              |
| Chinese Database of CEPS, American Federal Computer Library center (OCLC), USA                         | Excellent papers in ERIC                           | SJournal Index               |
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|  | Airiti   | Free Libs                    |
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|  | Electronic Journals Library (EZB)                  | CrossRef                     |

**Subscription Information:**

Price (per year): Print \$600

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# US-China Education Review B

Volume 6, Number 2, February 2016 (Serial Number 57)

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# Mandarin Sunday Classes: Educators' and Parents' Perceptions on Literacy Development of Second Generation Chinese-American Children<sup>\*</sup>

Julien Ekiaka-Oblazamengo, Chen-yu Xu, Yi-Ju Tien

Texas A & M University, Kingsville, USA

Chih-Hsin Hsu

American College of Education, Indiana, USA

Norma A. Guzmán

Texas A & M University, Kingsville, USA

Children acquire literacy from several sources: school, community, family's funds of knowledge, etc.. Most second generation Chinese-American children are sent to the weekend classes to learn Mandarin, their heritage language (HL), a language that they are culturally or proficiently connected to. The purpose of this qualitative study was to explore Chinese heritage language (CHL) school educators' and parents' perceptions of the Chinese literacy development of second generation Chinese-American children via Sunday classes in South Texas. The study used multiple data collection strategies including a non-participative observation of Sunday classes, and the interviews with the teachers, the principal, and parents. Responsibility, commitment, enthusiasm, participation, and cultural inheritance were some of the finding key terms that summarized participants' perceptions. Implications for a better venue of the Mandarin maintenance include, but not limited to, the merging to a formal bilingual private school.

*Keywords:* heritage language (HL), Chinese language maintenance, Mandarin Sunday classes, Chinese-American

## Introduction

The waves of immigration from all over the world toward the United States (U.S.) have an effect on the growing number of K-12 students in public schools, not only because children are coming from foreign countries, but also because of the increasing number of second generation offspring born in America (García 2005; Passel, 2011; Tienda & Haskins, 2011). Despite this growing number, immigrants still are counted among the minority ethnic/linguistic/cultural groups in the U.S.. However, most of the time, minority groups feel compelled to establish heritage language (HL) schools as parallel educational institutions existing outside the U.S. educational system due to political factors, limited financial resources for public schools, and

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**\* Declaration of conflicting interests:** The authors declare that there are no potential conflicts of interest regarding the authorship, and/or publication of this study.

Julien Ekiaka-Oblazamengo, Ed.D. candidate, Department of Teacher and Bilingual Education, Texas A & M University.

Chen-yu Xu, Ed.D. student, Department of Teacher and Bilingual Education, Texas A & M University.

Yi-Ju Tien, Ed.D. student, Department of Teacher and Bilingual Education, Texas A & M University.

Chih-Hsin Hsu, Ed.D., instructor, Department of Teacher and Learning, American College of Education.

Norma A. Guzmán, Ph.D., assistant professor, Department of Teacher and Bilingual Education, Texas A & M University.

parent/community commitment (Chao, 1996). HL is to be broadly understood as the language that is not spoken by the dominant culture but rather in the minority families (Krashen, Tse, & McQuillan, 1998). The majority of HL schools have taught Chinese, French, Hebrew, Italian, Japanese, Korean, Polish, Portuguese, Spanish, Ukrainian, and Yiddish in the community for the benefit of families (Kelleher, 2010).

Indeed, two facts have characterized the panorama of the Chinese heritage language (CHL) education in the U.S.: (a) the growing number of HL learners, generally second generation children in processes of settlement or assimilation (Smith, 2002); and (b) the use of adequate teaching strategies addressing their needs (McGinnis, 2008). HL learners are “individuals with familial or ancestral ties to a language other than English” (Hornberger & Wang, 2008, p. 6).

According to the National Council of Associations of Chinese Language Schools (NCACLS) (NCACLS, n.d), current student enrollment in NCACLS-affiliated Chinese community schools is estimated to be around 100,000 as of 2005. NCACLS schools have primarily been connected to the Taiwan immigrants and heritage communities in the U.S.. The Chinese School Association in the U.S. (CSAUS), which has primary connections with mainland Chinese immigrants and heritage communities, reported student enrollment of approximately 60,000 as of early 2005 (see Website <http://www.ncsaus.org>). The limited amount of teaching strategies to address learners’ needs has to do with instructors’ preparation and sense of professional identity (Hsu-Pai, Palmer, & Field, 2011).

### **Problem Statement**

Some Mandarin-speaking parents have chosen to use their HL voluntarily and emphasized the importance of the Chinese language to their children pointing to the academic benefits (betterment of the scholastic literacy) (Stavans, 2012). Additionally, the growing number of CHL schools and learners not only raised concerns about CHL teachers’ professional identity, commitment, and teaching beliefs, but also needs the best teaching practices at all costs (Hsu-Pai et al., 2011; McGinnis, 2008; Smith, 2002).

On the other hand, some of the previous studies (Chiang, 2000; Lam, 2005) have focused on students’ experiences, parental influence on children’s language ideology or maintenance of their ethno-linguistic identity (Curd-Christiansen, 2003; Park, 2007; Phinney, Romero, Nava, & Huang, 2001; Rumbaut, 2005), and the teacher’s sense of professional identity (Hsu-Pai et al., 2011). Nevertheless, little research has shown using multiple data collection strategies explore school educators’ and parents’ perceptions on the Chinese literacy development of second generation Chinese-American children.

### **Purpose and Research Questions**

This qualitative research aimed at exploring school educators (school principal and teachers) and parents’ perceptions on Chinese literacy development of second generation of Chinese-American children via Sunday classes in a CHL weekend school in South Texas. At this stage, literacy was broadly defined as the writing, reading, and speaking proficiency, but also a full range of practices involving the aforementioned types of proficiency (Barton, Hamilton, & Ivanic, 2000). In order to address the purpose of the study, the following research questions were explored:

1. What are school educators’ and parents’ perceptions on the Chinese literacy development of second generation Chinese-American children attending Sunday classes in South Texas?
2. How do school educators and parents express their views on the Chinese literacy development of second generation of Chinese-American children attending Sunday classes in South Texas?

### **Theoretical Framework**

In the U.S., HL learners are students raised in a home where a non-English language is spoken, who merely speak or understand the home language, and at some extent are bilinguals (Valdés, 2001, p. 38). Literacy and culture being two intrinsic aspects of HL education in the U.S., the scope of many HL programs consists of allowing people to be involved in the process of self-shaping their futures in society (Wiley, 2001). As a result, the theoretical framework followed in this study is ethno-linguistic education, an approach which emphasizes ethnic identity development (Noels & Clément, 1998; Park, 2007) and the development of proficiency in the target language, the HL (Ding, 2013).

In fact, the feeling of pride or of belonging to an ethnic group pushes people to identify themselves as members of such groups. The language (learning) is seen as an important component of ethnic identity, because it facilitates social interactions and represents the people who use the target language to communicate and to negotiate (Noels & Clément, 1998; Phinney & Alipuria, 1996). Ethno-linguistic affiliation or identity, an important feeling for the language revitalization effort (Ding, 2013), walks hand in hand with the second language (L2) learning process (Ding, 2013; Park, 2007) or HL learning since this latter helps learners associate with their heritage culture regardless of the use or not of the HL at home (Fishman, 2001). Under the understanding of the existing relationship between ethno-linguistic education and HL learning, this study will explore school educators' (principal and teachers) and parents' perceptions of Chinese literacy development via weekend classes in a CHL weekend school in South Texas.

### **Significance of the Study**

Findings may be informative for HL practitioners and developers of bilingual English-Chinese curricula as they may find insightful practical evidence or stories to base their activities on. In addition, as for scholars involved in the L2 learning practices, results can serve as suggestions on effective development of literacy proficiency in L2 or HL under subtractive bilingual settings. Finally, parents of CHL learners and other HL programs may find useful information able to influence their decision and determination of sending their second generation children to HL schools.

### **Division of the Article**

To help readers better understand, the content of this study will be introduced with the following sections: a brief review of the literature on CHL programs in the U.S., research methodology, findings and analysis, and the conclusions as well recommendations.

## **Literature Review**

This review of literature will cover bilingualism, HL in general, but most specifically, the development of CHL schools in the U.S.. Considered a relatively new discipline of bilingual education in general, HL refers to the language that is not spoken as a dominant language but used in minority families (Krashen et al., 1998). CHL in this study refers to Mandarin language as spoken in the U.S. by minority Chinese families.

Logically, noting that bilingualism and biliteracy involve instances, in which communication—written and spoken or articulated—happens in two languages (Hornberger, 1990). This communication is built upon interlocutors' interpretation and interaction (Heath, 1982). Because the interlocutors are present in a multitude of settings, literacy or biliteracy cannot exclusively be a school matter. Rather, it is also acquired from the community and the family's funds of knowledge (Moll, 1992). Therefore, literacy skills include learning to

read, to write, and to speak, and the dynamic of social practices involved in the acquisition of those skills (Barton et al., 2000). Hull and Schultz (2002) stated that “becoming literate involves more than simple mastering these discrete skills... [it] extends beyond isolated skills and includes one’s views and attitudes toward the world” (as cited in Dail & Payne, 2010, p. 330). Thus, these skills cannot be reserved only to formal or institutional settings.

At a certain point of the history of bilingual education in the U.S., bilingual children from minority ethnic groups were called heritage language learners (HLLs) or heritage culture learners (HCLs) (García, 2005). The term “HL” was first used in Canada in the 1970s, but it gained ground in the U.S. in the 1990s (Hornberger & Wang, 2008). The term has been used to talk about bilingual, native speaker children with a home language background or exposure, or who have learned a non-English language outside of their formal school education (Scalera, 2000; Webb & Miller, 2000).

Despite this learning is done outside of the formal or public education and despite the historical connection to endangered/indigenous, colonial, or immigrant languages (Fishman, 1999; Valdés, 2001), there must be a socio-psychological and cultural “struggle” dimension when defining or understanding HLLs (Hornberger & Wang, 2008). In the first perspective, where the ancestral affiliation is emphasized (Fishman, 2001), HLLs are linked to the ancestral language (Ding, 2013), but they live in a different geographical setting. Similarly, in the second perspective, where the level of proficiency in the HL is emphasized, HLLs are raised in non-English spoken families and merely speak or understand the HL (Valdés, 2001). Therefore, they are tacitly called to make choice between the “home” culture and the outside socio-cultural values. This internal struggling dimension is crucial in HLLs’ self-identity awareness.

In regards to the Chinese community in the U.S., the term “Chinese” is generally used to mean Mandarin language, the official language of China and Taiwan. Excluding any debate on the primacy of any language on others, both Mandarin speakers and speakers of other dialects of this latter accept the status of Mandarin as HL (Wiley, 2001). Consequently, the materials used in many community-based programs come from outside of the U.S..

Since 1848, during the emigration of Chinese laborers in the U.S., in order to address the needs of those immigrants, CHL schools have been considered as an integral part of the Chinese community in most cities. By 1905, several Chinese language schools were already consolidated in San Francisco, New York, and Chicago. By the late 1930s, many other schools were created in Los Angeles, San Diego, Washington D.C., New Orleans, Minneapolis, and Oakland. After the World War II, a new wave of “well-educated” immigrants, mainly from Taiwan and Hong Kong, introduced the concept of family-oriented education. They became their own children’s teachers (Wang, 1996).

Actually in the U.S., there are two categories of Chinese language schools. The for-profit category includes kindergartens, child-care centers, and tutorial schools for secondary students. The non-profit category comprises schools that are usually affiliated with non-profit organizations, such as churches. Non-profit schools operate on weekends or after normal school hours. The programs available in these schools are Mandarin Chinese only and Mandarin Chinese as a L2 classes (Wang, 1996).

However, the panorama of the CHL education sector in the U.S. faces two major issues: The growing number of HLLs and the use of adequate methods addressing their needs (McGinnis, 2008)—most of them being second generation children embedded in migration processes, settlement, and assimilation (Smith, 2002). These two issues are calling to think of CHL education not only as a heritage sector, but also as a benefit to the

mainstream American society since its preservation contributes to cultural diversity and enriches the American educational system (McGinnis, 2008; Wang, 1996).

Due to this rapid growth of CHL education, recent studies tried to analyze its impact on the American society. Chang (2010) looked at the effect of HL and public schools on the biliteracy development of Chinese-American children. Chang's (2010) qualitative case study on four Chinese-American students, third and fourth graders, intended to collect parents' and teachers' perceptions (through semi-structured interviews) on the students' biliteracy development in both the public and the HL schools. Findings showed that children's biliteracy development was shaped by languages, contexts, and cultural components. Curdt-Christiansen (2003) studied and analyzed the cultural knowledge as implicitly and explicitly included in the Chinese language art textbooks.

In fact, self-determination and motivation are some of the factors of learning a language. In a research study on 145 learners of Chinese, a correlation between learning (achievement) and learning process stated the following: "The more learners felt they were learning Chinese, because it was personally meaningful and fun, the more they engaged in the learning process" (Comanaru & Noels, 2009, p. 131). Of course, the CHL learning process was positively correlated to the home literacy environment. Chinese parents valued and fostered their children's HL maintenance even though the latter did not see the relevance of maintaining HL, and tended to use English or a mixture of English and HL to talk to their parents (Donghui & Slaughter-Defoe, 2009; Zhang & Koda, 2011).

In other research studies, Chinese immigrant families in Philadelphia used a co-ethnic network for the purpose of language maintenance: Mandarin second generation children, for example, resisted the pressures of linguistic assimilation while the Fujianese gave up their language as a way of surviving in the U.S. (Donghui, 2010; 2012).

When researchers came to investigate CHL teachers' perceptions, they discovered a weak sense of professional identity. Teachers' lack of professional identity was because they regarded the position as a secondary and volunteer job (Hsu-Pai et al., 2011). CHL language teachers' lack of identification was severely blamed by parents who wanted a different focus on curriculum, teaching style, teacher-parent communication, assessments, and class size—since Chinese classes consisted of both heritage and non-heritage learners (Lawton & Logio, 2009).

In definitive, the literature review suggests that in a bilingualism context, literacy includes also social interactions and practices involved in the learning of target language competences, such as reading, writing, speaking, and listening. Numerous studies on non-English speakers or HL learning children in the U.S. underlined the undergoing identity, language use, and socio-cultural struggles, while attending both the public education and HL learning schools. Other research studies reflected major issues faced by the rising of the CHL education in the U.S.: The growing number of HLLs and the appropriate methods to address their needs. From this perspective of HLL, another group of scholars sought a deep diagnostic of problems affecting CHL learning. Findings covered the shaping of biliteracy development through languages, contexts and culture, and the importance of self-determination and motivation in the acquisition of a HL, CHL teachers' lack of identification, and some children's resistance to CHL.

## **Methods**

### **Research Design**

In order to explore educators and parents' perceptions of Chinese literacy development or maintenance of second generation of Chinese-American children via Sunday classes, this research study required a qualitative

design embedded in multiple data collection strategies. This is, researchers, bounded by time and activity, had to collect detailed information from diverse procedures (Creswell, 2009; Stake, 1995) since conducting a qualitative research means involving “many things at the same time” (Nelson, Treichler, & Grossberg, 1992, p. 4).

The aforementioned design is a part of the broad area of the naturalistic inquiry. It uses and requires a human instrument and a natural setting to be carried out; it uses some of the appropriate methods to investigate about human being (Lincoln & Guba, 1985, p. 187) in order to gain in-depth knowledge of everyday (therefore weekly) life and reality (Denzin & Lincoln, 2005).

### **Site Selection**

The site of this study was a CHL school managed by the Second Baptist Church in South Texas. The school is the only Chinese school in an urban zone. The site selection was made following accessibility criteria which would guarantee the viability of the study. In other words, the site had to make the researchers’ entry possible, offer a high and rich possibility of a mixed set of processes and realities that helped answer the research questions, and provide the researchers with the possibility of maintaining a continuous presence (Erlandson, Harris, & Skipper, 1993).

### **Sampling**

Participants in this study included a purposeful and convenient sample and snowballing techniques of 10 individuals: two instructors, one principal, and seven parents. The principal and the instructors were purposefully selected since our target was clearly defined: A unique and well-running CHL school in the area. The parents were selected by the snowballing technique (Erlandson et al., 1993). This later technique was used to seek trustworthiness by not interviewing parents that could be known by the researchers (Lincoln & Guba, 1985).

### **Data Collection and Instruments**

Data collection consisted of videotaped weekend instructions and observers’ notes during the non-participative observation. Researchers used regular video camera, personal iPad, and iPhone to videotape teaching practices on Sundays. An observational protocol was designed to help researchers in their task. Rationale for a non-participative observation of classroom instruction while exploring educators and parents’ perceptions responded to the authors’ quest of aligning or comparing the in-class observed teaching behavior to further opinions or perceptions on the Chinese literacy development.

Additionally, the researchers conducted semi-structured interviews to the two teachers, the principal, and parents of students. The teachers’ interview was made of eight principal questions which purpose was to explore the instructors’ perceptions/beliefs on the way students develop Chinese literacy, teaching styles and strategies, challenges, and successful stories in their classes. The authors also developed an interview protocol that consisted of four main questions to interview the school principal. Parents’ interview protocol helped the researchers gather their opinions (and testimony) on the development of Chinese literacy of their children via Sunday classes. All these interviews were recorded via the aforementioned electronic devices.

Finally, the researchers collected and took pictures of some artifacts that included visual and written data generated in the Sunday classroom, that were significant to the Chinese literacy development and that could carry values and ideologies (Freeman & Mathison, 2009; Saldaña, 2009).

### **Data Analysis**

In each step of the research, data were prepared after collection, organized, and transcribed in order to

make sense (Creswell, 2009). In the non-participant observation phase, the researchers elaborated observational reports after reviewing the videos. Personal notes taken during the class observation helped completing their reports. The interviews were transcribed and coded. The analysis consisted of data interpretation and the reading through the transcribed or coded data in order to emerge a set of themes (Erlandson et al., 1993).

Artifacts were interpreted, according to the context, they were obtained (Freeman & Mathison, 2009). This was the application of descriptive coding which consisted of documenting the tangible products created and experienced on a daily basis by participants (Saldaña, 2009). Afterwards, observational, interview, artifacts, and other visual and written data were triangulated, i.e., confronted or compared to each other and brought together in the intent of answering the research questions. For the purpose of this study, the reference to observational data were made in the analysis section as to check back educators and parents' perceptions expressed during the interviews.

## **Data Report**

### **Site Description**

The CHL school was originally founded in 1990 by the Chinese association as an independent non-profit institution with a noble mission of providing the surrounding communities with a unique environment in learning Chinese language, culture, and heritage. According to the census, in 2010, the city hosting this school had a population of 305,215 persons. Of these, 59.7% were Hispanic or Latino, 33.3% White and non-Hispanic, 4.3% Black, and only 1.8% Asian. For the year 2013, the projected or the estimated population was of 316,381 persons (U.S. Census Bureau, 2014).

### **Description of Participants**

Interview participants consisted of the CHL school principal, two teachers, and seven parents. The CHL school principal, a 50-55 years old woman from (the People's Republic of) China, holding a Master of Business Administration (MBA) degree from a U.S. mid-western (West North central) university, was also interviewed. Teacher 1, a female instructor of around 25 and 30 years old from China but living in the U.S. since a year ago, held an associate bachelor degree in business administration from a Chinese university. Teacher 2, a bilingual (Chinese-English) male instructor from China, aged between 40 and 45 years old, holding a master's degree and appointed assistant professor at a local college and living in the U.S. for 14 years, has been teaching at the CHL school for two years.

The interview participants, six females and one male, were given the following pseudonyms: Yao, Mao, Lees, Fen, Xin, Hen, and Tsui. Being all from China, they were ranged from 30 to 45 years old. They were one graduate student, one house-wife who used to be a accounting specialist, one computer programmer, three university faculty members, and one teacher. They all had two children born in the U.S., excepted for Hen who had only one child. Most have been living in the U.S. for more than 10 years: Two have been living for 13 years, two others for 12 years, one for 14 years, one for 15 years, and another for 10 years. They were/are all bilinguals but they recognized that they speak mostly Chinese at home to their children.

### **School Principal Interview**

The school principal, ranging between 50 and 55 years old, restated that earlier in the 1990s, a group of old Chinese-Americans volunteered to teach their own American-born Chinese children. As one of the school co-founders, the principal admitted that by summer 1995 or 1996, she set up a camp to teach Chinese to the

kids, her daughter included, on Saturdays for an hour during two or three months. A lot of friends joined them and the summer camp experience was a big success. She was appointed to the principal position at the beginning of the school year 2003-2004.

The principal was one of the founder parents. Her motivation to get involved with starting a Chinese school came from a personal experience when her daughter was 5 or 6 years old in the summer of 1995-1996:

... With the help of other parents, I set up a summer camp to teach Chinese to kids every Saturday afternoon during an hour for two to three months. Then, a lot of friends joined us. Of course, we did other crafts and fun activities. It was a big success.

Asked about her perception of the teaching personnel of the school, the principal recognized that all the school teachers (seven in total) were volunteering. The majority of them had their children attending the same Sunday school. But there were also student teachers from a local college who wanted to gain some teaching experience. They had previously taught or they were from an education major. The principal was not as keen with them as she stated, "Student teachers are not stable. They would leave after they graduate or find other jobs. But parent teachers are relatively stable." These latter were waged on a weekly basis.

In regards to the curriculum, the principal recalled that the Chinese consulate in the U.S. recommended the use of the actual books. These books were published in 12 issues by the Xiwang School at the Jinan University in China and were particularly designed for oversea Chinese children. Adult learners, she said, were using supplemental drawing books also from a Chinese publisher. Finally, the principal perceived her responsibilities as to providing a platform for a better learning environment for students. However, she remained open to suggestions, "... I personally hope more young people could step in to help organize this school."

#### **Teachers and Parents' Interview Themes**

Four relevant themes emerged from teachers' and parents' interviews: (a) personal views on teaching practices; (b) views on Sunday class and parental involvement; (c) support of literacy at home; and (d) perceptions of school.

**Personal views on teaching practices.** Teacher 1 described her teaching style as motivating and promoting students' free thinking and speaking after telling stories: "By telling stories to the students, I hope the students will improve their listening skills and individual thinking skills in Chinese." Teacher 1's motivation to teaching seemed related to her cultural and linguistic identity:

When I saw these students talking to their parents in English while these latter tried to communicate with them in Chinese ... I felt they should master this language. Plus, China is well-developed now, so knowing the language well will benefit these kids.

Regardless of her teacher background in her natal China, Level 1 instructor never had training on language teaching principles, but she educated herself with materials found on the Internet. Nevertheless, she wished she could be formally trained either through professional developments or through higher education. She described her teaching practice as game-oriented. Teacher 1's views on assessment consisted of in-class questions and answers, and the review of homework. As she said, patience was the attitude that made her achieve teaching goals. The teacher pointed out her priority while teaching Level 1 students:

Now, I focus on teaching them how to read and speak, not necessary writing. But they would know how to write a simple word. When it comes to more complicated characters, they probably will only read them using the Pinyin.

She noticed that her students' weak skills were reading and writing. Thus, she suggested that parents

should reinforce these two language areas (but mostly reading) and foster the speaking of Chinese at home. This is how she perceived the family support of children's HL learning. She felt that enforcing the speaking of Chinese in class—but with a flexibility to bounce back to English when experiencing difficulties to explain something—improved their Chinese literacy.

Teacher 2 was proud of his two years experience of teaching levels 0-3 at the CHL school as well as his 10 years of teaching experience. He had training to teach in higher education. He clearly knew where his motivations to teach in that CHL school came from:

I love Chinese culture and history. When I was a student, I did very well on Chinese literacy, reading, and writing. I like to promote the Chinese culture and language [...]. At the same time, my kids are studying in this Chinese school; I want to encourage them to study Chinese as their L2.

As he perceived it, the most enjoyable part of his teaching practice was to witness the progress made by children on their Chinese and to see their smile in class. He confirmed that the school and class goal was to promote the Chinese culture in the city: "It [the CHL school] can be a window to show the importance of the Chinese-speaking world, and its global cultural, social, economic, and political impact."

In regard to assessing the student learning progress, the teacher usually relied on leaving them five pieces of: one per day starting Monday through Friday. On Sundays, children had two quizzes to check the writing and speaking of the previous lesson. Furthermore, he usually scheduled a review session: "Every three lessons, we have a review exercise in class." A mid-term exam and a final test are also applied in class.

Based on his practice, Teacher 2's perception of the way children learn and master Chinese characters followed a four-step demarche:

1. Teacher writes the two transcriptions (Pinyin and Chinese strokes) and explains the character on the board;
2. Students copy three times, form phrases, and make sentence with the phrases made;
3. Homework and exercise are given to reinforce the learning;
4. Quiz to take in the next class.

The instructor's view of how children can improve their Chinese literacy competences was aligned to a multitude of parameters: "Besides class and homework activities, student can maintain and improve their Chinese by speaking it more at home, reading some Chinese books, watching Chinese movies, and visiting China during vacations." In-class activities, he implemented to develop their literacy consisted of individual or group (team of two) reading aloud, speech in Chinese, writing essays in Chinese and English, and making projects and research on Chinese history and culture.

Pedagogically, Teacher 2 described his style as a combination of teacher-centered and student-centered approaches. However, "Most of the time, it is [a] formal authority type because of the students' age. If we have some project activities, I will become more as a facilitator." As for the communication or connection with children's parents, the teacher's perception was very favorable. He reported a deeper knowledge of each of the students since eight were attending the same public school as his children.

**Views on Sunday class and family experience.** Parents' reasons for wanting their children learn Chinese were multiple: cultural roots maintenance, literacy skill development, social interactions with other Chinese-American (new) friends, cultural benefits, communication with family members, and role models. This is what Yao said about sending her daughter to Sunday classes:

She started to see where the other students go after they finished the dance class, because she is in the dance class

(group). Right after the dance class, most of them went to the Sunday class. So, she said, “Oh, I wanna go.” But that time she was too young with only four years old. But, after a year, we thought that it was good.

Children have been studying Chinese for at least one year, which is the minimal time new students spent at the CHL school. Some of them have been learning Chinese for three years. Regardless of the length children have been attending Sunday classes, parents recognized that, at school, they learned writing and reading of Chinese characters and the Pinyin, Chinese cultural components, customs, and traditions as proposed in the curriculum. As a result, at home, parents witnessed children’s improvement in their reading and writing since they have been attending the CHL school. Yao, for instance, reported that one day while walking in China during a vacation, her daughter surprised her by reading a street sign:

One time, she was speaking (talking) to (about) the sign “小朋友” (xiao peng you) which means “little kid,” she began to read really aloud (laughs) and said, “Oh yes, I can read this, it is 小月友 (xiao yue you).” And when we began to laugh, she got so embarrassed and said, “What is wrong?”

As for Mao’s daughter, after attending the CHL school, she could tell jokes and play tongue twisters (same thing as Fen’s daughter) and riddles with her friends in Chinese. Lees’ son could read menus at Chinese restaurants or in Chinatown. Also, the class content helped identify himself as a Chinese-American who accepts the two identities. For Tsui, his daughter showed a great potential for learning a new language at the advantage of being the youngest in the class: She caught up with the other kids very quickly.

Nevertheless, parents reported challenging situations in their children’s process of Chinese literacy development. Most difficulties originated from homework and assignments completion, and the time constraint between public school and Chinese school. Children either did not want to do homework or struggled to complete them. But Yao found that it was very challenging for her daughter to start with a “blank mind” (not knowing anything of Chinese writing). This situation increased the daughter’s and parents’ stress. In counterparts, Tsui faced his daughter resistance to learn Chinese, because his daughter did not see the necessity of learning it: “The major reason is that there is no chance for her to use the Chinese language very often. We speak only at home, and Sunday class only lasts about school about two hours.”

**Literacy development support from home.** Parents reported a diversity of home support to the Chinese literacy development their children received. Watching TV shows (novels), prolonged stay in China with grandparents, summer travel to China where they had to practice their speaking and listening skills, family and grandparents’ visit in the U.S., Chinese story books (even though some children did not like reading them), phone calls to grandparents in China, video conference sessions with family members in China, online cartoons (but Xin judged it inefficient for reading and writing), and regular home conversations in Chinese were the reinforcing activities mentioned by parents.

However, Yao reported a curious behavior of her daughter. She has been reluctant to speak Chinese outside or when she plays with her friends born in America:

Every one of them speaks English and Chinese but [...] they just play in and always speak English. I would think that they have a lot of identification issues. Most of them think that they do not want other kids tell them the difference.... They are born here, they speak English, they are part of the mainstream, they want other American kids in school view them as American kids.

Yao recalled that her daughter uses code switch at home, but warned her once she appeared in any kind of public school activity: “Mom, you have to speak to me in English, please do not embarrass me!”

Although most parents preferred to speak to their kids in Chinese at home, they usually did not make an issue when the kids later replied in English or in Chinese. Some of them admitted enforcing the use of Chinese as much as they can at home, as in the words of Hen: “Basically we only speak Chinese and we force him to respond in Chinese although sometimes he will choose to speak in English.”

**Parents’ perceptions of school.** To the question, to know to what degree Chinese Sunday classes affected their children’s literacy, participants were unanimous: Sunday classes affected their literacy a lot. Mao’s assurance was evident: “[...] She improved a lot after she attended Sunday school, because [...] she has no chance to practice it at home, and I am very satisfied with it.” Fen agreed wholeheartedly with the Mao: “Yes, very obvious, she improved a lot in Chinese literacy.” Tsui was entirely of other parents’ opinion by providing concreted examples of what his daughter could do to show the impact of Sunday classes in her literacy: “She practices more [...]. She can read the Chinese caption from TV.”

Consequently, parents’ overall perceptions of the school were positive. Yao appreciated the principal’s courage and the teachers’ sense of responsibility. She admired the class size that she found proportional to the city town. Mao applauded the communication between the teacher and the parents. But she requested more class hours:

I am very happy with the Chinese Sunday school. I like the communication between parents and teacher. But only two hours and half every week are completely not enough. If there is chance to increase the hours or maybe summer camps, it will be better.

Fen found that her daughter’s teacher was attentive to the kids’ needs and advocated for more class hours. Similarly, Tsui, Hen, Lees, and Fen cheered on the school communication. Lees especially praised the chances of children to perform in different festivals, such as the Chinese New Year celebration, Christmas, and Thanksgiving.

On the other hand, although she appreciated her son’s teacher hard work with the kids, Xin would love the instructor to adjust the lesson pace, so that students would “digest” what they have previously learned. Finally, Tsui did not want to compare the CHL school teaching practice to China’s: “I am very satisfied with the teaching at the Chinese Sunday school [...]. I know that it cannot be compared with the teaching in China, because they [in China] use the language all the day.” Conversely to other parents, Tsui found that it is not easy to keep a child sitting in a classroom for two hours. Thus, he would not ask for more instruction hours.

### **Artifacts and Visual Data**

**Quiz samples.** Quiz samples 1, 2, and 3 (see Figures 1, 2, and 3) show the types of tests applied by Teacher 2 each Sunday in order to review the past week lesson. In samples 1 and 2, children wrote the vocabulary in Chinese characters except for the No. 6 in sample 1. The two samples suggested that the teacher wrote the Pinyin words on the board and children had to write the same words using the Chinese characters. Sample 3 showed the opposite demarche: from Pinyin to the characters.

On the second level of analysis, the teacher’s (correcting) style or method—better said the assistant’s style, because it was one of his assigned tasks—was transparent: a formal authority type. On a psychological level, the red ink has been accused to increase stress to students, or a symbol of negativity (Associated Press, 2012). However, this might be a reject of a teaching custom practiced over the years. Nevertheless, as the instructor was using a typical Chinese teaching practice, his assistant’s use of the red ink to correct students’ work can be justified and perhaps can culturally be loaded.

On a third level of the analysis, a systematic and particular grading system was notable. In the quiz sample 1, the student was given a full credit (100%) while the assisting teacher marked a mistake on the No. 8. In samples 2 and 3, similar marking habitué happened. The quiz was given a 99% of the grade and a 97% while two mistakes and four were respectively marked to samples 2 and 3. This showed that the teacher was giving high grades in order to motivate his students. However, on the bottom of the grades, the assisting teacher drew different pictures: a turtle, an insect, and a flower. This seemed so motivating and encouraging that children could not wait their papers to be turned back and started to like quizzes. It also meant the care the assisting teacher put to review each single quiz and personalize his feedback/correction.

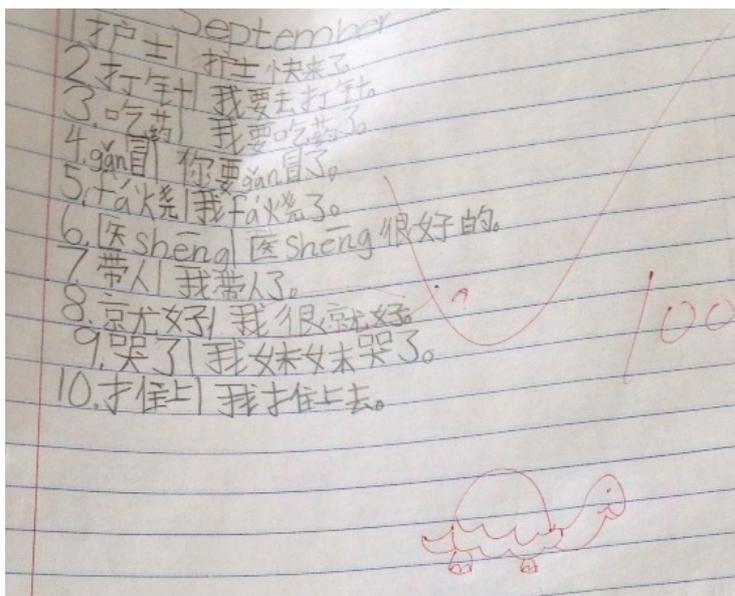


Figure 1. Quiz sample 1, Student A (September 29, 2013).

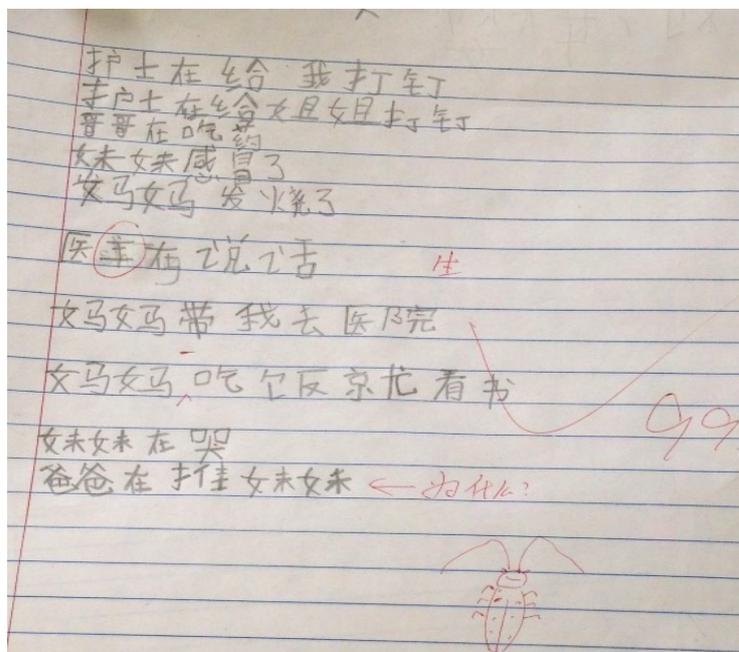


Figure 2. Quiz sample 2, Student B (September 29, 2013).

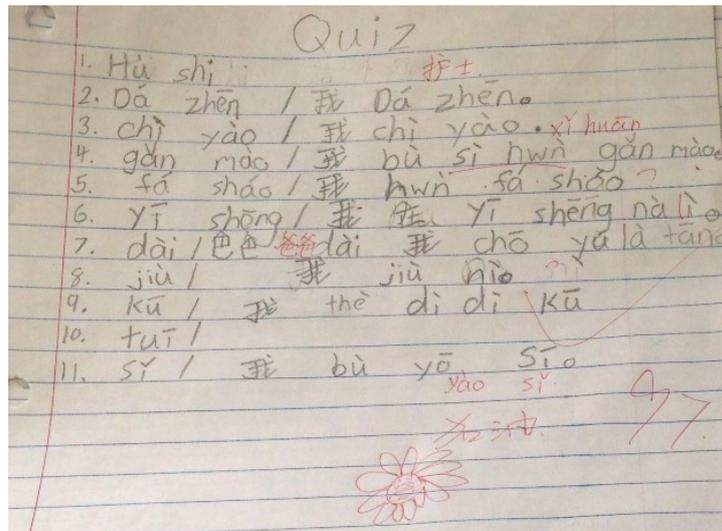


Figure 3. Quiz sample 3, Student C (March 30, 2014).

**Classroom pictures.** Visual data analyzed here consisted of rooms pictures taken. Figure 4 shows one façade of the Level 1 classroom which represents a tabernacle, a temple, and a world map. Level 4 classroom shows two geographical maps of the world and of the Middle East (see Figure 5). In the middle, there are a small chalk board and a chalk eraser. The map on the left shows the regions where the Baptist Church missions are established.

Figure 6 is a caption of the Middle East, the North-Eastern of Africa, and the South-Eastern of Europe.

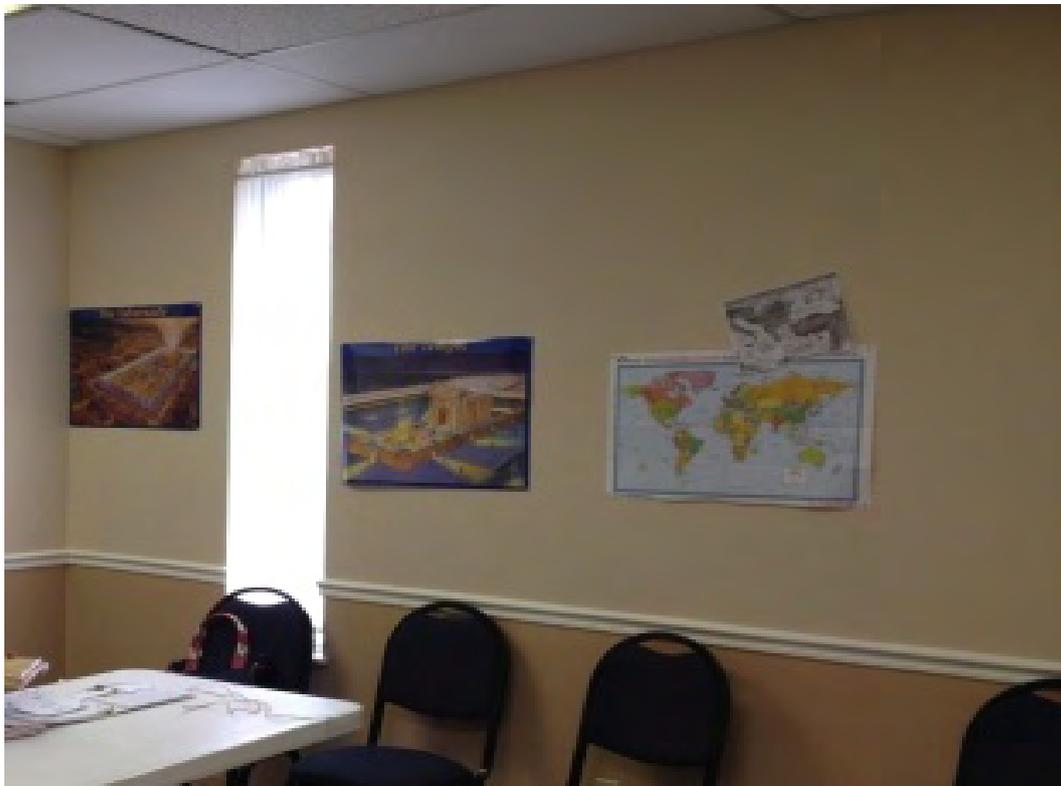


Figure 4. Wall pictures on the Level 1 classroom: the tabernacle, the temple, and the world map.



Figure 5. Front view of the classroom (Level 4).



Figure 6. Map on the right façade of the room (Level 4).

The picture on the right façade of the Level 4 classroom shows the places “Jesus walked.” It is a zoomed picture of the Figure 5 frontage maps. However, all these pictures had nothing to do directly with the Chinese literacy development. It is important to keep in mind that the CHL school was hosted by the Second Baptist Church. Therefore, the decoration or the facilities pictures had a religious purpose rather than academic. Considering the physical disposition of the pictures, the maps attract more than the board. The right façade map was even bigger than the pale board. It must be inferred that the academic plays a secondary role into the religious institution. Indeed, the researchers noticed that the church Sunday service or worship was always celebrated 15 minutes following the Sunday class.

### Findings

Overall, beside the observations of the two teachers’ teaching, the researchers interviewed the aforementioned two teachers, the school principal, and seven parents (representing a 63.6% of the families that had their children in Level 4). Observation of teachers’ teaching, which took place during the 2013-2014 school year, was made by at least two researchers in 15 occasions, representing a 65.2% of face-to-face classes per level over the 23 Sunday classes from September 2013 to April 2014. The instruction was carried on in two

periods of 45 minutes with a 15-minute break. Student body of the levels observed was composed of six students (four girls and two boys) initially but of three (one girl and two boys) at the end of school year, aged 4-12 in Level 1, and of 11 children (six girls and five boys), aged 6-8 in Level 3. Students' equivalent level in public school was ranged from pre-kindergarten to Grade 7. Therefore, the abovementioned data were served to address the research questions.

### **What Are School Educators' and Parents' Perceptions on the Chinese Literacy Development of Second Generation of Chinese-American Children Attending Sunday Classes in South Texas?**

The answer to this question requires the consideration of both observation and interview findings. In fact, the researchers observed that Teacher 1 used the Total Physical Response (TPR) strategy, mnemonics, visual teaching with flash cards and printed pictures, and relied on the audio lingual method (Larsen-Freeman, 2000) to teach vocabulary. To teach writing, she used the contrastive analysis or decomposition-composition strategy, an analytic technique of a pair of languages in order to detect structural or syntax differences and similarities (Mihalache, n.d.). For example, Teacher 1 taught Chinese characters by using the Pinyin Romanization and tones: “dā/搭” (high level tone), “dá/答” (rising tone), “dǎ/打” (falling rising tone), and “dà/大” (falling tone). For reading, she used in-class reading strategy consisted of group-reading strategy, small group (boys or girls only) reading, minimal pairs, and peer-reading strategies (two learners read together and sometimes self-corrected their mispronunciation), individual (sometimes guided by teachers) reading strategy, and repetition drill (imitation) techniques (Larsen-Freeman, 2000).

In contrast, Teacher 2 followed a formal instruction or the direct instruction method based on translation, or the grammar-translation approach, and the game-based instruction (Larsen-Freeman, 2000) to teach vocabulary. For instance, he wrote new words on the board using the Pinyin and Chinese characters and would randomly ask for the explanation. He would tell them in case of failure to correct the meaning. In other cases, he first explained new words in Chinese and then in English. His teaching writing strategy was similar to Teacher 1 who used contrastive analysis. For example, he taught children the Chinese punctuation by comparing it to English. Structurally and conversely to English, since the Chinese is a topographic language, he used the step by step or stroke by stroke technique to help children write a new Chinese character. In other words, teachers instructed the students on how to decompose and compose Chinese characters. For example, “景” can be decomposed into “日” and “京”. Additionally, Teacher 2 used a discriminatory-scaffolding technique, consisting of minimization of errors through the mastered of the prerequisite skills (Beale, 2005), to help children remember and recognize the characters previously learned by writing the already learned characters similar to the newest to be learned. In other words, the instructor was using the motor learning and memory mode (Ghilardi, 1984). Also, Teacher 2 used the same strategies than his Level 1 colleague for reading.

However, for the speaking skill, the two instructors observed taught their classes in the Chinese language with little use of English when needed. They used a question-answered strategy. Students most likely were speaking in English between them and sometimes when they had to address to the teacher. Both teachers were enforcing the use of Chinese during the class time. In addition and in particular, Teacher 1 often used the audio lingual strategy to foster the Chinese speaking skill of her students: Songs and recitals were used without any direct reference to English.

From the teaching behavior observed, it can be deduced that teachers' perceptions reflected a high level of responsibility and commitment. Their actions as educators were based on the inner conception of being Chinese.

In other words, the degree of dedication and commitment observed in their teaching practices revealed the awareness level of cultural and linguistic maintenance. Therefore, it can be deduced that teachers perceived the Chinese literacy development of second generation Chinese-American children as an obligation to fulfill. This perception of obligation, commitment, and responsibility, through the use of several teaching strategies observed, was confirmed in the teachers' interview.

Teacher 1, for instance, felt that children who usually talk to their parents in English even though parents spoke Chinese "should master this language." Further in the interview, she restated, "Right, I think they should be able to know Chinese." The modal "should" used here confirmed the idea of obligation, thus, commitment. Interpretatively, obligation for Teacher 1 was related to the notion of identity: This is, the belonging (through birth) to a certain ethnic group forced individuals to behave in a certain way. Children must follow the mainstream. Moreover, Teacher 1 perceived that teaching efficacy was depending on students' enjoyment of classes. This is why she introduced stories and funny activities in her teaching.

Similarly, Teacher 2's perception of the development of Chinese literacy through his teaching practice was seen as an obligation after curtsying Chinese culture and history. But obligation in him meant promotion the Chinese culture and language, as he stated in the interview: "... I like to promote the Chinese culture and language ... I want to encourage them to study Chinese ...". Furthermore, teachers reflected their commitment and sense of responsibility or obligation toward the development of Chinese literacy in the way they organized the instructional environment: A family-type like class setting for Teacher 1, and a traditional formal-authority type class setting for Teacher 2.

Likewise, the school principal's perception of the development of Chinese literacy showed the same pattern: from the home culture awareness and identity to the commitment and promotion of her native culture and language based on her family experience (her daughter). Therefore, she depicted herself as a motivator of the Chinese literacy development. For her, motivation was linked to teachers' volunteering dispositions as long as most of them were trained to teaching from their other jobs and were parents of second generation students attending the CHL school.

As for parents, their perceptions of their children's Chinese literacy development were also guided by their cultural and linguistic descent. They perceived that the Chinese literacy development was inheritance: Children must keep the Chinese heritage, so that they would be able to socialize with family members. This is why most of them supported the learning of Chinese at home. Moreover, they favorably viewed children's literacy development at Sunday classes, because despite challenges faced by HLLs, parents could witness children's progress through daily examples and real life situations. In other words, their perceptions were very positive and matched teachers' views and teaching practices or convictions. Justification for such similarity viewing the literacy development of HLLs was deduced from the similar status shared by both parents and teachers: Both sides had children attending Sunday classes. Thus, a sense of responsibility and attentiveness to the kids was also inferred in their perceptions.

### **How Do School Educators and Parents Express Their Views on the Chinese Literacy Development of Second Generation of Chinese-American Children Attending Sunday Classes in South Texas?**

The way school educators and parents expressed their views on the Chinese literacy development of second generation of Chinese-American children was deduced from both the observation and the interview data. Indeed, from the non-participant observation, data showed that the school principal was enthusiastic and showed a great level of satisfaction. During the interview, she repeated three times the same idea contained in

the following statement: “This Chinese school served as a good platform and I hope it can continue to provide Chinese kids with the opportunity to learn the language and our heritage culture.”

Although she was nervous at the beginning of the interview, Teacher 1 passionately expressed herself on her students’ literacy development process. Passion rhymed with enthusiasm in her voice and in her teaching behavior as observed. She usually utilized personal materials (iPad and smartphone) to compensate the school lack of pedagogical resources, and teaching strategies, such as TPR, game-based, etc., aimed at captivating children. By contrast, Teacher 2 expressed his views in a calm way. He was confident in what he was saying. The confidence came from his 10-year teaching experience. He was convinced that such schools could have a global, cultural, social, and economic impact in the local community.

As for most parents, they enthusiastically expressed their views on the Chinese literacy development of their children. Since they witnessed palpable progress at home, they joyfully and confidently voiced their perceptions. There was also a sort of spontaneity emanating from their answers and remarks during the interview. This spoke a lot of their satisfaction with the school as this latter was fulfilling their wish. Only one of the parents seemed frustrated due to the fact that her daughter was complaining a lot and was reluctant to attend Sunday class. Basically, this daughter was experiencing a sort of “homesick” due to a recent move from Georgia where she grew up to Texas.

### **Conclusions and Implications**

This research study aimed at exploring school educators’ and parents’ perceptions of Chinese literacy development of second generation of Chinese-American children through Sunday classes. A qualitative research design with a multiple data collection was necessary to answer our research questions. A 7-month period of non-participant observation of the CHL Sunday classes was adopted to describe educators’ perceptions of the Chinese literacy development through their teaching strategies. Teaching strategies reflected teachers’ commitment, responsibility, obligation, and home-country cultural awareness and identity. Accordingly, educators’ and parents’ interview data corroborated to some extent what was observed.

Furthermore, findings were consistent with previous studies on the development of CHL weekend classes across the U.S.:

1. Practically, in the CHL school, bilingual instruction happened. Learners and sometimes the teachers used both Chinese and English to communicate (Donghui & Slaughter-Defoe, 2009; Hornberger, 1990; Zhang & Koda, 2011).

2. Literacy was not only a school matter. Even though children were sent to the CHL school to improve their writing and reading skills, parents also collaborated in this task. Myriad of means, such as TV shows, family trip to China, grandparents’ visit in the U.S., etc., were used by parents for this purpose. These means were part of children’s funds of knowledge (Moll, 1992).

3. Identity issues and socio-cultural struggles (Hornberger & Wang, 2008) were evident in the teaching practices, and in what parents reported about their kids. Some children were reluctant to learn Chinese or to speak it in public since they were living in the U.S..

4. The observed CHL school was a non-profit organization (Wang, 1996). Therefore, it might entail the “classic” problematic of its genre as evoked in the literature. One of the teachers recognized that he was volunteering. However, it was rather a giving-back-to-school-attitude for having his son attending Sunday classes than a volunteering act.

5. However, in contrast to the lack of professional identity that most teachers of the non-profit Chinese schools showed in previous studies (Hsu-Pai et al., 2011; Lawton & Logio, 2009), teachers in this study showed a strong commitment and sense of professional identity to their teaching practice. The school principal evoked that when school had to rely on student teachers in the past, such lack of professional identity (as revealed in the literature) occurred: Most of the time, student teachers would quit the Sunday school teaching job once they got a better (well-paid) position somewhere else.

Finally, from the research findings presented above, implications to be mentioned here can also be considered as suggestions for further research:

1. One of the legitimate claims received from parents was to assign (attribute) more hours to the Sunday classes. This claim would infer the revision of the school status that would change from a non-profit to a for-profit organization. Multiple implications would stem from this change, i.e., the teaching preparation, the schedule change (classes during the week), the curriculum elaboration and development or election: bilingual or HL curriculum, etc..

2. Further adoption of or further conversion of the CHL school into a bilingual education English-Chinese program in this region of the U.S. was likely desired by the principal. Therefore, scholars, administrators, and teachers involved in the promotion of the CHL should look at the bilingual education programs (English-Chinese) that are already developed and running in other states, such as California.

3. Regarding the teaching practice, there was a slight “tension” that could be implicitly deducted by confronting the teaching philosophy and the students’ reality. Teacher 2’s formal authority or formal instruction philosophy used in China would need an adjustment in order to be applied in the U.S., because these children are living in a different setting; they are not living in China. Even though children can quickly adapt their behavior and learning styles to each teacher, an adaptive work should be made by teachers. Failure to doing so would result in assimilationist attitudes, which could take a colonialist image, e.g., a teacher from China imposes Chinese realities to American-born Chinese in the U.S. (Ekiaka-Oblazamengo & Ekiaka-Nzai, 2014).

4. There should be a need for redefining the qualifications of HL teachers to ensure and effective literacy development of the second generation Chinese-American children.

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# Outcomes of PISA and PIAAC Research and Today's Czech School Practice\*

Dana Vicherková, Petra Kaduchová, Stefan Chudy, Imron W. Harits, Tereza Buchtová  
Palacky University, Olomouc, the Czech Republic

The aim of this article is to think about key issues of readers' comprehension literacy of a specific category of research sample readers (15-24 years old). To what extent is the information of both international researches implemented into reality and chosen curriculum. In the first part of the article is introduced the basic terminology (literacy, according to Organisation for Economic Co-operation and Development [OECD], functional literacy, and reader's literacy). It is essential to understand that it is not just about literacy skills, i.e., being able to read texts and understand them, but also the skills to find, process, and compare the information contained in the text, and reproduce text content. In the second part the article thinks about and compares selected key data from international Program for International Student Assessment (PISA) and Program for the International Assessment of Adult Competencies (PIAAC) research for specific category of research sample (15-24 years old readers). It is also worth considering whether the teaching community and the general public are aware of the need for specific measurements and the international comparison of literacy, in which the Czech Republic participates.

*Keywords:* literacy, reading strategy, education to reading, curricula

## Introduction and Basic Terminology

The education of readers is an essential educational activity to acquire functional literacy skills, which is an important input to the adoption of a number of key competences.

Reading is one of the most important educational activities for students who attend primary school (later, other educational institutions). The art of reading and understanding the text belongs among the social and cultural manifestations of advanced civilized man. Knowledge of letters is used to record information and to process knowledge. A related skill is to read text not only technically, but also functionally (in view of certain communication situations in daily life).

Functional literacy—skills for the implementation of various human activities necessary for life in contemporary civilization—is literacy in the field of literary work, documentary and numerical, for example,

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\* **Acknowledgments:** IGA\_PdF\_2015\_026: Analysing the reflexion of specific pedagogical disciplines in the process of constituting pedagogical knowledge in students of PdF UP in Olomouc.

IGA\_PdF\_2015\_022: The phenomena of relationships between education and thinking in constructivism education.

Dana Vicherková, M.Ed., Ph.D. student, Department of Pedagogy and Social Sciences, Faculty of Education, Palacky University.

Petra Kaduchová, M.Ed., Ph.D. student, Department of Pedagogy and Social Sciences, Faculty of Education, Palacky University.

Stefan Chudy, Ph.D., professor, Department of Pedagogy and Social Sciences, Faculty of Education, Palacky University.

Imron W. Harits, M.A., Ph.D. student, Department of Pedagogy and Social Sciences, Faculty of Education, Palacky University.

Tereza Buchtová, M.A., Ph.D. student, Department of Pedagogy and Social Sciences, Faculty of Education, Palacky University.

the ability not only to read, but also to understand complex texts and fill in forms, to understand graphs and tables, etc. (Průcha, 2009, p. 67). Reader's literacy—complex knowledge and skills that enable an individual to deal with written texts commonly encountered in everyday life (e.g., a railway timetable or instructions for taking medication)—is not just about literacy skills, i.e., being able to read texts and understand them, but also the skills to find, process, and compare the information contained in the text, reproduce text content, etc. (Průcha, 2009, p. 42).

According to the definition of literacy (according to Organisation for Economic Co-operation and Development [OECD] and Program for International Student Assessment [PISA]), it is the skills in understanding a written text, thinking about it, and using it to achieve certain goals, to develop own abilities and knowledge, and for active integration into society (Procházková, 2002).

### **Selected Key Data From International PISA and Program for the International Assessment of Adult Competencies (PIAAC) Research**

The organizer of the international PISA and PIAAC research is the OECD. Both studies focus on finding the level of basic skills needed in solving everyday problems, and affecting the labour market.

PISA (2009) focused on the target group of 15 years old students, and PIAAC (2011/2012) on the adult population between 16-65 years old.

The aim of the PISA study is to determine whether pupils of different countries at the end of compulsory schooling acquire the knowledge and skills that are necessary for the successful involvement of young people in the real world of the new millennium (how they can use what has been learned in diverse life situations), while the PIAAC research aims to examine the level of preparedness of the adult population in modern society.

Among the surveyed PISA skills were: information gathering, processing, and evaluation of the text. PIAAC monitored reading skills, information searches, the use of computers and technology, work experience, and the process of initial and continuing education.

The research respected the specificities of development of literacy in each of the participating countries, taking into account, for example, children and their maturity period of the preschool methods of working with pupils with specific learning needs, socio-cultural differences, as well as extracurricular and lifelong learning.

This contribution is dedicated to the selected category research sample of 15-24 years old readers.

### **Possible Key Literacy Issues of the Czech Population**

Even though a lot of research projects deal with diverse supporting influences for the development of literacy (e.g., Huffman, Mehlinger, & Kerivan, 2000), a key position in its development is held by the school. International studies (PISA and PIAAC) indicate the current status of literacy in comparison among member states, and it is worth considering that our level of reading strategies for 15 years old pupils is getting worse. It is therefore important to investigate all the available measures to prevent and intervene, in order to support the development of reading skills (mainly in the processing and evaluation of information, critical thinking, and interconnection processing of information in the text with their own experience gained in everyday life).

To understand the European trends in attitudes to reading and reading skills, it is necessary to analyse existing educational curricula, which define the boundaries and possible methods of reading literacy development. The possibility of comparison with other countries is an inspiration for the possible modification of teacher training, including support for the development of reading.

Among other factors affecting literacy, own didactic work of teachers (choice of methods), course organization, the number of pupils, classroom amenities, school libraries, and other educational centres must be included. School experience shows the weak motivation and unwillingness of many teachers to use appropriate methodology (methods of critical thinking, teachers working with art books, literature for youth, etc.). From interviews with teachers of different kinds of schools that have taken place in the context of our survey, we can see that across all stages, teaching the Czech language and literature only working with excerpts from artistic literature in papers prevails. It also showed that the development of a comprehensive approach to reading is mostly applied only in the 1st grade of primary school (reading skills are dealt with by teachers not only in teaching the mother tongue, but also in other subjects). The situation is different for the 2nd grade of primary schools, where we find a comprehensive approach to reading virtually missing (reading skills deal only with learning the Czech language and literature, and sometimes foreign languages). In the 3rd grade of education, the introduction of the state graduation exam returns to Czech language and literature, using the book as a whole (not just extracts from the texts).

Although for mutual understanding of content being communicated, communication between people is important. Our findings do not reflect this fact, because schools do not respect the requirements for mastering the basic rules of language and communication training, stylistic and literary education, as applied in everyday life.

The question is to what extent our contemporary curriculum characterizes and develops literacy skills in all areas of our education. It is also worth considering whether the teaching community and the general public are aware of the need for specific measurements and the international comparison of literacy, in which the Czech Republic participates.

### **Results of International Research and Practice in the Selected Curricula of Pedagogic Educational Institutions for the Pupil Population**

Human personality develops even at a preschool age, when developing need and motivation for self-knowledge (i.e., different literacy, including reading literacy, which is enshrined in the current preschool, and later school, curriculum). Curricular document Framework Educational Programme for Basic Education (FEP BE) 2004 does not contain the characteristics leading to reading skills. It is up to the teachers of preschools how their educational and training activities are used to develop literacy skills, and they often substitute their own expert ideas for the gaps in the existing general educational programme for preschool education. According to the survey, some hope of change (adding measures to promote and develop pre-reading skills and their methodology) in the basic preschool curriculum was brought by the thematic report published by the report of research (Czech Statistical Office) to support the development of literacy in preschool and primary education (Kropáčková, Wildová, & Kucharská, 2014). It can be stated that the systematic teaching of reading and writing is performed from compulsory school attendance.

In economically and socially developed countries, they are laying the foundation for lifelong learning as early as in preschool education, which reveals the results of the Progress in International Reading Literacy Study (PIRLS) and PISA investigations. Here, it confirms that pupils attending nursery school and kindergarten perform significantly better, and often reach a higher level of education.

In 2001, the so-called National Programme for the Development of Education White Paper, which forms a coherent concept of education development in the Czech Republic for the next period of 5-10 years, was published.

The FEP BE has an educational portion divided into nine educational areas, which are composed of one educational field or interlinked educational fields (the titles subjects). In 2007, there was a realization of FEP BE in all elementary schools in the Czech Republic in the form of school educational programs of individual schools (under elaboration on the specific conditions of their school environments).

According to Švrčková (2011) and Kropáčová (2006), the current form of FEP BE insufficiently appeals to the development of literacy of students (in importance for success in everyday life).

Literacy skills, or their components, do not figure as an important goal at any level in the FEP BE. The FEP BE is not a required systematic development of literacy skills of each pupil and literacy as such, then it is not integrated at the level of general education, and binding targets is also built next to the key competences. Expected outputs of individual disciplines require mastery of some of the components of development of literacy mostly only in fields that are traditionally perceived as appropriate, and where the reader is reading, and readership is largely a self-content industry (language and communication training, literature). Even here, development of literacy is not systematically covered in the modern meaning. Other courses and cross-cutting themes in the contemporary conception of the curriculum contribute to the development of literacy sporadically, although their role can and should be much more substantial. (Švrčková, 2011, p. 26)

Since September 1, 2013, the effective program is in the document Standards for Basic Education (Ministry of Education, Youth and Sports of the Czech Republic [MŠMT], 2013c). We will focus on text analysis targeted for pupils of the second stage of primary school (9th grade).

An urgent problem of today's educational curriculum documents is whether they put sufficient emphasis on explaining the needs of a pupil in education (respect for individual differences in abilities, skills, and knowledge of pupils). The valid revision of FEP BE has been some changes in the concept of education, but in advisory didactic teaching of the mother tongue, it does not separate (specific) emphasis on developing reading strategies (only as part of communicative competences). Standards for Basic Education of the Czech language and literature prepared pursuant to the modified FEP BE (MŠMT, 2013b), effective from September 1, 2013, include 10 expected results in the thematic area called 1. Communication and Education Essay, eight expected outcomes in the area named 2. Language Education, and nine expected outcomes in the area named 3. Literary Education.

From this document (standards for Czech language for basic school education programs), it is not entirely clear how exemplary the role of developing specific reading strategies and skills are that international surveys of literacy focus on. Through study and analysis of standardized tasks, training facilities can specify reading skills, as targeted by PISA and PIAAC, for example, skills focused on information gathering, processing, and evaluating information.

#### **Example 1**

Reading, comprehension, and readership strategies dedicated to the first thematic area of Communication and Composition, and these expected outcomes FEP ČJL-9-1-01 (e.g., in reading the text, the student has to distinguish facts from opinions and assessments, collate and verify facts through questions with other available sources of information). The discussed literacy strategy reflects the skills of the students to find information, process, compare, and evaluate it according to specification.

#### **Example 2**

The expected output of FEP ČJL-9-1-06 (currently included in the above document of 1.9.2013) seeks to distinguish prepared and impromptu speech communication. It emphasizes the diversity of verbal, nonverbal, and paralinguistic means of language. There, it obviously applies to reading education, for example, selecting

an appropriate reading tempo, phrasing, intonation according to the kinds of sentences under the rules of pronunciation. The benefit is an appeal to productive short key information, distinguishing speech in private, and in public. Illustrative work leads to students being able to talk about a topic they understand (e.g., by providing the information in speech). The acquired skills can be applied in working with texts (e.g., what a given character says and why). There are noticeable signs of working with information, analysis, and evaluation of the text.

### **Example 3**

The expected output of FEP ČJL-9-3-03 is directed to the expression (sharing) of personal impressions from reading, and others. It is the expression of views on the work of art (an appeal to the right argument, stating both positive and negative opinions). An illustrative role belongs among the readership strategies in evaluating text.

In conclusion, we can say that in the analyzed curriculum document (text analysis is based on tested methodology to be used in an international survey of reading literacy of 15 years old pupils) Standards for Basic Education of the Czech language and literature processed according to the modified FEP BE (with specifications for the second stage of primary school, 9th grade) are processed selected current output from the field of literacy training reading strategies consistent with tested skills of reading literacy and reading performance at international measurements (PISA 2009) were processed, as witnessed by the above analysis of the document. But, we cannot expect a significant improvement in Czech pupils in reading, since some lack of unified specialized terminology of development of literacy (terminology) in all curricula (FEP Standards for Basic Education of the Czech language and literature, with specifications for the second stage of primary school, 9th grade) is missing.

Also, obvious is the absence of systematic development of each pupil's development of literacy. Given that development of literacy is not integrated at the level of general education, and mandatory targets are not built next to key competences, we do not think that we can expect significant improvement in Czech students in reading in other international surveys in the future. Of course, in this troubled area being examined, development of literacy plays a role not only for students, but also for their teachers and learning materials (ČJL textbooks).

It is certainly a question of the extent which ČJL textbooks meet (for students of 9th grade), based on the requirements of the mandatory curricula, to what extent teachers (Czech language) of 15 years old students are interested in the results (outcomes) of international development of literacy research, and whether teachers have an interest, motivation, time, and space for further education in the monitored problematic plane.

### **Results of International Research and Practice in the Selected Curricula of Educational Institutions of the Adult Population**

Another part of this paper focuses on the adult population. In the youngest age group of the adult population (16-24 years old), research showed worse results, just like in other developed countries. Despite this deterioration, however, it is the youngest group who was evaluated at least as average.

The group that achieved the worst results among the population was the 35-54 years old group. Apparently, here, we see the results of a hectic period, heavy workload, parenting, and a lack of time for hobbies and personal skills development.

On the contrary, as for tendencies for improvement, we can talk about the older adult population between 55 and 65 years old, presumably because they are not professionally active, and therefore, have more time to devote to educational activities that promote personality development and improve the quality of life.

For university educated individuals, results in reading literacy have worsened since 1998, probably in the context of increasing access to higher studies, the skills of Czech university students still remain above average in international comparisons. The research brings indisputable evidence that skills increase with increasing education.

In our selected adult population, i.e., 16-24 years old, we focus on analyzing the curricula of secondary education (the catalogue of testing requirements for school-leaving examinations in the Czech language and in literature).

For secondary school pupils, teachers, and the educational community (as well as the lay public), it is important to monitor developments and the educational concept of a unified state graduation exam in Czech language and literature.

On April 30, 2013, the *Ministry of Education, Youth and Sports* published (in accordance with Act No. 561/2004 Coll., on preschool, primary, secondary, higher professional, and other education—the Education Act, as amended by subsequent regulatory documents) catalogues tests required for school-leaving examinations in foreign languages, mathematics, and Czech language and literature. With the above requirements, tests and sub-tests of school-leaving examinations held after January 1, 2015, will be developed.

Catalogues are mandatory educational documents that are based on the framework of educational programmes for secondary schools and general educational programmes for the fields of secondary vocational education with school-leaving exams (effective from 2007), and valid teaching documents for secondary vocational schools. In the preparatory process, catalogues were also based on the Standard of Secondary Vocational Education, issued by the Research Institute of Vocational Education (VÚOŠ) Prague (with effect from January 1, 1998).

The publication of catalogues of requirements for 2015 (the revision of previously existing catalogues) has not fundamentally altered the structure and scope of school-leaving examinations in Czech language and literature, but thanks to the professional pedagogic and public discussion, it has stabilized the structure of the text, with the option to maintain comparability between test tasks and assignments. Parts of the individual catalogues are examples of test tasks and examples of written work assignments, as well as a worksheet for the oral exam.

We consider the openness and accessibility of information output on the current curricula on the CERMAT Website (<http://www.Novamaturita.cz>) a positive direction in education. On this Website, there is valid information on the organization and preparation for the school-leaving examination in the current period (for pupils, teachers, and the general public). The graduation bulletin is published regularly in advance, with a summary of key information on selected problematic phenomena. The practice, repetition, and examining pupils' knowledge and skills can be used in the archives of graduation assignments (tests, essays, as well as worksheets, sample tasks with solutions) from previous years of state school-leaving exams.

Research has shown that today's schools are not sufficiently harnessing their full potential for the development of literacy, for example, because questionnaires for teachers and students, as well as interviews, revealed insufficient teacher support in active and productive work with the text. Reproduction of the text is predominant. The aforementioned outlets also confirmed the PIRLS test results, which showed that teachers mainly used reading material in a uniform manner, regardless of the reading level of students. Reading

comprehension is only checked verbally, by reproduction, or identifying the main ideas, and less frequently compared to the experience of the student or other texts, not developing skills in anticipation and generalization (Najvarová, 2008, p. 20).

In reading literacy, from 2000 to 2009, the results of primary school pupils and students in school-leaving and non-school leaving exam programs of secondary vocational schools significantly worsened. This increased the gap between the results of these pupils and pupils of grammar schools, whose results are virtually unchanged. (Palečková, Tomášek, & Basl, 2010, p. 35)

It can be stated that education towards reading is deliberately conceived conceptually. The level of pupils' reading strategies at the end of secondary studies is evaluated by the didactic text form (since the school year 2014-2015, it has contained a didactic test with open and closed tasks) and oral examinations (artistic and non-artistic analysis of the text).

### Conclusion

It is worth considering that the Czech pupils in reading literacy tests only achieve average results. Their results are comparable to, e.g., the results of Austrian and Slovakian pupils; but the youngest population of students from neighbouring Poland, Germany, and also pupils from Hungary, fared better. The Czech Republic is also among the top five OECD countries, which, since 2000, has had a significant deterioration in results (Australia, Sweden, Austria, and Ireland). The failure of Czech pupils in reading literacy is a problem concerning fact processing, comparison, analysis, interpretation, and evaluation.

The PIAAC final results confirm the hypothesis of declining education of the Czech adult population. The Czech Republic has achieved average results in reading, because reading proficiency in Czech adults can be compared with the level of literacy in 1998.

Many reading studies indicate the necessity of taking a complex look at developing reading strategies—across all stages of human development, from childhood, through youth, and into adulthood. Based on international research, we see that immature literacy leads to study problems, and then to the difficulties associated with finding work (we are talking then about functional illiteracy). With a lower level of education attainment, difficulties in social application are closely related.

Education dedicated to reading occurs in varying degrees at all grades of schools, but not to the same degree. The teacher's personality and specific didactic work are always important, which lead to education in reading, and respecting the existing curriculum, and possibly the complementary absence of the above-mentioned problem areas.

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# Development and Implementation of a Collective Teacher Efficacy Scale Among Elementary School Homeroom Teachers

Chia-Hsun Chiang

National Sun Yat-sen University, Kaohsiung, Taiwan

Wan-Chen Hsu

National Kaohsiung Normal University;

National Kaohsiung University of Applied Sciences, Kaohsiung, Taiwan

Hsueh-Hua Chuang

Iowa State University, Ames, USA;

National Sun Yat-sen University, Kaohsiung, Taiwan

Collective teacher efficacy has been a prominent research topic in the field of educational effectiveness. Improving the quality of scales measuring collective teacher efficacy is imperative. The aims of this study were to revise a self-report Collective Teacher Efficacy Scale (CTES), and investigate the relationship between collective teacher efficacy and teacher self-efficacy among elementary school homeroom teachers in Taiwan. A nationally representative sample of 758 elementary school homeroom teachers from 57 schools was recruited for the study. First, the structural equation modeling results revealed that the CTES, which contains questions about teachers' perceptions of student discipline and instructional strategies, is a reliable and valid measure. Second, elementary school homeroom teachers perceived themselves to have positive teacher self-efficacy and positive collective teacher efficacy in their schools. Finally, collective teacher efficacy was positively correlated with teacher self-efficacy. Discussion of the results and recommendations for future research were also provided.

*Keywords:* collective teacher efficacy, elementary school teachers, teacher self-efficacy, quantitative research

## Introduction

Collective teacher efficacy differs from teacher self-efficacy in that it refers to teacher perception of the effectiveness of the teaching staff as a whole, rather than teacher judgments of the effectiveness of individual teachers (Goddard, Hoy, & Hoy, 2004). Previous studies have reported that teacher self-efficacy is related to teaching behavior in the classroom (Abu-Tineh, Khasawneh, & Khalailah, 2011; Hsiao, Chang, Tu, & Chen, 2011; Rahimi & Gheitasi, 2010). Bandura (1997) argued that the collective efficacy of the teachers within a school is a powerful construct that varies considerably among schools and is systematically associated with student achievement. Therefore, collective teacher efficacy has been considered a vital predictor of the

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Chia-Hsun Chiang, Ph.D., Institute of Education, National Sun Yat-sen University.

Wan-Chen Hsu, post-doctoral fellow, Graduate Institute of Adult Education, National Kaohsiung Normal University; Center for Teaching and Learning Development, National Kaohsiung University of Applied Sciences.

Hsueh-Hua Chuang, Ph.D., associate professor, Department of Curriculum and Instruction, Iowa State University; Institute of Education/Center for Teacher Education, National Sun Yat-sen University.

differences in teacher self-efficacy and teaching behavior.

Teachers used their sense of efficacy in order to be effective in teaching (Magno & Sernbrano, 2007). Collective teacher efficacy has been a prominent research topic in the field of educational effectiveness. It is associated with teachers' self-efficacy, motivation, and teaching ability as well as student learning outcomes (Lee, Zhang, & Yin, 2011). Several studies have indicated that collective teacher efficacy can positively affect teachers' self-efficacy (e.g., Chen & Wu, 2010; Goddard et al., 2004; Hung, 2010; Skaalvik & Skaalvik, 2007) and teaching behavior (e.g., Chiang, 2014; Ciani, Summers, & Easter, 2008) in addition to their students' learning achievement (e.g., Bandura, 1997; Goddard & Goddard, 2001; Tschannen-Moran & Barr, 2004).

Improving the quality of scales measuring collective teacher efficacy is imperative. For some of such scales, only one factor can be extracted through factor analysis (e.g., Barr, 2002; Goddard, 1999; 2002). In addition, follow-up studies have not been conducted to verify the applicability or suitability of the measurement models that underlie the scales. Therefore, developing a highly valid self-report instrument for measuring teachers' collective teacher efficacy is necessary. Accordingly, the objective of the current study was to develop a Collective Teacher Efficacy Scale (CTES) that involves applying Teacher Self-Efficacy Scale (TSES) as a criterion for understanding the relationship between collective teacher efficacy and self-efficacy.

## **Literature Review**

### **Meaning of Collective Teacher Efficacy**

Collective teacher efficacy, which is defined as teachers' perception that the educational efforts of the faculty as a whole have a positive effect on students, is based on Bandura's (1977; 1997) social cognitive theory. Social cognitive theory acknowledges that "personal agency operates within a broad network of socio-structural influences" (Bandura, 1997, p. 6), meaning that perceived levels of ability in any specific situation are mediated by the social interaction norms prevailing in that situation (Tschannen-Moran, Hoy, & Hoy, 1998). The theory therefore extends the analysis of the mechanisms of human agency to the exercise of collective agency (Bandura, 1997), which is the shared belief that people can make a difference by working together.

Bandura (2000) defined collective efficacy as "people's shared beliefs in their collective power to produce desired results" (p. 75). When a group of individuals engages in a common endeavor, success depends on the individual capabilities of each member and their ability to pool resources, communicate clearly, and coordinate their efforts. For schools, collective teacher efficacy refers to teachers' expectations about the effectiveness of the school and to their collective perceptions and beliefs about how to effectively organize and execute teaching functions to make a positive educational difference for the students (Demir, 2008; Goddard & Goddard, 2001; Goddard, Hoy, & Hoy, 2000; Goddard et al., 2004; Moolenaar, Slegers, & Daly, 2012).

Collective teacher efficacy is based on individual teachers' perceptions of the capabilities of the entire group (Lim & Eo, 2014). Several researchers have employed individually perceived collective teacher efficacy to assess the criterion validity of the CTES they have developed (e.g., Goddard, 1999; Goddard et al., 2000). Other researchers have examined the relationship between individually perceived collective teacher efficacy and other variables, such as teacher efficacy and teacher commitment (e.g., Gibbs & Powell, 2012; Lee et al., 2011; Skaalvik & Skaalvik, 2007). The present study addressed individually perceived levels of collective efficacy with no aggregation.

In recent years, studies have reported that collective teacher efficacy comprises two dimensions. Goddard et al. (2000) proposed two dimensions of assessment of teaching competence and the challenges presented by the teaching task in a particular school. The challenges include the availability of school-provided resources, presence of community resources and constraints, and physical facilities of the campus. Teaching competence encompasses teaching students learning skills, level of training, and years of experience. Several researchers have adopted these two dimensions to measure teachers' collective teacher efficacy in empirical studies (e.g., Fives & Looney, 2009; Goddard et al., 2004; Ross & Gray, 2006).

Barr (2002) proposed two other dimensions of collective teacher efficacy: student discipline and instructional strategies. Student discipline is a faculty's collective capability to manage student behavior. Instructional strategies are a faculty's collective capability to promote student learning. This scheme differs from the previous one in emphasizing student discipline. Several researchers have adopted these two dimensions for measuring teachers' collective teacher efficacy in empirical studies (e.g., Chen, 2010; Chen & Wu, 2010; Lee et al., 2011; Tschannen-Moran & Barr, 2004).

Self-efficacy is a multidimensional construct (Tschannen-Moran et al., 1998), and collective efficacy is rooted in self-efficacy (Bandura, 1997). The two dimensions proposed by Barr (2002) have a very important impact on student achievement (Chen, 2009; Chiang, 2014). Accordingly, in developing our measurement model, we defined collective teacher efficacy as consisting of the two dimensions proposed by Barr (2002).

### **Review of Instruments Measuring Collective Teacher Efficacy**

In this study, we developed a self-report instrument that can be used to accurately measure teachers' collective teacher efficacy on the basis of the two dimensions of instructional strategies and student discipline. Only one factor could be extracted from the previous scales through factor analysis (e.g., Barr, 2002; Goddard, 1999; 2002). For example, Goddard (1999) adhered to the theoretical model proposed by Tschannen-Moran et al. (1988) and adapted the two-factor scale of Gibson and Dembo (1984). Goddard (1999) extracted one factor and the Cronbach's  $\alpha$  was 0.96.

Goddard (2002) adapted the scale of Goddard (1999) to create the short form of our scale, called the Collective Teacher Efficacy Instrument—Short Form (CTEI-SF). The CTEI-SF (12 items) is more theoretically pure than the original CTEI (21 items). The correlation  $r$  between CTEI-SF and the CTEI was 0.98. Goddard extracted one dimension for the CTEI-SF, and Cronbach's  $\alpha$  was 0.94.

Barr (2002) used the Collective Teacher Belief Scale (CTBS), which has two subscales: instructional strategies (six items) and student discipline (six items). However, Barr extracted only one factor, with the Cronbach  $\alpha$  value of 0.90, through factor analysis.

In short, both the CEI-SF and CTBS have only one factor. Follow-up studies have not been conducted to verify the applicability or suitability of the models for these scales. Therefore, we developed our own self-report instrument that can be used to accurately measure teachers' collective teacher efficacy (defined by instructional strategies and student discipline) and to explore its measurement model.

### **Teacher Self-Efficacy and Collective Teacher Efficacy**

According to Bandura's (1986) social cognitive theory, self-efficacy refers to individuals' beliefs about their own ability to successfully implement a particular course of action. In reference to schools, teachers assess their own ability to bring about desired outcomes of student engagement and learning. This assessment is a

teacher's self-efficacy (Chen, 2009; Hsu, 2008; Tschannen-Moran & Hoy, 2001). Bandura (1997) argued that collective efficacy is rooted in self-efficacy.

Skaalvik and Skaalvik (2007) emphasized that individual teachers' self-efficacy might depend on how adequately the team to which the teacher belongs functions. Teachers do not always work alone. In Taiwanese schools, most of the organizing and planning functions are chosen and conducted by teachers. Homeroom teachers and subject teachers work as a team, sharing responsibility for each class of students. In such cases, a correlation between collective teacher efficacy and teacher self-efficacy can be expected. Research on teachers' senses of self-efficacy indicates that self-efficacy is positively associated with collective efficacy (e.g., Calik, Sezgin, Kavgaci, & Cagatay Kilinc, 2012; Gibbs & Powell, 2012; Goddard & Goddard, 2001). Accordingly, we propose the following hypothesis: A teacher's self-efficacy is positively associated with collective efficacy.

### Method

This study was reviewed and approved by the Institutional Review Board (IRB) at the Institute of Education at National Sun Yat-sen University before it began. Professor Shu-Ching Yang, Professor Chin-Tang Tu, Professor Ching-Lin Shih, and Professor Wen Cheng were on the IRB/ethics committee that approved the study. Informed consent was obtained from each participant before joining our study.

#### Participants

**Sample for the pilot study.** For the pilot study, a purposive sample of 232 homeroom teachers was drawn from 16 public elementary schools in Taiwan. Each participant was mailed a questionnaire, and 224 usable (complete) questionnaires were returned, resulting in an effective response rate of 96.55%.

**Sample for the formal study.** We employed a stratified cluster sampling method. We used region as the tier basis and school as the sampling unit and determined the optimal sample size for each region according to the proportion of elementary school homeroom teachers in the northern, central, southern, and eastern regions of Taiwan.

We recruited 877 teachers from 57 elementary schools to participate in our survey. Respondents who had not completed the entire survey or who provided invalid responses were removed, and a total of 758 valid surveys (86.43%) were retained, an acceptable response rate. Among these 758 valid respondents, 289 (38.13%) respondents taught in the northern region of Taiwan, 213 (28.10%) taught in the central region of Taiwan, 213 (28.10%) taught in the southern region of Taiwan, and 43 (5.67%) taught in the eastern region of Taiwan.

#### Instruments

**CTES.** As mentioned, the objective of this study was to develop a self-report instrument that can be used to accurately measure teachers' collective teacher efficacy according to the two dimensions of student discipline and instructional strategies. The 11-item CTES, which we developed following a thorough literature review (e.g., Chen, 2009; Hung, Chiou, & Huang, 2012; Tschannen-Moran & Barr, 2004) and applying the process of concept clarification, comprises two subscales with the same names as the dimensions they measure: student discipline (five items) and instructional strategies (six items). The respondents answered the items by using a 5-point Likert scale with scores ranging from 1 ("Not at all") to 5 ("A great deal").

Item analyses returned *t* values ranging between 7.10 and 16.21 (all  $p < 0.001$ ), demonstrating adequate discrimination of the responses. According to the results of inter item correlations ( $0.35 < r < 0.83$ , all  $p < 0.001$ ) and a homogeneity test, all items were retained. Finally, an exploratory factor analysis (principal axis

factoring extraction; eigenvalue > 1) revealed that the value of the Kaiser-Meyer-Olkin (KMO) test was 0.84 ( $\chi^2 = 1333.40$ ;  $df = 55$ ;  $p < 0.001$ ), Bartlett's sphericity test was significant ( $p < 0.05$ ), and the explained variance was 54.29%. The high Cronbach  $\alpha$  coefficients (0.89 for student discipline, 0.82 for instructional strategies, and 0.92 for the total scale) demonstrated high internal consistency. Table 1 shows the CTES items.

Table 1

*CTES Definitions and Item Content*

| Subscales                | Definition   | Item content   | Source(s)  |
|--------------------------|--|--|--|
| Student discipline       | The perception of teachers in a school of how well the efforts of the faculty as a whole manage student behavior and discipline. | How well do teachers in your school construct rules to promote students' learning?                 | Chen (2009); Hung et al. (2012); and Tschannen-Moran and Barr (2004) |
|                          |  | How well do teachers in your school get students to follow school rules?                           |  |
|                          |  | How well do school personnel in your school control disruptive behavior?                           |  |
|                          |  | How well does your school help students perform well while they are at school?                     |  |
|                          |  | How well do teachers in your school teach students proper etiquette?                               |  |
| Instructional strategies | The perceptions of teachers in a school that the efforts of the faculty as a whole promote student learning.                     | How well do teachers in your school use multiple assessments?                                      | Chen (2009); Hung et al. (2012); and Tschannen-Moran and Barr (2004) |
|                          |  | How well do teachers in your school help students master content?                                  |  |
|                          |  | How well do teachers in your school help students think critically?                                |  |
|                          |  | How well do teachers in your school provide different examples and explanations in their teaching? |  |
|                          |  | How well do teachers in your school promote deep understanding of academic concepts?               |  |
|                          |  | How well do teachers in your school adopt individualized instruction based on evaluation?          |  |

**TSES.** The 12-item TSES, which we developed following a thorough literature review (e.g., Chen, 2009; Hsu, 2008; Tschannen-Moran & Hoy, 2001) and employing the process of concept clarification, contains three subscales: efficacy of classroom management (four items), efficacy of student engagement (four items), and efficacy of instructional strategies (four items). The items were answered using a 5-point Likert scale with scores ranging from 1 ("Not at all") to 5 ("A great deal").

Item analyses revealed  $t$  values ranging between 7.21 and 11.83 (all  $p < 0.001$ ), demonstrating adequate discrimination of the responses. According to inter item correlations ( $0.20 < r < 0.72$ , all  $p < 0.01$ ) and a homogeneity test, all items were retained. Finally, an exploratory factor analysis (principal axis factoring extraction; eigenvalue > 1) revealed that the KMO test value was 0.89 ( $\chi^2 = 1,241.38$ ;  $df = 66$ ;  $p < 0.001$ ), Bartlett's sphericity test was significant ( $p < 0.05$ ), and the explained variance was 67.22%. The high Cronbach  $\alpha$  coefficients (0.87 for efficacy of classroom management, 0.83 for efficacy of student engagement, 0.74 for efficacy of instructional strategies, and 0.88 for the total scale) demonstrated high internal consistency. Table 2 shows the TSES items.

**Data Analysis**

First, peer review was used to confirm the content validity of the CTES and TSES. Second, item analysis and exploratory factor analysis were used to assess the validity and reliability of these scales. Third, confirmatory factor analysis was used to identify the optimal measurement models for the CTES. Fourth, the means and standard deviations of both scales were calculated to describe the current levels of collective teacher efficacy and teacher self-efficacy. Finally, Pearson product-moment correlations were used to analyze the relationship between scores on the CTES, the TSES, and their respective subscales.

Table 2  
TSES Item Content

| Subscales                            | Item content   |
|--------------------------------------|--|
| Efficacy of classroom management     | 1. How well do you control disruptive behavior in the classroom?<br>2. How well do you get children to follow classroom rules?<br>3. How well do you calm a student who is disruptive or noisy?<br>4. To what extent do you use multiple management strategies?  |
| Efficacy of student engagement       | 5. How well do you maintain the students' concentration in class?<br>6. How well do you create a pleasant learning atmosphere in class?<br>7. How well do you motivate students who show low interest in schoolwork?<br>8. How well do you improve the understanding of a student who is failing?                                |
| Efficacy of instructional strategies | 9. To what extent do you use multiple assessment strategies?<br>10. To what extent do you provide an alternative explanation or example when students are confused?<br>11. To what extent do you use multiple instructional strategies?<br>12. How well do you adjust your lessons to the proper levels for individual students? |

### Results

#### Confirmatory Factor Analysis

According to the reference standard of Bagozzi and Yi (1988), we used the preliminary fit, overall model fit, and fit of the internal structural model as criteria to examine our measurement model (see Figure 1).

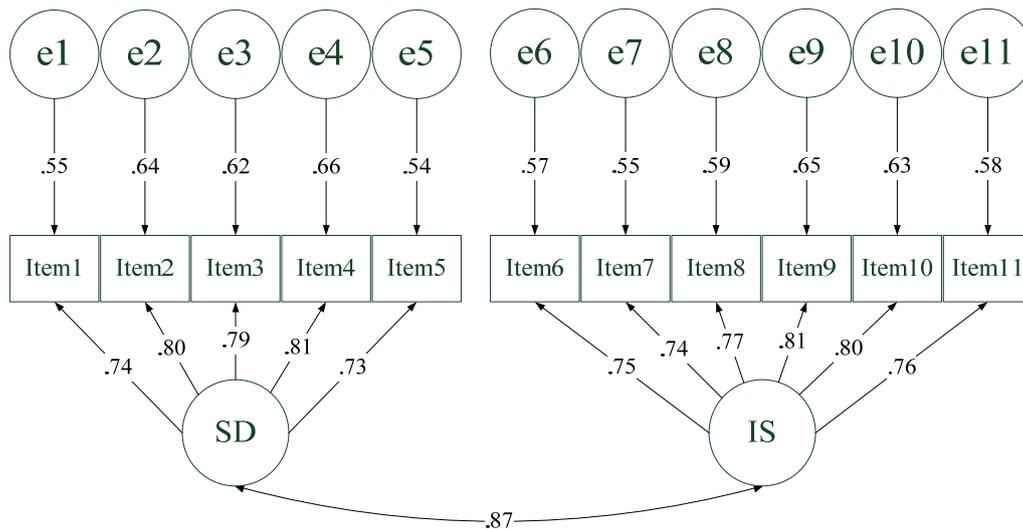


Figure 1. Measurement model for the CTES.

**Preliminary fit.** Table 3 shows that the error variances of the items ranged from 0.54 to 0.66 ( $p < 0.001$ ) and the standard errors ranged from 0.04 to 0.06. Establishing convergent validity requires examining the significance of the factor loadings (Anderson & Gerbing, 1988). All item factor loadings were significant ( $p < 0.001$ ) and ranged from 0.73 to 0.81, confirming convergent validity (see Table 3).

**Overall model fit.** The overall model fit indices are outlined as follows:  $\chi^2/df = 4.86$ , critical N (CN) = 215, goodness-of-fit index (GFI) = 0.95, adjusted GFI (AGFI) = 0.93, Tucker-Lewis index (TLI) = 0.96, normed fit index (NFI) = 0.96, comparative fit index (CFI) = 0.97, relative fit index (RFI) = 0.95, standardized root mean square residual (SRMR) = 0.03, root mean square error of approximation (RMSEA) = 0.07, parsimony normed fit index (PNFI) = 0.75, parsimony goodness of fit index (PGFI) = 0.62, and parsimony

comparative fit index (PCFI) = 0.76. Furthermore, the  $\chi^2$  test was significant ( $\chi^2 = 209.4$ ;  $df = 43$ ;  $p < 0.001$ ). The fit indices indicated that the CTES demonstrated a favorable fit with the model (see Table 4).

Table 3

*Estimates for the CTES*

|                          |         | Standardized factor loading | Individual item reliability | Standard error | Error variance      | Composite reliability | Average variance extracted |
|--------------------------|---------|-----------------------------|-----------------------------|----------------|---------------------|-----------------------|----------------------------|
| Student discipline       | Item 1  | 0.74 <sup>***</sup>         | 0.55                        | -              | 0.55 <sup>***</sup> | 0.83                  | 0.50                       |
|                          | Item 2  | 0.80 <sup>***</sup>         | 0.64                        | 0.05           | 0.64 <sup>***</sup> |                       |                            |
|                          | Item 3  | 0.79 <sup>***</sup>         | 0.62                        | 0.06           | 0.62 <sup>***</sup> |                       |                            |
|                          | Item 4  | 0.81 <sup>***</sup>         | 0.66                        | 0.05           | 0.66 <sup>***</sup> |                       |                            |
|                          | Item 5  | 0.73 <sup>***</sup>         | 0.53                        | 0.05           | 0.54 <sup>***</sup> |                       |                            |
| Instructional strategies | Item 6  | 0.75 <sup>***</sup>         | 0.56                        | -              | 0.57 <sup>***</sup> | 0.86                  | 0.50                       |
|                          | Item 7  | 0.74 <sup>***</sup>         | 0.55                        | 0.05           | 0.55 <sup>***</sup> |                       |                            |
|                          | Item 8  | 0.77 <sup>***</sup>         | 0.59                        | 0.05           | 0.59 <sup>***</sup> |                       |                            |
|                          | Item 9  | 0.81 <sup>***</sup>         | 0.66                        | 0.04           | 0.65 <sup>***</sup> |                       |                            |
|                          | Item 10 | 0.80 <sup>***</sup>         | 0.64                        | 0.05           | 0.63 <sup>***</sup> |                       |                            |
|                          | Item 11 | 0.76 <sup>***</sup>         | 0.58                        | 0.05           | 0.58 <sup>***</sup> |                       |                            |

Note. <sup>\*\*\*</sup> $p < 0.001$ .

Table 4

*Model Fit Summary of the Goodness-of-Fit Statistics for the CTES*

| Overall model fit indices | Criteria | Values                  |
|---------------------------|----------|-------------------------|
| $\chi^2/df$               | < 5      | 4.86                    |
| GFI                       | > 0.90   | 0.95                    |
| AGFI                      | > 0.90   | 0.93                    |
| SRMR                      | < 0.05   | 0.03                    |
| RMSEA                     | < 0.08   | 0.07                    |
| TLI                       | > 0.90   | 0.96                    |
| NFI                       | > 0.90   | 0.96                    |
| CFI                       | > 0.90   | 0.97                    |
| RFI                       | > 0.90   | 0.95                    |
| CN                        | > 200    | 215 ( $\alpha = 0.05$ ) |
| PNFI                      | > 0.50   | 0.75                    |
| PGFI                      | > 0.50   | 0.62                    |
| PCFI                      | > 0.50   | 0.76                    |

**Fit of the internal structural model.** The reliability of the individual CTES items ranged from 0.53 to 0.66, and the composite reliability of each dimension was greater than 0.80. The average variance extracted for each dimension was 0.50 (see Table 3). These results showed that the CTES exhibited adequate construct reliability and convergent validity.

**Descriptive Statistics for the CTES and TSES**

The means for the two dimensions of the CTES were 3.80 (student discipline) and 3.76 (instructional strategies). These results revealed that the elementary school teachers had positive perceptions about the efficacy of their student discipline and of the instructional strategies as a whole in their respective schools. The means of the three dimensions of the TSES were 4.17 (efficacy of classroom management), 3.77 (efficacy of

student engagement), and 3.97 (efficacy of instructional strategies). These results indicated that the elementary school teachers perceived themselves as having some impact on their classroom management, student engagement, and instructional strategies (see Table 5).

Table 5

*Means and Standard Deviations for the CTES and TSES (N = 758)*

| Dimension                            | Items | Sum   | Standard deviation | Mean |
|--------------------------------------|-------|-------|--------------------|------|
| Collective teacher efficacy          | 11    | 41.53 | 5.51               | 3.78 |
| Student discipline                   | 5     | 19.00 | 2.67               | 3.80 |
| Instructional strategies             | 6     | 22.53 | 3.17               | 3.76 |
| Teacher self-efficacy                | 12    | 47.69 | 4.97               | 3.97 |
| Efficacy of classroom management     | 4     | 16.69 | 1.97               | 4.17 |
| Efficacy of student engagement       | 4     | 15.09 | 2.08               | 3.77 |
| Efficacy of instructional strategies | 4     | 15.91 | 1.90               | 3.97 |

### Relationships Between the CTES and TSES

Scores for student discipline, instructional strategies, and the overall CTES were all positively and significantly correlated with the scores for classroom management, student engagement, instructional strategies, and the overall TSES ( $0.22 < r < 0.44$ ). All but one of the positive correlations was statistically significant ( $p < 0.01$ ). These results indicated that collective teacher efficacy was positively associated with teacher self-efficacy (see Table 6).

Table 6

*Pearson Product-Moment Correlations for the CTES and TSES*

| Teacher self-efficacy    | Collective teacher efficacy |                          |        |
|--------------------------|-----------------------------|--------------------------|--------|
|                          | Student discipline          | Instructional strategies | Total  |
| Classroom management     | 0.29**                      | 0.22**                   | 0.27** |
| Student engagement       | 0.39**                      | 0.36**                   | 0.40** |
| Instructional strategies | 0.37*                       | 0.44**                   | 0.43** |
| Total                    | 0.42**                      | 0.40**                   | 0.43** |

Notes. \*  $p < 0.05$ ; \*\*  $p < 0.01$ .

## Discussion

### CTES Is a Reliable and Valid Measure of Student Discipline and Instructional Strategies

Although numerous studies have applied exploratory factor analysis for examining CTES, fewer studies have applied confirmatory factor analysis to such measures. The main purpose of the current study was to develop a CTES for elementary school teachers. For a robust instrument of CTES, first, we conducted a thorough literature review and applied a concept clarification process. Second, we administered a questionnaire survey to a pilot sample of 232 elementary school teachers in Taiwan. After item analysis, exploratory factor analysis and reliability analysis were conducted, an 11-item formal CTES was constructed (Cronbach's  $\alpha = 0.92$ ). It comprised two subscales: student discipline (Cronbach's  $\alpha = 0.89$ ) and instructional strategies (Cronbach's  $\alpha = 0.82$ ). The explained variance for the total scale was 54.29%.

A total of 758 valid participants were recruited for the formal test. We conducted a confirmatory factor analysis and observed that individual item reliabilities ranged from 0.53 to 0.66, standardized factor loadings ranged from 0.73 to 0.81, composite reliability was greater than 0.80, and the average variance extracted was

greater than 0.50. The fit indices (e.g., NFI, CFI, and RMSEA) revealed that the CTES exhibited an optimal fit with the model, signifying that it is a reliable and valid measure of student discipline and instructional strategies. The CTES can thus be offered to educators seeking to evaluate elementary school teachers' collective teacher efficacy and serve as a basis for further research.

### **Elementary School Homeroom Teachers Reported Positive Self-Efficacy and Collective Efficacy, but the Variability of Collective Efficacy Was Greater Than That of Self-Efficacy**

The means of the subscales of the TSES ranged from 3.97 to 4.17, and those of the CTES subscales ranged from 3.76 to 3.80. These results indicated that the elementary homeroom teachers perceived themselves to have positive teacher self-efficacy and all the teachers in the schools to have positive collective teacher efficacy.

In Taiwan, each elementary school homeroom teacher teaches several subjects. Other teachers teach special subjects (usually music, art, science, or physical education) to a number of different classes at different times. Elementary school teachers must be knowledgeable about instructional strategies for the various subjects they teach and must create a classroom environment favorable to learning and personal growth while motivating their students and establishing an effective rapport with them.

The role of an elementary school teacher is similar to that of a parent at home. In Taiwanese culture, this role incorporates authority and dignity. In addition to teaching the subject matter, elementary school teachers must promote personal development and foster normative behavior in their students while providing them with the tools to navigate social and cultural situations (Hsieh, Lin, Chao, & Wang, 2009). Therefore, elementary homeroom teachers believe that they can influence student engagement, instructional practices, and classroom management, and that the teachers in the school collectively can influence student discipline and instructional strategies.

In our study, the standard deviations for the TSES subscales ranged from 1.90 to 2.08, and those for the CTES subscales ranged from 2.67 to 3.17. The standard deviations were higher for the CTES than they were for the TSES. Collective teacher efficacy is based on the individually perceived capabilities of the group as a whole (Lim & Eo, 2014), but it is not a monolithic group attribute; it can vary among its members, even if they belong to the same group. Also, belief in the commonality of efficacy does not guarantee that every member of the group holds the same viewpoints on all aspects of group functioning (Bandura, 1997). This explains why the variability of elementary school homeroom teachers' perceptions about the teachers' collective efficacy was greater than their perceptions about their self-efficacy. Accordingly, the question of how to increase collective teacher efficacy is vital.

### **Collective Teacher Efficacy Was Significantly Positively Related to Teacher Self-Efficacy**

In this study, all the statistically significant correlations of the CTES subscales with the TSES subscales were low to medium in magnitude. Therefore, our hypothesis was supported, which is consistent with previous studies (e.g., Calik et al., 2012; Gibbs & Powell, 2012; Goddard & Goddard, 2001). According to social cognitive theory, collective efficacy is rooted in self-efficacy (Bandura, 1997), and an individual teacher's self-efficacy is possibly based on how effectively the team functions as a whole (Skaalvik & Skaalvik, 2007).

Chiang's (2014) qualitative data analysis revealed that a high level collective teacher efficacy is considered the norm and is honored in Taiwanese schools. It is encouraged as a strategy to promote teachers' self-efficacy and improves their teaching behavior. In Taiwan, one elementary school homeroom teacher and several special subject teachers team up to cover a class and share responsibility for the class. Homeroom

teachers have to work closely with special subject teachers to ensure that their students achieve their full potential at school. This explains the observed significant positive correlation between collective teacher efficacy and teacher self-efficacy.

### Conclusion

This study was a theoretical and empirical analysis of the development of the CTES. First, a model for the CTES was constructed for use in elementary schools. Subsequently, the CTES was developed, tested, and determined to demonstrate strong reliability and reasonable validity. Finally, the application of the CTES and TSES to examine the perceptions of school teachers perceived themselves to have positive teacher self-efficacy and positive collective teacher efficacy in their schools. The variability of teachers' collective efficacy was greater than that of their self-efficacy. In addition, collective teacher efficacy was positively correlated with teacher self-efficacy.

Because we tested only elementary school homeroom teachers in Taiwan, the generalizability of our findings to other teachers may be limited. To increase external validity, studies involving different samples should be conducted. The practical implication of the positive correlation between the CTES and the TSES that various strategies can be adopted for enhancing both factors. For example, principals, as a transformational leader, should empower teachers to achieve the collective task of school through the development of self-efficacy (Demir, 2008).

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# Didactic Material Production Management

Andreza Regina Lopes da Silva, Andreia de Bem Machado, Fernando José Spanhol  
Universidade Federal de Santa Catarina, Florianópolis, Brazil

The preparation of didactic materials involves management and pedagogical practices that directly infer the quality of a course, as it is considered that the didactic material is the leitmotif of the teaching-learning process. The objective of this study is to map the production management practices and didactic content management for distance education (DE). The methodological procedure used for the gathering of practices adopted in the preparation of didactic materials followed the basic principles of exploratory research. Data collection technique was made through semi-structured interviews, seeking to identify best practices from benchmarking in institutions of Southern Brazil. For the analysis of collected data, we did qualitative descriptive analysis. The results showed that the majority of the surveyed institutions do not follow a management model for the production of didactic materials. It is expected that the mapping of good practices presented in this research can contribute to the debate on management in the process of production of didactic materials in DE from the perspective of a model of instructional design in which originates and intersects the production of didactic materials for the modality.

*Keywords:* distance education, didactic material, instructional design

## Introduction

In the context of distance education (DE), the production of didactic materials is the determining factor of success in a course, because it assumes the role of guide in the teaching-learning process. The development of didactic materials involves the management of different actors, processes, and technologies, so that a course can be offered with quality and suite to the needs of the expected audience. As for the importance of improvement of production processes of didactic materials on DE, management practices can be considered a strategic point in the maintenance and continuity of the system.

Benchmarking, a management strategy created at the end of the 1970s in order to identify best practices within an organization, is an action that can be performed on educational projects to identify best practices and propose solutions based on new knowledge.

Batista (2012) and Balm (1995) indicated benchmarking as an internal and/or external practice to the institution in search of better references for comparison of processes, products, and services of the same or similar branch. For North and Rivas (2008), benchmarking basically let you compare the structuring processes and identify best practices in a company. For the Asian Productivity Organization (APO), benchmarking is a

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Andreza Regina Lopes da Silva, Ph.D., student of the Graduate Program in Engineering and Knowledge Management, Universidade Federal de Santa Catarina.

Andreia de Bem Machado, Ph.D., student of the Graduate Program in Engineering and Knowledge Management, Universidade Federal de Santa Catarina.

Fernando José Spanhol, Ph.D., undergraduate professor of Information and Communication Technologies, Universidade Federal de Santa Catarina, Araranguá; professor of the Graduate Program in Engineering and Knowledge Management, Universidade Federal de Santa Catarina.

process with the goal to find, adapt, and implement new practices based on existing models (APO, 2005). According to the APO, benchmarking begins with the identification of what you want to improve followed by learning about how to improve, through partnership and knowledge sharing of institutions that stand out in the area in question. Benchmarking plans to implement change, monitoring the performance and the identification of new opportunities for improvement (APO, 2005).

### Method

To identify best practices in the production of didactic materials in DE using the benchmarking tool, this study adopted some steps of exploratory research, such as visits and semi-structured interviews. Instructional design became the object of study, because it is understood that it guides the management of development of didactic materials in DE.

After collecting information, the instructional design practices identified were organized, creating a dialogical problematizing array based on preset conceptual categories. To analyze the information collected, analysis of the Collective Subject Discourse (CSD) of Lefevre and Lefevre (2012) was used as reference. This procedure meets in a speech-synthesis the key expressions and the central idea.

Key expressions are pieces of excerpts or segments, continuous or discontinuous of speech, which must be selected by the researcher and that reveal the essence of the content of the statement or speech (Lefevre & Lefevre, 2012, p. 73).

The central idea is a name or linguistic expression that reveals and describes the most synthetic and accurately as possible the meaning or the meaning of the key expressions. The central idea is what the interviewee meant (or what, about what) and the key expression as it was said (Lefevre & Lefevre, 2012, pp. 76-77).

Initially, it was mapped, for the research, companies in the State of Santa Catarina that offer educational solutions, according to the Secretaria de Estado do Desenvolvimento Econômico Sustentável/Secretary of State for Sustainable Economic Development (SDS), published in 2013. It is understood as educational solutions, according to an interview with a representative of the SDS, innovation to facilitate the process of teaching and learning, which involves companies and projects that develop products related to information and communications technology (ICT). To refine the search, we selected the middle region of the greater Florianópolis/Santa Catarina, resulting in 67 institutions offering educational solutions. Of these, 20 companies are described in the report as having something to do with DE service and only 17 of them have a steady stream of demand for DE; the other three serve projects by specific demands sporadically. Of the 17 institutions mapped, after previous contact (email and telephone), only six were selected for interviews, because they work with the production of didactic materials, a specific focus of this study. The result was a sample, based on SDS (2013), of six institutions: four private companies providing service, a federal public educational institution, and a community education foundation.

To diversify the sample, we used the *Census EaD. BR 2013* (Associação Brasileira de EaD/Brazilian Association of Distance Education [ABED], 2014), from which have been mapped intentionally institutions of Santa Catarina. Through contact held previously, considering the central objective of research (production of didactic materials), we sought to complete the initial sample in order to cover four segments for this research: (a) private institution (educational or service provider to DE); (b) public educational institution; (c) community education foundation; and (d) autarky. As a result, we had the participation of other three institutions: (a) a community foundation; (b) a public institution; and (c) an autarky. In addition to the nine institutions, we

sought two more of private character to draw up different sample materials previously defined. One of the selected institutions focused on the production of materials for the training of clients who purchase their service (software). The other institution is part of an educational group considered leader in the sector of DE in Brazil.

Thus, the effective sample of this research consists of 11 organizations of different areas: six private institutions (five service providers and an educational institution), two public education institutions (federal and state), two community educational foundations, and an autarky.

### Results and Discussion

The questions that guided the interviews for data collection were prepared in semi-structured mode and conducted openly in order to meet the peculiarities about the production process of didactic material. The interview included 21 questions organized into four areas: (a) identification (interviewed and institution); (b) demand and didactic model; (c) a multidisciplinary team; and (d) production process.

The answers were analysed based on key expressions and arranged in a problem matrix, using a data spreadsheet software, based on four axes defined, each with subsections determined by researchers in order to meet the objective of the research. After this segmentation, key expressions were identified and central ideas were defined by spheres. Table 1 presents the description of the sample of private institutions (education and DE services providers).

Table 1

*Central Ideas of Private Institutions (Education and DE Services Providers)*

| Area                      | Subsection           | Central idea  |
|---------------------------|----------------------|---|
| Identification            | Time of existence    | Between 8 and 45 years of presence on the market, with a concentration between 8 and 20 years   |
|                           | Time working with DE | Between 4 and 19 years, generally (in four of the six institutions surveyed) commencing after the implementation of the company   |
| Demand and didactic model | Demand               | Focused on the production of materials for another private institution (academic and corporate material). Two companies use their own material. The demand is established through partnerships, commercial sector contacts, and direct customer demand. Half of the companies interviewed still participate in bidding. The production of didactic materials, in large part, is originally from the menu of disciplines organized in Political Course Project (PCP) planned by the institution; undergraduate, graduate, extension, and technical course; and short-term training. In some situations, the material is drawn from meetings for the routing of the briefing, which initiates the instructional design of the course. |
|                           | Didactic model       | Based, according to all the respondents, in digital material and in Virtual Teaching-Learning Environment (VTLE). Five of the six companies interviewed also work with video classes. The printed material is produced and distributed on a smaller scale, due to costs. Games (listed as interactive activities) and material for tablet have been tentatively developed (around 50% of the respondents adopt such features). It is also mentioned the use of HTML5 language for responsive material.  |
| Professionals             | Professionals        | A team is composed of a content teacher; an instructional designer (ID); a proofreader; a graphic designer (GD), or a Web designer or multimedia designer; and an environment programmer. The coordination is organized by project in four of the companies interviewed, organized by project and by area in one of the companies and organized by people in one of the companies. In addition to these professionals, some institutions have a staff video writer, monitor, tutor, educational analyst, information analyst, plagiarism analyst, developer of learning objects, and illustrator.   |
|                           |                      | Content teacher: Writes or organizes information for content-base. In some institutions surveyed, this professional also elaborates the learning activities and evaluation, in addition to the video classes.   |

(Table 1 to be continued)

|                        |                                    |   |
|------------------------|------------------------------------|---|
| Multidisciplinary team | Responsibilities of each function  | <p>ID: Operates in different scenarios, such as production, organisation, and adaptation of content for educational purposes; travel planning; and management from concept to final validation, as well as the monitoring of content, didactic language adaptation for DE, instructional design validation, and production of content with the client. An ID can also work with the production and organization of screens to the Web.</p> <p>Proofreader: Responsible for spell check and textual and material regulations.</p> <p>GD: Responsible for the visual identity of the project in different media.</p> <p>Programmer: Prepares the VTLE, organizes the course, prepares the space for exchange of material management, and trains for tool use.</p> <p>Project coordination: Accompanies one or more projects from conception to completion, applying knowledge and technique for its implementation, as well as team's leadership and communication with senior management.</p> <p>Coordination by project and by area: Accompanies the activities related to the area under his/her responsibility.</p> <p>Coordination by people: Accompanies the work to be performed by a team organized in different areas.</p> <p>Plagiarism analyst: Responsible for ensuring material's authenticity and avoiding copyright infringement.</p> <p>Illustrator: Responsible for illustration or animation.</p> |
|                        | Technologies used by each function | <p>Content teacher: Text editor, according to all the respondents. Some companies also use a presentation editor.</p> <p>ID and proofreader: Text editor in all companies, and presentation and PDF files editor in some cases, in addition to authoring tool for specific activities.</p> <p>GD: Adobe package for all respondents, as well as authoring tool in some cases. An institution uses its own technology—"Inside Framework."</p> <p>Programmer: Most of respondents work with the Modular Object-Oriented Dynamic Learning Environment (Moodle) software. Some companies work with the client platform and one institution has its own platform for hosting the course.</p> <p>Coordination: Three of the six institutions interviewed have their own software. The other companies use spreadsheet, some shared in drive. Two respondents, in addition to their own software, also adopt a supporting software, such as Microsoft Project, virtual Kanban, and practice of Project Management Body of Knowledge (PMBOK). Shanel, Trello, and Redmine were also mentioned as management tools.</p>  |
| Production process     | Processes mapping                  | <p>Four of the six companies surveyed have the material production process mapped and visible to all. However, during the interviews, only one mapping was visible. Two respondents indicated not having clear the mapping process, because the process is not explicit, or because it is not aligned to the business unit. Three of the surveyed companies review the process at the end of the project (for example, meeting of lesson learned), two do the review throughout the process, and one does not review, follow the flow of software.</p>  |
|                        | Flow                               | <p>Three institutions consider that the production process begins with contact between client and project manager for planning and opening of the project. The remaining surveyed companies have the beginning of the project from the elaboration of content (which can go for adjust by the ID or for approval by the professor, or for proofreading). Some companies validate the contents at the first step; others at the end of the validation process. The vast majority of the respondents do only one proofreading to reduce production time. After that, the material is diagrammed and validated by the ID, to later be adjusted by GD and then posted in the VTLE.</p>  |
|                        | Deadline                           | <p>All companies interviewed set the deadline of the project according to the customer's need; the development team needs to make it work. Four respondents indicated that the deadline is met, and two companies said that generally (around 50% of projects) do not meet the agreed time limit, although they are aware of the need.</p>  |
|                        | Challenge                          | <p>For four of the six companies interviewed, the question people is the challenge—To maintain, manage, and select qualified persons with competence in the area. People are considered differential in the process, contributing to the continued improvement of the production. The development process itself is mentioned as a challenge, which requires flexibility and quality assurance. Another challenge is the lack of reference in the market itself about how to do DE, what it is wanted, and how it is wanted.</p>  |

Note. Source: Authors.

Table 2 provides a description of the sample of public education institutions.

Table 2

*Central Ideas of Public Educational Institutions*

| Area                      | Subsection                         | Central idea   |
|---------------------------|------------------------------------|--|
| Identification            | Time of existence                  | Average of 50 years  |
|                           | Time working with DE               | Between 7 and 9 years  |
| Demand and didactic model | Demand                             | Production for own use, focusing on graduation, eventually postgraduate (specialization) and extension. The material is elaborated from the educational project.   |
|                           | Didactic model                     | Printed and digital materials, as well as VTLE. One of the companies interviewed prepares Web lessons and learning objects to promote interaction. Another company with the same concern works with thematic DVD.  |
| Multidisciplinary team    | Professionals                      | The content teacher works on demand. The ID and proofreader are scholars of the Universidade Aberta do Brasil (UAB) and outsourced. As for the GD and the illustrator, one researched institution has an information technology (IT) system, which these professionals are part of; in another institution, they integrate, along with the programmer, the core of Graphic Design of Hypermedia (GDH) and are responsible for the visual design, the illustration, and the treatment of VTLE. Coordination is by project. One of the interviewed institutions also has external referee and editorial committee, activities with content analysis function.  |
|                           | Responsibilities of each function  | Content teacher: Responsible for preparing the content and generally monitoring of discipline.<br>ID: Responsible for contact with the teacher, the project presentation and DE learning methodology, language adaptation, for diversifying ways of representing knowledge, the proposal of activities, and for planning of educational discipline and pedagogical sketchbook.<br>Proofreader: Responsible for reviewing spelling and regulatory review.<br>GD: Responsible for developing graphics, Web classes, and other elements that have didactic contribution.<br>One institution has a GDH core that diagrams printed, digital material, and virtual environment designer customizes the VTLE. One company has a video writer and an illustrator. Coordination is by project. One of the respondents also has the coordination of production, responsible for the production, regardless of the project. |
|                           | Technologies used by each function | Teacher, ID, and proofreader: Text editor. An institution interviewed has an <i>ad hoc</i> proofreader, which works with PDF file.<br>Editorial committee and screenwriter: Text editor.<br>GD and illustrator: Adobe.<br>Programmer: Moodle.<br>Coordination: Spreadsheet.  |
| Production process        | Mapping processes                  | In both surveyed institutions, the mapping exists and is visible to all, online and printed; a respondent presents the flow on a banner. One institution reviews the mapping over every production process; the other does not.  |
|                           | Flow                               | The teacher prepares the content. In one of the institutions, the content is still evaluated by the editorial committee or referee. Then, ID is made, and then goes through the approval of the teacher. Later happens the content review followed by diagramming. Then, it is approved by the teacher and the ID. The GD makes necessary adjustments and the material is forwarded to the printer and to VTLE.  |
|                           | Deadline                           | The period considered is of the graphics. On the team, the deadline is flexible, i.e., it is hardly fulfilled—A characteristic of intensive processes in intellectual production.  |
|                           | Challenge                          | The challenge is the management of people, especially sharing of work. Another challenging factor is the lack of institutionalization of DE.   |

Note. Source: Authors.

Table 3 shows the sample of community education foundations.

Table 3

*Central Ideas of Educational Foundations*

| Area                      | Subsection                         | Central idea  |
|---------------------------|------------------------------------|---|
| Identification            | Time of existence                  | Consolidated institutions, with an average of 50 years  |
|                           | Time working with DE               | Between 6 and 11 years  |
| Demand and didactic model | Demand                             | Production for own use, focusing on undergraduate and postgraduate. One foundation interviewed also has demand for extension courses and sequential programs. Work based on PPC.  |
|                           | Didactic model                     | Both surveyed institutions work with digital material and VTLE. One still adopts printed materials and for tablet, interactive objects, and Web class, seeking to meet the training through an array of competence. Another foundation adopts video classes, in addition to digital material and VTLE.  |
| Multidisciplinary team    | Professionals                      | The content teacher is hired by project demand. One foundation has reduced team: The ID does the textual review as well as coordinating the production and the GD runs the VTLE and does illustrations. One institution interviewed has a video writer. Another has a diverse team, with ID, proofreader, GD, illustrator, programmer, and coordinator of the production process. There are also academic assistant, multimedia team, and learning evaluation team.   |
|                           | Responsibilities of each function  | Content teacher: Elaborates the content of discipline and learning activities.<br>ID: Acts in pedagogical management of content and in planning the course as a whole.<br>Proofreader: Does the spell check and textual and regulatory review.<br>GD and illustrator: Diagram the material in printed and digital format, in addition to working the visual identity of the project.<br>Programmer: Programmes the VTLE.<br>In both surveyed foundations, coordination acts in the production, including the management of processes and people involved in the production of the material. One of the institutions has an academic assistant to review the VTLE material, so there is no need for the interference of the ID; Multimedia team to work the learning object in Flash; and learning evaluation team for organizing the bank of questions. |
|                           | Technologies used by each function | Content teacher, ID, and proofreader: Text editor. In one of the interviewed institutions, in addition to the text editor, authoring tool is also used in some situations.<br>GD and illustrator: Adobe and authoring tool.<br>VTLE programmer: Moodle.<br>Coordination: Text editor and spreadsheet editor.  |
| Production process        | Mapping processes                  | In one of the foundations, the mapping is done digitally, in a repository, and meetings are held to review it throughout the development of the project, if necessary. The other institution has no mapping, because it considers that it is implicit in people's minds, there is no need for review.   |
|                           | Flow                               | The process begins with ID and the coordination, with the project planning. After the teacher delivers the content, the instructional design of the material is made, which is then reviewed. The ID validates the material and passes to the GD to diagram; Subsequently, the ID and content teacher validate. The project is transferred to the GD for adjustments, generating the final file to the printer, in one of the institutions, and for the VTLE, in another.   |
|                           | Deadline                           | Begins to count from the start date of the course and is not always fulfilled. One of the institutions is able to meet the deadline, because it posts on VTLE each unit of material, thus, not having printed material.   |
|                           | Challenge                          | The challenge is diverse: Relating to people, the lack of pedagogical assistance for DE, and the complexity of control of material production.  |

Note. Source: Authors.

Table 4 presents a sample of an autarky in the field of teaching continuing education and youth and adult education (YAE).

Table 4

*Central Ideas of Autarky*

| Area                      | Subsection                         | Central idea  |
|---------------------------|------------------------------------|---|
| Identification            | Time of existence                  | Sixty-three years in the market   |
|                           | Time working with DE               | About 15 years  |
| Demand and didactic model | Demand                             | Production for public and private institutions—Industry, with demand for continuing education and YAE. The client is the one looking for the autarky. The design of the course starts from the demand.  |
|                           | Didactic model                     | Printed and digital material, video classes, VTLE, and games based on a competence array.   |
| Multidisciplinary team    | Professionals                      | Content teacher, ID, proofreader, GD, illustrator, IT staff, and coordinator by area.   |
|                           | Responsibilities of each function  | Content teacher: Organizes the content and training of those who will teach the course.<br>ID: Organizes the content, taking care of the proper language for DE and the amount of page/hour, plus identify if the competencies proposed in the course will be accomplished.<br>Proofreader: Performs textual and regulatory review.<br>Illustrator: Develops the illustrations of the material.<br>GD: Does the layout of the material.<br>IT team: Responsible for the VTLE.<br>Coordinator: Monitors the production process by project. |
|                           | Technologies used by each function | Content teacher, ID, and proofreader: Text editor.<br>GD and illustrator: Adobe.<br>IT team: Moodle.<br>Production coordinator: Spreadsheet editor.   |
| Production process        | Mapping processes                  | Available on the intranet. Revised along the way and adjusted when necessary.   |
|                           | Flow                               | Starts with the industry's demand, which counts with coordination and ID to do the planning. Then begins the preparation of the menu by the teacher. With the menu approved, the organization of the content is made. This is adjusted by the ID and then for proofreading, producing the material for diagramming. After being diagrammed, the material goes back for the teacher's analysis and the ID's second textual revision. The adjustments are made by the GD. The file is included in the VTLE and forwarded to the printer.    |
|                           | Deadline                           | It is usually served. This is attributed to the time spent on planning, which allows to gain in production.   |
|                           | Challenge                          | Selection of trained personnel for DE flow.   |

*Note.* Source: Authors.

One can see that the process of production of teaching materials for DE, although relevant in the educational context, is not treated as a priority in Brazil in projects without practice and recognized process. Each institution presents its model and manages according to the needs of their clients. The results show the absence of a management model to plan, organize, coordinate, monitor, and control the process of production of teaching materials in DE projects. Such a process has unique features, different with each new project.

### Final Considerations

This analysis took a sampling of Brazilian institutions of different spheres to have a comprehensive overview about the process of producing teaching materials for DE. In this research, one can see the need for more effective organization of production of didactic materials from the perspective of a model of instructional design, process in which originates and intersects the production of didactic materials for the modality.

This study predates a more detailed research, from the first author, which aims to elaborate a management model for the essential processes of the production of didactic materials for DE.

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# Alternative Dispute Settlement Mechanisms: Towards Restorative Justice in Yucatán, Mexico

Carlos Alberto Macedonio Hernández, Lucely Martina Carballo Solís,  
Melba Angelina Méndez Fernández, Edith Cisneros-Cohernour  
Universidad Autónoma de Yucatán, Yucatán, México

This article presents an analysis of a new reform in the process of criminal law dispute resolution in Mexico. It examines the characteristics, principles, strengths, and weaknesses of this process for the protection of human rights, as well as its implications. Findings of the study indicate that the inclusion in the Mexican constitution of alternative dispute resolution mechanisms contributes to strengthening of democracy, by favoring the participation of private wills in handling conflicts and exercising their rights to solve their conflicts without the intervention of state organisms. Participation in mediation is voluntary, confidential, flexible, neutral, impartial, equitable, law abiding, and honest.

*Keywords:* human rights, mediation, legal process, lawyers' preparation

## Introduction

On June 18, 2008, the *Official Journal of the Mexican Federation* published a decree, in which Articles 16, 17, 18, 19, 20, 21, and 22 of the Mexican constitutions were amended in its fractions: Sections XXI and XXIII of Article 73, Section VII of Article 115, and Section XIII, Paragraph B, of Article 123. These changes are related to public security and criminal justice, establishing the foundations of the new criminal justice system of Mexico. This constitutional reform had a strong impact on the domestic legal order, as it meant a change not only in the regulatory field, but also regarding to the legal experience understood as the law in its sociological dimension.

The constitutional reform resulted in a new foundation for the system of administering justice in Mexico, since the second transitory article of the aforementioned reform forced the officials governing the Mexican states to rethink their legal systems and train members of the prosecution and judiciary, in order to meet the demands of society. This was caused generally in response to the demand for a more flexible procedure, less corruption, greater sense of justice, and also more transparency.

The adversarial criminal justice system is the process by which criminal proceedings have been developed

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Carlos Alberto Macedonio Hernández, Juris Doctor, coordinator of the academic group (Multidisciplinary and Tridimensional Vision of the Law), College of Law, Universidad Autónoma de Yucatán.

Lucely Martina Carballo Solís, Master in Law, academic dean and member of the academic group (Multidisciplinary and Tridimensional Vision of the Law), College of Law, Universidad Autónoma de Yucatán.

Melba Angelina Méndez Fernández, Master in Law, member of the academic group (Multidisciplinary and Tridimensional Vision of the Law), College of Law, Universidad Autónoma de Yucatán.

Edith Cisneros-Cohernour, Ph.D., member of the academic group (Educational Administration and Policy), College of Education, Universidad Autónoma de Yucatán.

under a democratic regime (Constantino, 2009). The trial begins only by accusation of the victim and his/her family, the accuser is someone other than the judge, and the decision acts correspond to a state representative. It can be said that in this system, the representative of the state is on charge of the prosecution. If this action is not realized, it cannot be the source of the process. The freedom of people is ensured by a set of legally instituted guarantees. The only the exceptions are those allowed by the procedural needs. Therefore, there are some principles prevailing: equality, oral trial, public, and the concentration of procedural acts.

In the adversarial criminal proceedings, the defense has the freedom to offer evidence and its evaluation is responsibility of the judge, the hearings are public and oral, and the judge has an obligation to solve the conflict based on the evidence of sound system.

Based on the above, the processes from prosecution, defense, and the adversarial system decision-making are not exercised by a single person, but are entrusted to different subjects: The indictments are responsibility of the state prosecutor, defense acts to the accused,<sup>1</sup> and acts of decision-making to the individual judge or magistrate among others.

The new adversarial system was created since March 13, 2007, when the president of Mexico, Felipe Calderon Hinojosa, proposed a criminal reform to the Senate that declared the principles in favor of an oral adversarial criminal justice system. This initiative was subjected to the opinion of the House on December 10, 2007, and approved the final draft of the reform on February 28, 2008. This, in turn, was also approved by local legislatures without modifications.

Finally, the constitutional reform in Criminal Justice and Public Safety was published in the *National Official Gazette* on June 18, 2008, resulting from transcendental importance in the field of justice administration, the implementation of the new oral penal accusatory process. This reform modified 10 articles of the constitution in order to change the system of administrating justice and the systems and institutions that surround it.

The centerpiece of the constitutional reform is to establish oral trials in criminal matters, that is, changing the mixed criminal justice system that Mexico had in its adversarial criminal proceedings, in order to ensure a higher level of legal certainty for the governed through the immediacy, the immediacy, and the presumption of innocence. Article 20 of the Mexican Constitution states:

The process is adversarial and oral. It will be ruled by the principles of openness, contradiction, concentration, continuity, and immediacy.

A. General Principles:

I. The criminal proceedings have the purpose of clarifying facts, protecting the innocent, ensuring that the guilty not go unpunished and that the damage caused by the offense is repaired. (Gobierno Federal, 1917, p. 13)

It is noteworthy that the respect for human rights is vital in these reforms, because the public power limits are imposed to prevent abuses. In this regard, the rules of due process include the presumption of innocence, which prevents the abuse of preventive detention to allow the accused subject to criminal proceedings experience the process freely.

The reform also sought to end the monopoly hitherto exercised by the public prosecutor to establish that in certain cases resort to the offended judge directly through private action of the victim. Alternative dispute

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<sup>1</sup> ... Either personally or through an advocate, who represents the defender. This can be designated by the individual or appointed on its behalf by the state, and is called the public defender.

resolution mechanisms are established to enable the parties to resolve their differences without a trial, through conciliation and mediation.<sup>2</sup>

### **The Alternative Dispute Resolution**

The counterpart of oral trials is the alternative means of dispute resolution, which is a way to avoid trial. For years, the institutions responsible for administering justice have exceeded their capacity for resolving disputes that the parties involved in a conflict of criminal law require, this is why the courts are full of old records and consequently procedural terms are not met.

This lag could not abate despite increasing the number of courts and judges. In addition, the minority of the population have financial resources and time to engage in a criminal law procedure that sometimes takes years. Because of the time lost and money spent, many of those affected are disappointed by our current criminal justice system. They waive any right they have to bring a lawsuit and wait for the judge to make a judgment, which in turn can be combated by the other party by an appeal or an injunction, meaning more lost time and more money spent. Given the above, it is very important that each and every one of the states has alternative means of dispute resolution.

With the amendment published on June 18, 2008, in the *National Official Gazette*, our constitution formally incorporated alternative dispute resolution mechanisms in Articles 17 and 18. The fourth paragraph of Article 17 states, “The laws provide for alternative dispute resolution mechanisms. In criminal matters they regulate their implementation, ensure the repair of the damage and establish the cases in which judicial review is required” (Gobierno Federal, 2016, p. 12).

Article 18 states, “... The alternative forms of justice should be observed in implementing of this system, as soon as they proceed ...” (Gobierno Federal, 2016, p. 12).

The inclusion in our constitution of alternative dispute resolution mechanisms contributes to strengthening of democracy, by favoring the participation of private wills in handling conflicts and exercising the right they have to solve them without the intervention of state organisms.

In Yucatán, the State Congress issued on June 24, 2009, the *Law Alternative Dispute Resolution Mechanisms of Yucatán*, in which it is stated that alternative means to judicial process are intended to resolve and settle disputes arising between rulers, achieving on one hand that conflicts are solved optimally as possible, and on the other hand, that the administration of justice is prompt, efficient, and effective, venting the workload in the courts as this has hindered the proper application of the law, so that the incorporation of the legal forms of conciliation and mediation as alternative means of trials in all types of court proceedings contributes to strengthening the organs of administering justice.

Article 179 of the Criminal Procedure Code for the State of Yucatán states, “In criminal cases are applicable, both conciliation and mediation as outlined in the *Law Alternative Dispute Resolution Mechanisms of Yucatán*” established by Article 181, “The request of submitting a criminal conflict to an alternative dispute resolution mechanism may take place at any stage, even having a final judgment, but in the latter case, it can only be tried as conducive for repairing the damage” (Gobierno del Estado de Yucatán, 2011, p. 145).

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<sup>2</sup> Constantine (2009) stated that the general objectives of a democratic system of criminal justice is to streamline justice through alternative means to the courts, private action, early termination, guaranteeing the right of defense, due process and rescue rights of victims and others (p. 23).

In the case of criminal disputes that are likely to undergo some alternative mechanism, the prosecution during the investigation, or when appropriate, the presiding judge in the hearing process linkage shall inform the defendant accused and the victim on the possibility of some alternative mechanism. If they agree to resolve the penal conflict in this way, the public prosecutor or judge, as appropriate, shall suspend the investigation or prosecution for a period of 30 working days, extendable for 15 days, at the request of the parties, in terms of the law of matter (Gobierno del Estado de Yucatán, 2011, p. 126).

According to Peña (2010a), alternative mechanisms are “those procedures to settle disputes, avoiding the recourses of the ‘official’ or traditional system.” The goal of alternative means of dispute resolution is that the courts will reduce the amount of workload they have, reduce cost and delay in resolving conflicts by getting them resolved in less time and with greater satisfaction of the parties, since they are the ones who proposed, negotiated, and agreed to the solutions to their problems.

These mechanisms have the advantage of having a solution in a short time. In Yucatán, according to Article 181 of the Criminal Procedure Code, conflicts can be resolved in 30 working days, or 45 working days at the latest.

Moreover, they are confidential, because the agreements that are made in a private session, with the presence of a mediator or a conciliator and the parties involved in the problem in a non-adversarial climate, recognizing past events, but they are encouraged to seek solutions in order not to feel that one has won and the other lost as usually happens in the mixed system, but both have received benefits from the decisions they agreed. They also have the advantage of having flexible agreements that can be modified if there is a settlement between the parties.

Among the alternative means of conflict resolution, we can analyze the conciliation and mediation as described in the Criminal Procedure Code for the State of Yucatán.

### **Settlement**

The word “settlement” derives from the Latin word “conciliation” or “reconciliation.” It is the action and effect of reconciling.

According to Peña (2010b), conciliation is “a legal act by which the parties come motuproprio, i.e., voluntarily, to a duly accredited third party, a conciliator, in order to help them solve a conflict of interest and thus, achieve social peace in justice” (p. 325).

Elvira Martinez Coco for her part said, “Reconciliation is a legal act, understood as the manifestation of the will of those participating in the conciliation and aimed at solving their conflict of interest” (Peña, 2010b, p. 325).

We can say that the settlement is an alternative means of conflict resolution, through which the parties are involved in proceedings in order to solve the conflict with the help of a third party called conciliator.

The role that the conciliator plays is to work with the parties in conflict in order to find a solution that is beneficial to both, even proposing formulas for a solution. The conciliator must help each party to better analyze alternative solutions, but without losing its status as impartial and leaving the resolution to the will of those involved in the conflict.

The aim of conciliation is that the parties in conflict resolve their differences voluntarily with the help of a third party called the mediator, who will propose solutions, will promote dialogue encouraging a rapprochement between them, and will guide them so they can resolve their conflict if they wish. To reach a solution, participants sign an agreement, which is in the nature of a contract (Constantino, 2009, p. 98).

According to Peña (2010a, pp. 12-13), the reconciliation presents particular characteristics that clearly define mediation:

1. It is a legal act through which the parties rely on a third party to help them resolve a dispute;
2. It requires the existence of a third party, who does not decide; it merely points out the possible ways to resolve the conflict without the parties necessarily having to choose one;
3. It is an alternative dispute resolution mechanism, as the parties can decide whether to accept or not to undergo it;
4. The oral nature of the procedure and immediacy are always present, it is unimaginable a conciliatory process by written documents that come and go;
5. It takes place outside the judicial process;
6. It is voluntary, because the parties freely come to a mediation center and have no obligation to obey it;
7. It is confidential because the parties and the mediator must keep confidential all matters discussed and agreed;
8. It is very personal, because they are the conflicting parties involved and not their representatives;
9. It promotes a consensual solution to the conflict with the help of the conciliator;
10. The mediator does not resolve but facilitates negotiation and it is the parties that solve the conflict.

### **Mediation**

Mediation is a non-adversarial process in which a third party assists the parties to negotiate and reach mutually acceptable agreements. The parties involved in a conflict seek a solution to their problems with the help of a third party called the mediator. The mediator guides the process, but does not suggest ways of solution, only helps the parties to create their own solutions. The purpose of the mediation, according to Peña (2010a), is to help the parties to generate their own solutions to resolve the conflict. The mediator guides the process, but does not suggest ways of solution (Peña, 2010b, p. 9).

For the Advisory Committee for Mediation Project in Mexico sponsored by the Rights Consortium, mediation is a voluntary, confidential, and flexible procedure to help two or more people or institutions find the solution to a conflict in non-adversarial manner, governed by principles of fairness and honesty, which involves a neutral and impartial third party called the mediator.

The main function of the mediator is to facilitate communication between participants in a conflict, making it possible for everyone to be heard fully, creating an atmosphere conducive for parties feel comfortable talking to each other, and focusing on their needs and interests to end their dispute peacefully, satisfying, and in a lasting way, without having the mediator imposing a solution.

**Principles of mediation.** In Mexico, part of the success of mediation programs is the application of the principles governing the process developed by the Advisory Committee Mediation Project, sponsored by the Rights Consortium, which was approved by the Advisory Committee on October 18, 2002, and had the support of representatives of judiciaries, prosecutors' offices, universities, the Supreme Court of Justice of the Nation, the Mexican Mediation Institute, among others. According to Fierro (2010, pp. 28-30), these principles are as follows:

1. Voluntary: The participation of the parties in the mediation process must be by choice, not obligation. The mediator must recognize that they have the power to make decisions in the mediation.
2. Confidentiality: Anything discussed in mediation cannot be disclosed by the mediator, with the exception of cases where the information concerns a criminal offense as stated by the relevant legislation. The

mediation sessions are held in private and the confidentiality involves the mediator and parties and everyone connected to the process.

3. Flexibility: The mediation procedure shall lack all strict formality in order to meet the particular needs of the parties. The mediation procedure is conducted without procedural formalities, where the mediator and the parts can decide how the mediation will take place.

4. Neutrality: The mediator maintains a posture and mentality of not giving in to his/her own inclinations and preferences throughout the process of mediation. Nor can induce the parties towards a solution, but must subtract his/her views related to the conflict and respect the decisions taken by them.

5. Impartiality: The mediator will act free of favoritism, bias, or rituals, trying the parties with absolute objectivity, without making any difference. The mediator must contain their natural sympathy or liking towards certain ideas, situations or people impulses and apologize if there are certain links between him/her and one or more of the parties.

6. Equity: The mediator must ensure that the agreement reached by the parties is understood and to that is perceived just and lasting for them, creating conditions of equality for the parties to achieve beneficial agreements for both.

7. Legality: It can only be mediated disputes arising from the rights that are freely available by the parties. When the mediator detected or suspected agreements that are based on false information or bad faith, he/she should recommend the parties seek professional or personal advice, because the agreements reached by them must be law-abiding.

8. Honesty: The mediator should disqualify himself/herself from participating in mediation or terminate it if, in his/her opinion, believes such action would be in favor of the interests of one of the parties.

**Characteristics of mediation.** According to Peña (2010b, pp. 10-11), like conciliation, mediation has certain features as follows:

1. To choose or elect a mediator or a third party is a mission that should rest with a person who possesses the necessary skills to find solutions to a problem that the parties cannot resolve.

2. It is an intermediate system of dispute resolution between conciliation and arbitration;

3. The process achieves acceptance by the parties through the proposal of a third party, which only has the power of recommendation;

4. The mediator does not impose anything, and his/her presence and work does not restrict or limit the initiative of the parties themselves to achieve the direct solution to the conflict;

5. The third person, despite having no authority over the decision itself, can assist the parties in the process of adopting the decisions, acting as a catalyst between them.

It should be noted that, in many cases, the application of these alternative methods of dispute resolution is more appropriate to resolve the disagreements between the parties, rather than a prison sentence, since it often not financially compensates the victim. So, the victim could feel that the time and effort invested in the struggle trying to obtain the respect for his/her rights would not be met adequately, remaining with a hint of frustration and resentment towards the defendant and the criminal justice system.

The benefits of implementing alternative methods of dispute resolution, such as conciliation and mediation, are not only for the parties involved in the conflict, who can resolve their disputes more quickly and satisfactorily than in a court proceeding. Benefits also fall to the lawyers, as their job opportunities are extended and can address more cases in less time, which will result in an increase in their income, and avoid personal and

professional wear for a lengthy litigation. The judicial system also benefits by having less workload when the parties solve their disputes through agreements, because it is case that is not going to be part of litigation, allowing cost savings in infrastructure and personnel (Peña, 2010 a).

Besides the above alternative means, the procedural code for the State of Yucatán states that the imputed compensation agreements are also an alternate exit under which, the accused and the offended agree to satisfactory forms of reparation that have arisen as a result of a punishable act. As González (2016) stated, by means of compensation agreements between the victim and the accused or injured party, it can result in a settlement of the dispute through any suitable mechanism which has the effect of completing the procedure.

There is also the suspension of the proving process, which is a mechanism that allows either to the accuser or the suspects' prosecutors, with the consent of the victim or offended and with the approval of the supervisory judge, to give early termination to the procedure and leave it suspended as long as certain requirements of the code are met.

### Conclusion

Alternative means of settling disputes constitute one of the pillars of restorative justice, and are designed to solve those conflicts that occur in a globalized and developed society, because the criminal proceedings are an exception to the controversy that has not been resolved. Thus, alternative mechanisms are necessary to find appropriate solutions when a conflict occurs, or when there exist a victim and a victimizer, not using or proposing them by the authorities, it would be the denial of a human right, because all authority should look above all for a culture of peace.

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# PUS-Based Educational Paradigm From “Mastering Science” to “Understanding Science”

Huo Ai-xin

Tianjin Normal University, Tianjin, China

The publication of the report *The Public Understanding of Science* (PUS) elicited people’s thinking on the value of science education and guided reform of science educational reform. With increasingly obvious influences of science to society, understanding science and promoting science progress were of great importance, as well as mastering science and understanding science. Science education shall reflect the education value orientation of PUS and realize transforming from “mastering science” to “understanding science” and from double-base education to science, technology, and society (STS) education, and history, philosophy, and sociology (HPS) of science education, so as to realize the educational value of promoting students’ science literacy and PUS. We advocate the educational paradigm from “mastering science” to “understanding science,” but we do not say that “mastering science” is wrong, only because the concept does not adapt to the development of science education, or it is not the ultimate aim of science education, but the periodical target in cognition. “Understanding science” is the ultimate goal adapting to the development of science education, which is the basic science quality possessed by the public.

*Keywords:* public understanding of science (PUS), mastering science, understanding science, double-base education, science, technology, and society (STS) education, history, philosophy, and sociology (HPS) of science education

## Introduction

Sir Baume, fellow of the Royal Society, drafted and the Royal Society published *The Public Understanding of Science* (PUS) officially in 1985. The report highlights the importance of PUS, discussing on how to promote public understanding on science nature and its positive roles to society, and at the same time, it is charismatic to some extent (Royal Society, 1985). The core issues of the PUS report include what do scientists let the public understand? And what are public cognition, understanding, and action of science?

The report elicited people’s thinking on the value of science education and guided reform of science education. Science education not only makes students master science knowledge, but also concerns promoting their science literacy. The concept of public science literacy promoted worldwide science educational reforms. In the past 30 years, such concepts as science, technology, and society (STS) education, science, technology, society, and environment (STSE) education, and history, philosophy, and sociology (HPS) of science education have appeared, which have reflected the education value orientation of PUS and guided idea and paradigm of science education to transform from “mastering science” to “understanding science.” Furthermore, “understanding science” has become a basic connotation of public science literacy.

*Silent Spring*, published in the United States (U.S.) in 1962, marked that people concerned environmental issues for the first time, particularly pesticide using (Carson, 1962). Soon afterwards, breaking out of a series of events, including ozone hole, greenhouse effect, genetically modified food, and nuclear leak, the public were suspicious of science.

In the final analysis, the public were suspicious of science, because they did not understand science.

With increasingly obvious influences of science to society, understanding science and promoting science progress were of great importance, as well as mastering science and understanding science. Nowadays, public participation is necessary to science. To a great extent, the development speed and tendency of science lie in public understanding degree of science. Science undertakings can move forward only when the public understand science.

### **Traditional Education on “Mastering Science”**

#### **Meaning of “Mastering Science”**

Traditional science education regards “structuralism” as the basis, “disciplinary structure” as contents, and “mastery learning” as objective, to highlight mastering of disciplinary knowledge. “Mastering” is a word with high frequency of occurrence in the 1980s, including “mastering knowledge,” “mastering method,” “making master of,” “making a good command of,” and so on.

Mastery learning and target classification are cores of Broome’s educational theory. Mastery learning indicates making students master all course contents. Broome classified learning targets into cognitive domain, from simple to complicated: knowledge, comprehension, application, analysis, synthesis, and evaluation (Gao, 1990). In the target classification of Broome, comprehension indicates mastering significances of learned contents; you can express them in your own language, can explain them, and can deduce them simply.

Thus, it can be seen that the “comprehension” is comprehension in cognition, namely, mastering disciplinary knowledge and disciplinary structure in science education.

#### **Educational Paradigm of Mastering Science—Double-Base Target Education**

Mastering science is a kind of educational concept. Generally, science curricula require students to master basic knowledge and skills. “Mastering double-base” has become a kind of educational paradigm. Curriculum contents of double-base target education give priority to disciplinary structure. Taking Chinese chemistry curriculum in secondary school in 1978 as an example, curriculum contents include basic knowledge and skills. Basic knowledge includes fundamental concepts and principles of chemistry and the knowledge of chemical elements; basic skills include chemical terms, chemical experiments, and chemical calculation. The curriculum target is “systematically mastering basic knowledge and skills” (Ministry of Education of the People’s Republic of China, 1996) The above is the traditional “double-base” target education in China. Furthermore, the educational paradigm concerns mastering disciplinary knowledge of chemistry.

The above are features of “double-base” educational paradigm. Knowledge and skills learned by students are integrated, systematic, and rigorous, which are in favor of mastering solid basic knowledge and forming integrated disciplinary knowledge structure. “Double-base” is the leading content of middle school chemistry teaching and it shall reflect its fundamentality. However, the teaching program requires them still highly. It requires “mastering systematically,” which highlights the educational concept of “mastering disciplinary knowledge and disciplinary structure” (Ministry of Education of the People’s Republic of China, 1996).

Chinese “double-base” teaching is also reflected in relatively low requirements to application of basic knowledge, namely, “primarily understanding their application in practice” (Ministry of Education of the People’s Republic of China, 1996).

With such education, students do not understand science. Once, there was a situation question: Coal contains sulfur and sulfur dioxide will be generated during burning and enter into atmosphere to pollute environment, how can we solve such environmental issue? Many students answered as follows:  $S + O_2 = SO_2$ . Students mastered knowledge in the sense of disciplinary structure, but they do not understand science really from the aspect of science understanding.

Under educational thought of PUS, limitations of double-base educational paradigm become more and more prominent.

Curricula of “double-base” educational paradigm excessively stress logical order and systematicness of disciplinary knowledge. Therefore, teachers always emphasize mastering of basis knowledge and skills and ignore students’ physical and mental development and social development demands. Curriculum contents of the “double-base” educational paradigm always break away from students’ life realities, ignoring extensive connections of chemistry and society, life, production, science, and technology; concern plenty of declarative knowledge but ignore thoughts, viewpoints, methods, and processes in chemical knowledge, and ignore students’ learning interests and their dynamic role in learning.

The double-base educational paradigm of mastering science has not adapted to educational thought of PUS, which cannot become the ultimate goal and value orientation of science education. People start to seek the educational paradigm adapting PUS, to realize the target of understanding science.

### **PUS-Based Education of “Understanding Science”**

#### **Meaning of “Understanding Science”**

Doctor John Durante, professor in PUS in the United Kingdom (U.K.), reported that PUS is at least made up of the following three aspects: (a) understanding of science knowledge; (b) understanding of science research method; and (c) understanding on how science to drive social development. It inosculates with basic requirements of public science literary (Li, 2005).

Thus, it can be seen that science education shall not rest on the cognitive stage of mastering science or cognitive domain.

With science education, students shall understand science nature and influences from science to society. If we conduct science education with science spirit, attitude, and method, students can have a perfect command of learned knowledge after understanding science and handle the relationship among STS correctly. “Understanding science” is an inevitable choice of science education.

#### **Two Educational Paradigms of Understanding Science—STS Education and HPS Education**

Knowledge-based viewpoint of traditional science education thinks that science knowledge does not involve in value or transfer with scientists’ personal quality and social attribute, without “value” or “context property.” Science knowledge is not “contextual” knowledge, which keeps away from subjective emotion, or we can say that science knowledge excludes all subjective factors. Therefore, there is a traditional “double-base education” paradigm.

With the appearance of PUS, Edinburgh School, advocating sociology of science knowledge, spared no effort to advocate that science knowledge is the product of social construction.

Definition of science education from baike.haosou.com reflects the value orientation of modern science education:

Science education in the science education research field regards all adolescents as the main body, school education as the main position, and natural science education as main contents, involving total education of such disciplines as technology, history of science, philosophy of science, science of science culture, and science sociology, so that adolescents can master basic knowledge and skills of natural science, learn science methods, experience science inquiry, understand the relationship among STS, grasp science nature, cultivate science spirit, and comprehensively foster and improve science quality, develop social productivity, improve social culture, and let science spirit and humanistic spirit mix in modern civilization through cultivating qualified citizens with science quality. (Science Education, n.d.)

The definition can be interpreted as the PUS-based definition of science education, so that PUS-based educational paradigm appeared, giving priority to STS education and HPS education.

### **STS Education**

One of the PUS cores lies in correctly understanding the influences of science and technology on society, so that students can understand the relationship among STS.

Does science education cultivate science elites or improve citizens' science quality comprehensively? "Science for All," as a new slogan for challenging science education, was responded around the world in the early 1980s. Therefore, common citizens can face future STS and participate in decisions of society, politics, and individuals. So far, STS education has begun.

STS is the abbreviation of science, technology, and society, which is a wide educational field. STS education concept thinks that science education shall not only cultivate scientists and technical personnel understanding and devoting to society, but also citizens understanding science, technology, and their results, and participating in decisions involving in science technology. The most important feature of STS education is bringing social factors into science education as an indivisible part. In science education, STS are a correlative entirety. The educational pattern aims to cultivate the public's science and technology quality, to cultivate and train individuals' participation sense and decision-making ability, and to emphasize orientation of social value in decision practice.

STS education has become a kind of educational paradigm. STS emphasizes imparting knowledge in view of science and technology, sustainable development concept, environmental protection, science method, science spirit, and science morality at the time of spreading knowledge, so as to expand their knowledge scope. Therefore, STS education includes not only science knowledge and nature conception, but also life outlook, value outlook, world outlook, etc..

The STS educational paradigm is relatively mature. STS education has infiltrated into all disciplines of science education.

The *National Science Education Standards* (National Research Council, 1996) of the U.S. focus on the relationship among STS. In these standards, keywords, such as science, technology, society, environment and sustainable development, etc., are frequently mentioned. Science education should pay more attention to students' learning from the perspectives of personal and society. Science education should make students really understand science, and science education should be the understanding of science and technology's impact on individuals and society too.

In April 2013, the U.S. *The Next Generation of Science Standards* (NGSS) (National Research Council, 2013) was published. Once again, science education emphasizes the interaction of STS. In NGSS Appendix

J—Science, Technology, Society, and the Environment, the goal that all students should learn about the relationship among STS (known by the acronym STS) came to prominence in the U.K. and the U.S. in the early 1980s.

To improve the science literacy of students as the core goal, science curriculum reform in China in 1999 paid close attention to the relationship among STS (Huo & Ni, 2004). *Chemistry Curriculum Standards of the Junior High School* (Ministry of Education of the People's Republic of China, 2011) continue to focus on the interaction of science, technology, society, and environment, to help students understand the nature of science and improve their science literacy.

The STS educational paradigm is in keeping with PUS thought. At present, subject curricula of Chinese science education aim to promote students' science quality and permeate STS concept, so that students can concern and comprehend relations among STS.

Therefore, STS education will be the primary education paradigm for the development of science education and for understanding of science in the future.

### **HPS Education**

Another core of PUS lies in correctly understanding science nature, which raises certain requirements towards the public's science quality. Based on this concept, America-led Western countries carried out, in succession, promotion of PUS-based educational paradigm through HPS education in the 1980s.

HPS education mixes relevant contents of history of science, philosophy of science, and sociology of science into science curricula in middle and primary schools, so as to help students understand science nature. With HPS education, we can understand science nature and social functions of science correctly.

Analyzing science undertakings in historical view, the public can understand science according to real occurrence mode of science or the public can understand science as a whole. Philosophy of science tells us that science knowledge is a kind of factual description and certain cognition of people to the development law and nature of objective world, but understanding science knowledge is a kind of value judgment, carrying value factors of the subject. The relation among STS becomes more and more close. Science education shall not only explain science, but also point to the society. As for science education, the public shall understand basic knowledge of science and social value of science knowledge (Zhang, 2008; 2011).

The value orientation of HPS education lies in improving people's science quality really, effectively, and roundly.

Views of science nature contained in HPS education are very important to middle school students, mainly including:

1. Science knowledge is not long-term but short-term;
2. Theories hook on to science knowledge;
3. Experiences are bases of science knowledge;
4. To a certain extent, science knowledge is a product imagined, inferred, and created by people;
5. Science knowledge hooks on to social and cultural background;
6. Science theories, laws, observations, and inferences are different;
7. Science methods are not generally applicable.

Thus, it can be seen that HPS education is a kind of brand-new science education concept and efficient path improving the public's science quality comprehensively, based on the PUS educational paradigm.

In 1996, the U.S. *The National Science Education Standards* clearly put forward the relationship between science and history of science, and Chapter 6 “History and Nature of Science in Five to Eight Grade” mentions that all the students should be gradually understand the goal of human science, the nature of science, and the history of science (National Research Council, 1996).

In 1999, the reform of science curriculum in China begun to pay close attention to the nature of science. For example, chemistry curriculum standards explicitly put forward “to understand the nature of science” and “to deepen the understanding of the nature of science” in junior high school chemistry curriculum and the high school chemistry curriculum. Although chemistry curriculum standards do not specially point out that chemistry education must carry on the HPS education, but compiler of the chemical teaching material compiled a lot of history, philosophy, and sociology of chemistry, in order to realize the HPS education.

So, HPS paradigm of science education is the development trend of international science education to cultivate students’ concept of the nature of science. HPS paradigm can make the students understand science.

### Conclusion

We advocate the educational paradigm from “mastering science” to “understanding science,” but we do not say that “mastering science” is wrong, only because the concept does not adapt to the development of science education, or it is not the ultimate aim of science education but the periodical target in cognition. “Understanding science” is the ultimate aim adapting to the development of science education, which is the basic science quality possessed by the public.

STS education pays much more attention to the influences of science and technology to society, while HPS education concerns science nature and social functions of science more, but they understand values of science education from the angle of PUS.

PUS educational thought requires changing science education concept from elite education to mass education, from scientist education to public science quality education, from mastering science to understanding science, and from double-base education to STS education and HPS education. Such changes are not only in form, but also in concept of science education value, which is a kind of realization of PUS-based concept of educational value.

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## Racism Reflected in *Invisible Man*

JING Jing

Changchun University, Changchun, China

PENG Ya-nan

Lianghe State Administration Taxation, Yunnan, China

Ralph Waldo Ellison is one of the most distinguished African American writers in the contemporary era. He has a unique writing style because of his unique life experience. His novel *Invisible Man* won the National Book Award in 1953. He describes the hardship of the black and the racial discrimination the black suffered in the United States in *Invisible Man*. This paper introduces the racial discrimination in different aspects in America through the narrator's experience, including the narrator's growth process, employment, and politics. He illustrates a lot of hardship the black people meet in different society. The black's rights can not be protected and they need to be humble to the white. Because of the discrimination, the narrator lost himself and began to become an invisible man step by step. These kinds of things are unfair for the black men. They can not realize their social value under such a circumstance. So, Ellison implies that the black men should pay attention to this kind of problem and try to transform their identity from invisible men to visible men.

*Key words:* racial discrimination, Racism, *Invisible Man*

### Introduction

Ralph Waldo Ellison is a famous black writer and his novel *Invisible Man* is a famous book in American literature. As an African American writer, he is so concerned about the problem of racism.

*Invisible Man* was Ellison's masterpiece. It uses the rich metaphor and symbolism to illustrate the racial discrimination in America. And, it makes contribution in American literature. It is the most influential American novel since World War II. Ellison learns from many American and European classical writers and works, and makes *Invisible Man* become an encyclopedia of American culture and history. Unlike any novel you have ever read, *Invisible Man* is a richly comic, deeply tragic, and profoundly soul-searching story of one young Negro's baffling experiences on the road to self-discovery.

Ellison spent almost seven years to complete this book. From the bizarre encounter with the white trustee which results in his expulsion from a southern college to its powerful culmination in New York's Harlem. His story moves with a relentless drive: The nightmarish job in a paint factory, the bitter disillusionment with the Brotherhood and its policy of betrayal, the violent climax when screaming tensions are released in a terrifying race riot. This brilliant, monumental novel is a triumph of story telling. It reveals profound insight into every man's struggle to find his true self.

### **A Brief Introduction to Racism**

Racism is the discrimination between two different races. Racial discrimination in the United States has been a major issue since the slave era and the colonial era. Legally racist sanctioned rights and privileges for White Americans are not granted to Asian Americans, Native Americans, Latin Americans, and African Americans. The history of American Racism is the slave trade. Since Columbus discovered the New Continent, slave trade had happened. Millions of black men were captured and sailed to American as labors. They suffered hunger, thirsty, and disease. The blacks' social status was very low and their masters took it for granted that they should work all day long and accept all kinds of work they had given to them.

From 1861 to 1865, the bloodiest and most destructive of all the nation's wars, the Civil War between North and South resulted. Black slavery ended in the United States after the Civil War when the North was finally victorious. Slavery was abolished in the 1860s, but its legacy continued. The black was not readily assimilated into the large American culture, especially in the South. This kind of phenomenon still exists until now.

American Racism is reflected in many aspects, including education, employment, voting rights, immigration, citizenship, and so on.

One of the important aspects of the American Racism is education. In the early 100 years after the United States was founded, whether it was public or private school, the white and the black were separated, not co-educational. The situation existed until President Eisenhower era. Even though the law about the situation was already in force, racial discrimination on education still existed. Therefore, there are still most white students who are in good schools.

Another form of American Racism is employment. In America, most of the black are carpenters, miners, soldiers, cleaners, or engaged in heavy industry factory to do some dirty, tiring, and unskilled job. The blacks' wages are generally low. The blacks seldom get into management, engaged in technical work or be a lawyer, doctor, and government officials. Although there has been a large increase now, the number of blacks in the high wage job is still far apart compared with their proportion in the United States.

The third form of racism is living standard. In America, living environment has played a decisive role. It is related to education, employment, service facilities, and so on. *The Civil Rights Act* of 1968 declared that the blacks have the same opportunities to choose the living environment as the white. The racism in living standard seems to be weakened and disappear. But in fact, it is not improved. In a survey of 119 apartments in Atlanta, only 27% give equal opportunity for the black and the white. Forty five percent claim that they will give priority to the white. The racial discrimination of living standard divides the American society into two different societies.

### **Racism Reflected in the Growth Process**

The narrator in *Invisible Man* is a black man who lives in South America. As we know, the blacks are not slaves now, but they are still poisoned by the ideology of slavery. In their mind, the white are their lord. They have to serve white men without any hesitation. In the period when he was studying in college, the narrator suffered a lot. He was obedient to the arrangement of the teachers in the school and the rule of whites in whites club. When he began to understand the world and himself step by step, American Racism and apartheid policies of the United States make the boy's growth alienation.

The narrator's growth process experienced the spiritual shock again and again. The poor black youth asked himself again and again, Who am I? Where am I from? How can I be a true man? These were the most abstract questions, but also the most natural questions. In the growth process, the black youth began to know the definition of visibility and invisibility, and transformed himself from visible man to invisible man again and again. From the young's inner change, the author presented the issue of racial discrimination again and again.

In *Invisible Man*, we can see that the narrator's grandfather warned his family members that, "Son, after I am gone, I want you to keep up the good fight. I never told you, but our life is a war and I have been a traitor all my born days, a spy in the enemy's country ever since I give up my gun back in the reconstruction. Live with your head in the lion's mouth. I want you to overcome'em with yeses, undermine'em with grins, agree'em to death and destruction. Let'em swoller you till they vomit or bust wide open. Learn it to the younguns" (Ellison, 1965, p. 16). The narrator's grandfather's opinion made us ponder. On his grandfather's opinion, the black should keep two identities. On the one side, they should pretend to be a good slave, behaving as their former masters' wish. However, on the other side, they should remember their resentment and bitterness, and fight against this enforced false identity. That was a usual way the blacks will do to deal with the racial discrimination. They just sought a way to protect them but never fight for their rights and identity. From his view, we can see that the racial discrimination in America influenced the black a lot. The black knew that they suffered bitterness and resentment, but they can not change the reality. So, they must wear a mask, so that they can protect himself and live a better life in this unfair world. In the narrator's growth process, we can see that the narrator emphasized submission and humility as the key to the advancement of black Americans. They wanted to get equal human rights to be a real American, but a series of grave insults made them know that they had paid grieving price for them. And even though the view that all men are created equal was put, it seemed that the white were more equal than the black.

### **Racism Reflected in the Social Life**

After expelled from the college, the narrator began to enter the society. He moved to New York by bus. In the bus, we can see that even though it was vacant, the narrator as a black man can only sit in the end of the row. He met the vet whom he met in Golden Day. The vet told the narrator his felling about the situation of this society and said that this society was so unfair for the black. From the vet's words, we can see that the black man cannot have the some freedom as the white man. The vet also illustrated the fact of racial discrimination, but he was treated as a mental patient. And before the vet got off, he gave the narrator some advice. In the vet's opinion, the black should learn to be their own master. This kind of opinion was very important especially for the black man. But at that time, the narrator did not understand the meaning of the vet's words. When he came to New York, he was so confident. He wanted to obtain the recognition through his efforts and struggle. He wanted to be a visible man and obtained the social status in this industrial society. He believed that he can realize his own value through his efforts. He went to a paint factory with the help of the son of a trustee, Emerson. The narrator thought he can make his dream come true in this factory when he entered the factory.

When he entered the paint plant, he saw a huge electric sign reading "Keep American Pure With Liberty Paint." He was satisfied with everything in the factory, the work environment was free and different races work together. The paint factory was named liberty, and they produced the whitest paint in America. But the way of making this kind of paint was so meaningful. They needed 10 drops to combine. That was just like American

society, this kind of white can not produce without the blacks. The American prosperity and development can not be separated from the contribution of the blacks. Sometimes, people just saw the final white just like the paint but forgot how it can be so white. Ellison (1965) said in the novel, "Our white is so white you can paint a chunk coal and you would have to crack it open with a sledge hammer to prove it was not white clear through" (p. 195). The meaning of this sentence exactly reflected the situation of the black. In the eyes of the white, the white culture can assimilate black culture just as coal is painted with white paint. We can only see the white from the surface. If someone wanted to see the inner color of the coal, he had to break it with a hammer. The hammer stood for the power the black searches. The way how to produce the white paint demonstrated the way of this society.

He worked hard in this factory, but he did not do the job well. He made the white paint gray and sticky. So, he was sent to basement to work. He had misunderstanding with his master and the labor union. Through the conflict with his master, an old black man, the narrator began to consider about his humility. There was a very important monologue by the narrator in this period. The content of this monologue was that he was be trained be a humble man, and he should bear almost everything. Even though sometimes they bully you, the only way you would do was just leaving. His monologue reflected the current situation of the black man.

In the process of his working in the factory, the narrator was injured because of boiled explosion. When the narrator was sent to the hospital, he was treated as a test object by white doctors. He wanted to be away from the hospital, but the electric shocks made it impossible. He had no choice but lying on the bed. When the doctor asked what his name it, he found that he became a real invisible man. After leaving the hospital, he could not return to the paint factory. And, we can find that it was difficult for an injured black man to find a job in American industrial society.

The narrator suffered a lot in the industrial society, but nobody noticed the narrator's pain and numbness. It seemed that he was like living in another world. He can see every act and every move of the white men, but the white would not notice him. He had been labeled as invisible. The experience in the paint factory made the narrator understand that in this so-called freedom under the factory environment, he still can not change his status as an invisible man. Any free environment did not include him. The American Dream he carried on is so beautiful and so fragile that once the dream touched the reality, it would broken. The narrator began to think about the problem of his dream. But, he finally found that all his thoughts were pipe dream, he was just an invisible man.

### **Conclusion**

Ralph Waldo Ellison's *Invisible Man* describes an American black youth without a name and he is not accepted by the society. His experience reflects the phenomenon of racial discrimination in the American society, and his quest for freedom and self nature makes the black call attention to their value and destiny. The author creates a black image who will have self reflection on racial issues. The author describes the problem of racial discrimination in different society through the different stages of the narrator's experience.

In the novel, the author Ellison conducted a comprehensive, real, and profound description and characterization of the social phenomenon of racism. But, unlike many other black writers, Ellison did not have the nationalism tendency. He just describes the common racial discrimination and prejudice through the experience of the narrator. He uses the realistic approach and calm statements to illustrate how racial discrimination engraved deeply in the soul of the Americans. At the same time, Ellison pointed out that in

America, such a racist crisis of society, it is a very deep social problem. It can not be resolved by racial violence, blindly flatter, or the so-called achievement the blacks get.

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US-China Education Review B  
Volume 6, Number 2, February 2016

David Publishing Company

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