

Professional Development for Teachers of Mandarin: Creating Career Pathways for New Teachers

Xiaoqiu Xu, Amado M. Padilla, Duarte M. Silva, Tracy M. Steele
Stanford University

Margaret D. Peterson
San Francisco Unified School District

Abstract There is growing interest in Mandarin language instruction in American elementary and secondary schools. This interest however is not matched by the current availability of credentialed Mandarin teachers. This paper describes an intensive summer professional development program which included 29 participants involved in some way in the teaching of Mandarin (e.g., community language schools), but most of whom were not yet credentialed as teachers. Quantitative and qualitative data are presented to show how the program addressed the varying needs of participants and deepened their understanding of teaching practices such as lesson unit design and assessment strategies. Following the program all of the participants expressed an interest in pursuing a credential in teacher education that would allow them to teach in an American public school and continuing with professional development in one form or another. The program's objectives, curriculum and performance tasks are also provided for reference.

虽然中文教育在美国的中小学越来越红火,但是具有教师资格证书的中文教师却很缺乏。本文描述了一个中文教师的暑期培训项目。参加该培训项目的二十九位教师从事着不同形式的中文教学工作(比如社区语言学校的中文教学),却都没有正式的教师资格证书或受过正式的教师培训。定量和定性研究的数据表明该培训项目很好地满足了这些老师的教学需求,并加深了他们对于课程设计和评估等方面的理解。项目结束时,所有参加该项目的老师都表示有兴趣报考教师资格证书,并将继续参加将来的教师培训项目。本文还提供了该培训项目的各项指标和具体课程设计方案,以供参考。

Key Words: Beginning Mandarin Teachers, Professional Development, Needs Assessment, Career Pathway, Program Effectiveness
新中文教师, 教师职业培训, 教学需求, 职业通道, 项目效果

1. INTRODUCTION

1.1. Increasing Demand for Mandarin Learning

The economic growth of China over the last 30 years highlights its growing importance in our new global society. Learning to speak Mandarin and understanding China's cultural norms has become increasingly important because of the new opportunities that are occurring in the 21st century.

Interest in learning Mandarin is growing from multiple sources. Government, business, educators, and parents are recognizing the economic and political advantages that come from learning Mandarin. Seven states (Kansas, Ohio, Oklahoma, Minnesota, North Carolina, Wisconsin, and Utah) have made the instruction of Mandarin a priority in their world language programs. In addition, two large metropolitan school districts, Chicago and Los Angeles, have now expanded Mandarin curriculums in their foreign language offerings. In fact, more than 7,000 students are currently studying Mandarin in Chicago Public schools ("Q&A Interview with Secretary of Education Arne Duncan", 2009). In California, student enrollment in Chinese foreign language classes has doubled over the past decade. In 2000-2001, 52 schools offered 157 classes of first and second year Chinese to a total of 4,122 students. By 2008-2009, 123 schools were offering close to 400 courses to more than 10,000 students (Data Quest, 2009).

1.2. Shortage of Qualified Mandarin Teachers

Experts have argued that a shortage of qualified language teachers is the major obstacle in building effective and sustainable world language programs in the United States (Asia Society, 2005; Spaine Long, 2000; Steele, Oishi, O'Connor, & Silva, 2009). According to Shuhan Wang (Vu, 2007), the Executive Director of Chinese Language Initiatives, U.S. has only about three to four hundred qualified Chinese teachers but more than 2,400 schools that want to offer the language. Public schools throughout the country have hired as many as 10,000 foreign teachers, including Mandarin teachers, in primary and secondary schools on "nonimmigrant" work or cultural exchange visas who are currently going through the certification process (Barber, 2003). Simultaneously, many Chinese immigrants who have settled in the United States are making career changes. Realizing the demand for Mandarin teachers and accompanying employment opportunities, many native Mandarin speakers have decided to pursue teaching Chinese as a viable career option.

While recruiting native speakers from other fields as prospective Mandarin teachers does help alleviate the shortage, it also requires extensive professional development and training in instructional strategies, assessments, school policies, and parent relations if these new Mandarin teachers are to be successful in U.S. schools.

An article by International Education Center (2007) entitled *Seminar on Introducing Mandarin to the World and Mandarin Teacher Training in the U.S* points out a critical problem in current teacher education programs. The authors argue that many Mandarin teachers in the U.S. are not familiar with teaching practices appropriate for American students that are accustomed to student-centered learning, and rely instead on Chinese teaching practices that are not necessarily effective in the U.S. Understandably, Chinese teaching practices differ significantly from that in this country, often resulting in numerous classroom difficulties.

1.3. STARTALK: A Non-Credential Professional Development Program for Mandarin Teachers

A solution to the shortage of qualified Mandarin teachers is the conventional teacher credentialing programs which certify teachers to teach in public schools. Although a teacher credentialing program can “ensure integrity and high quality in the preparation, conduct and professional growth of the educators” (Commission on Teacher Credential, 2009), it takes one to five or more years to complete (Teacher Prep Center, 2009). Considering the length of teacher credentialing programs, alternative professional development programs are urgently needed to help potential and novice Mandarin teachers gain knowledge and skill in the field and be prepared for teaching.

STARTALK, a nation-wide summer language and professional development program funded by the National Security Language Initiative (NSLI), offers non-credential professional development programs to potential teachers of foreign language instruction. In 2007, STARTALK funded 34 institutions from 22 states and the District of Columbia, including both public and private universities, high schools, and heritage schools, with over 430 teacher and 870 student participants. In 2008, STARTALK funded summer programs in 30 U.S. states with a total of 1000 teacher participants and 2600 student participants. By 2009, STARTALK was offering 48 teacher programs across 26 states and 77 student programs across 31 states (“STARTALK,” n.d.).

Like many other professional development programs, STARTALK does not offer a teaching credential for teachers as such, but motivates participants to seek official credential programs and prepares participants for what they might expect in such programs. Program evaluations of STARTALK and other Mandarin professional development programs are ongoing. What is known is that these summer professional development programs for prospective teachers are beginning to have an impact by: (1) enhancing the pedagogical skills of Mandarin teachers who mostly teach in non-public school settings and (2) increasing the number of native Mandarin speakers interested in pursuing teacher credentials in order to work as world language educators in public schools.

1.4. Research Questions

This paper seeks to contribute to the small body of literature in the field of professional development for Mandarin teachers. In this study we provide a description and analysis of an on-going two-year intensive summer professional development program for Mandarin teachers, most of whom are native speakers. Using both quantitative and qualitative data collected from the 2008 STARTALK program at XXX University, the research questions that guided the professional development program were:

1. What were the professional development needs of participants, and how well did the program meet the identified needs?
2. To what extent did the program enhance participants' skills in terms of curriculum planning, instructional and assessment strategies?
3. How did the program help participants gain access to new career pathways such as enrolling in a credential/certificate program, assuming teaching positions, and networking and collaborating with other educators?

2. PROGRAM DESCRIPTION

In 2008, the XXX University STARTALK program offered a two-level professional development program series: Level I for novice teachers or teacher candidates, and Level II for more seasoned teachers who had participated in the STARTALK program in the summer of 2007¹. There were two overarching goals of the program:

1. *Implement an "academy" model professional development program for approximately 20 Mandarin language educators. In addition, assist teachers to network with other professional groups that will support them with professional growth opportunities and certification, if needed.*
2. *Provide a leadership development program for a subset of the participants from the summer 2007 "academy" professional development program to strengthen their professional growth while increasing the XXX's ability to support additional Mandarin teachers in the future.*

To achieve these goals the curriculum was designed to meet the needs of participants in their various stages of professional growth and development. Two distinct levels were offered: Level I consisted of 45 hours of instruction for new participants to the program, while Level II offered 55 hours of instruction intended for returning participants from the 2007 summer program. Each level provided options

¹ The 2007 STARTALK program focused on having its participants acquire the theoretical foundations and best practices for standards-based Mandarin language instruction. The 2008 STARTALK Level II program recruited these participants back for a continuous professional development which focused on leadership development.

for teachers to focus on areas that specifically met their diverse needs. Regardless of the level, the curriculum sought to instill in participants an understanding that student learning is directly related to teacher practice and that an overall goal of the program was to assist participants to become better teachers through guided practice and reflection. Table 1 (see below) summarizes the specific curricular goals for Level I and Level II participants. As shown in Table 1, five objectives are identified for improving pedagogical content knowledge and teaching skills related to Mandarin Chinese instruction. The actual instruction was done by experienced world language teacher educators in both English and Mandarin.

Table 1: *Objectives of the Professional Development Program*

Teachers will: Level I	Level II
Acquire basic principles of second-language acquisition (SLA) to inform instruction	Review principles of second language acquisition in context of proficiency-oriented assessment
Develop standards-based lessons for students	Develop standards-based thematic units for students with appropriate assessment strategies
Integrate assessment strategies in lesson planning and delivery	Conduct oral proficiency interviews and learn how to rate students' authentic language samples
Develop peer-coaching skills and learn how to use observation protocols to identify SLA principles in action.	Apply peer-coaching skills, mentor novice teachers, and provide them with constructive feedback
Differentiate instruction for diverse learners	Differentiate instruction for diverse learners ²

Using McTighe and Wiggins' (2005) theory of understanding by design³, the program incorporated a combination of presentation, modeling and interactive activities to help participants plan lessons and assessment tools that started with the expected student performance in mind. This program required participants to develop their own lessons, units and curriculum scope and sequences, for different level courses that they would teach in the future. Performance tasks allowed participants to demonstrate the knowledge and skills they acquired during the program. Per-

² ^aThe same instruction was offered to both Level I and Level II since it was not included in the 2007 summer program.

³ Defined by McTighe and Wiggins (2005), Understanding by Design is a "framework for designing curriculum units, performance assessments, and instruction that lead your students to deep understanding of the content you teach." Understanding by Design has six facets of understanding which include students being able to explain, interpret, apply, have perspective, empathize, and have self-knowledge about a given topic.

formance tasks required participants to:

- *Apply the concepts taught in the program to their own lesson plans and unit designs.*
- *Elicit appropriate student language samples and rate them in proficiency terms.*
- *Demonstrate the relationship between teacher practice and student performance.*
- *Perform teaching demonstrations grounded in Second Language Acquisition (SLA) principles and research-based practices.*
-

Specific professional practices, such as peer coaching, shown to increase teacher effectiveness were interwoven into the program (Joyce & Showers, 2002). Reflective sessions—such as classroom discussions, debriefings of classroom observations and lesson modeling, informal dialogues among colleagues and classroom participation assisted the instructional staff to assess participant learning and to guide further instruction. Formative assessments included pre-post surveys, reflective journals, responses to readings or lectures, work samples and required products (e.g., lesson plans, curriculum guides, assessment items, and surveys). In addition, the program also addressed larger issues related to language education in U.S. schools, such as local control, parent roles, etc. Since most of the participants were Chinese immigrants, time spent on reviewing educational issues specific to the United States and to the State of California proved especially helpful. For example, the program's curriculum included topics on teacher credentialing pathways typical in U.S. teacher preparation institutions, criteria and processes for selecting appropriate textbooks and other supplemental instructional resources, and networking opportunities for professional development and pertinent professional organizations. Program leaders also discussed the key elements that constitute an effective Mandarin language program, how to build positive community relations for supporting Mandarin language programs, strategies for identifying community resources, and ways to showcase and promote student success.

3. METHODS

We used a mixed-method research design to gather data on the demographics and needs of Mandarin teachers in American schools, as well as the impact of a professional development program on their teaching practices and career pathways. Quantitative and qualitative data were collected by three means: (1) 2008 STARTALK Teacher Program Pre- and Post-Surveys, (2) a six-month follow-up survey, and (3) phone interviews with teachers who participated in both the 2007 and 2008 STARTALK programs.

At the beginning and the end of the 2008 STARTALK program, the teacher participants completed STARTALK Teacher Program Pre- and Post-surveys developed

by the National Foreign Language Center. The survey instrument was used to gather data on respondents' demographic background, educational background, professional background, self-assessment of need, and post-program evaluation. The survey used a combination of close-ended and open-ended questions, with most of the survey questions being close-ended. Two open ended questions, "What were the best parts of the program" and "What do you think could be improved," were asked at the end of the survey. These two questions allowed the respondents to elaborate on particular strengths and weaknesses of the program and offer insights on topics not covered by the closed-ended survey questions.

In order to follow up and gather additional data on how the STARTALK program impacted participants' teaching, a short email survey was sent to the 29 teacher participants 6 months after the program ended. If a participant failed to respond to the email, phone calls were made to increase the response rate. Eventually, twenty-five (86%) teacher participants responded to the follow-up survey either by e-mail or phone.

The limitation of this quantitative approach in collecting data lies in the self-reporting nature of the surveys; however, the data were used for the purpose of eliciting participants' impressions of the professional development program and whether they felt that their needs were being met. Although these data do not permit us to carry out any statistical analysis to assess the effectiveness of the summer program, nonetheless the data are useful in program planning.

To supplement the quantitative data, we also conducted face-to-face interviews with six teachers who participated in both the 2007 and 2008 STARTALK programs. The interviews were conducted three months after the 2008 program⁴. Interviewees were asked to reflect on their experiences with the STARTALK program and its impact on their teaching career guided by the following five interview questions:

1. *What influence has STARTALK had in your teaching of Mandarin in your classroom?*
2. *How did STARTALK (level II) help to deepen your understanding of such practices as backward design⁵, differentiated instruction, lesson unit design, assessment strategies, and peer coaching (give examples of how this program helped your teaching practices)?*
3. *Why did you decide to continue with STARTALK Level II Mandarin after your initial experience?*
4. *How have these programs helped you gain new opportunities such as enrolling in*

⁴ Eight teachers who participated in both the 2007 and 2008 STARTALK programs, but only six teachers were available for interview.

⁵ Backward design is a method of designing curriculum by setting goals before choosing content to teach, which ensures that the content taught remains focused and organized, promoting a better understanding for students (McTighe and Wiggins, 2005).

a credential/certificate program, seeking employment, and networking with other teachers?

5. What suggestions do you have about future programs?

Interviews with the respondents were conducted over a period of three weeks. Interviews were scheduled at the convenience of the respondents and were mostly conducted over the phone. Follow-up phone calls were made when we needed to clarify certain questions or explore thoughts from the teachers. Each interview lasted approximated 40-60 minutes. All interviews were taped and detailed notes were taken throughout the interview. Four out of the six respondents answered interview questions in Mandarin. The interviews were transcribed and translated into English afterwards.

4. RESULTS

4.1. Teacher Participants

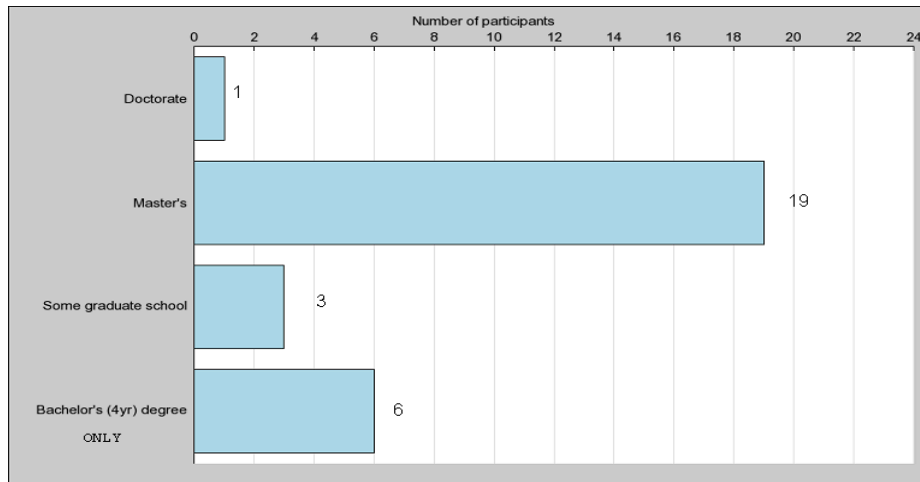
Participants in the study were 29 teachers who participated in the 2008 XXX University STARTALK Teacher Professional Development program. Among them, eight teachers had also participated in the 2007 STARTALK program and were recruited for participation in the 2009 program as Level II teacher participants. Based on both the pre and post survey results, participants' demographics, educational and teaching backgrounds, and previous certification and training experiences are summarized in below.

Regarding demographics of participants, two of the 29 participants (7%) were English native speakers who taught Mandarin Chinese in American schools. This is interesting because in the 2007 STARTALK program all teacher participants were native speakers of Mandarin. This demographic change in the program indicates that Mandarin teaching has not only attracted native speakers, but also teachers who have Mandarin as their second language. As for gender distribution, there were no male teacher participants in the 2008 program. The absence of male participants reflects the general teaching population in foreign language teaching with a predominance of female teachers throughout elementary and secondary schools (NCES, 2007). Further, participants represented a wide range of ages ranging from the mid 20s to 50s with most participants between the ages of 30 to 49 (72%). The reason could be more Mandarin speakers between the ages of 30 and 49 had shifted their career to education and as a consequence recognized the need for teacher professional development.

All of the participants in the STARTALK program were well-educated with 70% holding graduate degrees (see Figure 1). However, holding an advanced degree does not ensure being a successful language teacher; while candidates speak and write native or native-like Chinese, they may lack adequate understanding of linguistic

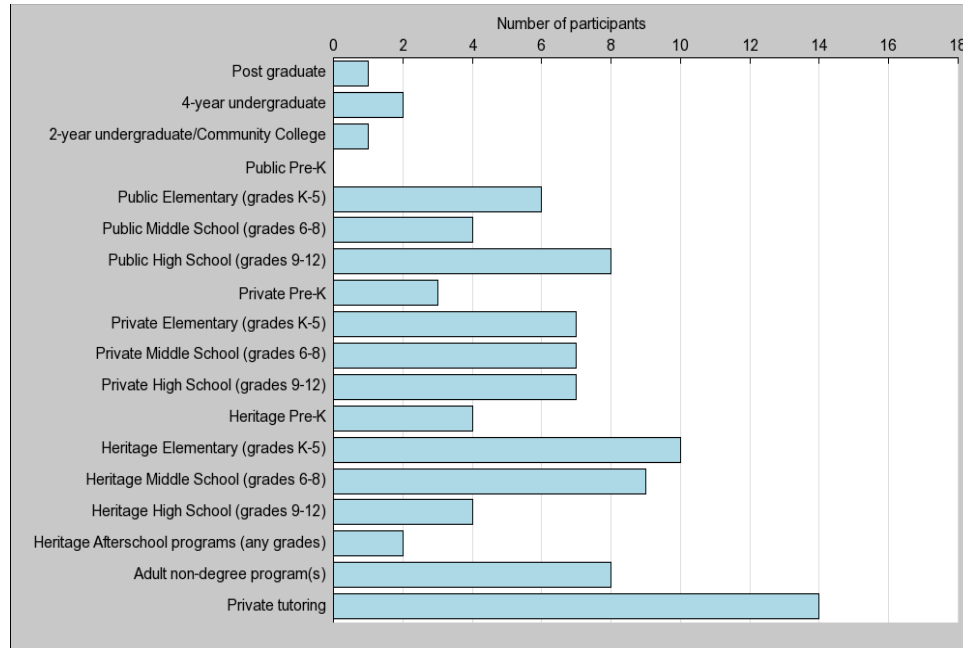
knowledge, pedagogical strategies for teaching a foreign language, and information about the functioning of the U.S. school system. Only 6 of the 29 teachers (20%) had degrees related to Chinese language or education. Most of the other participants had degrees in business (e.g., finance) or computer science. Thus, teaching Mandarin represented a career shift for most of the program participants.

Figure 1: *Participants' Educational Background*



Furthermore, participants' teaching experience varied much more than their educational backgrounds. Demographic data showed that the participants differed widely in their teaching experience, ranging from less than 1 year to 10 years or more. The survey results also showed that participants taught language at many different levels from Pre-K to post graduate and in different educational settings including private schools, public schools, heritage schools, and college (See Figure 2). In addition 14 of the 29 teachers (48%) were doing private tutoring in addition to their formal teaching job.

Figure 2: *Have you taught the target language in any of the following education settings in the United States?*



Regarding participants' certification and previous training experiences, most participants (90%) reported some form of professional development in language teaching; however, the majority of participants (66%) were not certified to teach language or any other content material (See Table 2).

Table 2: *Certification and Previous Training of Teacher Participants in the STARTALK Program*

	Possess Certification in Language Teaching?	Previous Training in Language Teaching?
2008 STARTALK Program	Yes 10 (34%) No 19 (66%)	Yes 26 (90%) No 3 (10%)

4.2. Quantitative Findings

Self-Assessment of Need

Participants in the 2008 STARTALK program were administered a pre-post survey asking them to rate the importance of 11 specific domains for teaching Mandarin in American schools (see Table 3). The majority of participants rated each of the 11 domains either as *important* or *very important* on both the pre and post survey. However, in two specific domains—second language acquisition and educational technology—participants reported a sharp increase in the importance of these two

areas for teaching Mandarin. For example, while only 12 participants (41%) rated second language acquisition as *very important* on the pre-survey, 21 participants (75%) rated it as such on the post-survey. Meanwhile, only 16 (55%) of the participants perceived educational technology to be very important to teaching on the pre-survey; this increased to 21 participants (75%) on the post-survey. Among all the domains surveyed, participants reported a decrease in the importance in only one domain, US educational systems and classroom management, with 21 (72%) participants rating it as *very important* on the pre-survey as compared to 17 (61%) participants on the post-survey.

Table 3: *Self-Assessment of Need Pre/Post Survey Questions*

How important is/are:	Pre-Survey N=29	Post-Survey N=28
Approaches and Methods	27 (93%)	27 (96%)
Curriculum and Lesson Design	26 (90%)	28 (100%)
Instructional Planning and Strategies	27 (93%)	27 (96%)
Materials Development and Adaptation	23 (79%)	25 (89%)
Assessment	24 (83%)	25 (89%)
Structure of the Target Language and Pedagogical Grammar	13 (45%)	16 (57%)
Second Language Acquisition	12 (41%)	21 (75%)
US Educational Systems and Classroom Management	21 (72%)	17 (61%)
Educational Technology	16 (55%)	21 (75%)
Reflective Practice and Leadership	20 (69%)	22 (79%)
Pathways to Certification	12 (41%)	14 (50%)

The increase in importance given to second language acquisition (SLA) in the participants' post-survey ratings is due most likely to the fact that SLA is typically addressed within the curriculum content of methodology courses for language teachers, but since most participants did not have any formal instruction as language educators they had not had an opportunity to learn about SLA prior to the summer program. Likewise, educational technology is also interwoven in nearly all aspects of XXX University's STARTALK program. Participants collaborated to develop units online and use Web 2.0 tools such as podcasting, blogs, flickr, voicethread, ning, and wikis. The use of multimedia was to engage students in as many modal-

ities as possible.

The decrease in importance given to US educational systems and classroom management in the participants' post-survey ratings is possibly due to the fact that this area of knowledge was not emphasized in the program due to time constraints. The XXX University's STARTALK program focused more on specific language teaching methods and practices rather than a broader picture of education and classroom management. Nevertheless, educational systems and classroom management is forever an important topic in professional development program for educators.

The survey also asked participants to indicate which of the 11 domains listed in Table 3 they expected to have their knowledge and skills increased after completing the program. Table 4 shows these pre and post survey responses. The biggest changes in participant responses from the pre to post survey came in the areas of approaches and methods, assessment, structure of target language or pedagogical grammar, and reflective practice and leadership. Participant responses decreased in their expected gain in approaches and methods on the post-survey by 24%, 18% in assessment, and 26% in structure of the target language and pedagogical grammar. Meanwhile, participant responses increased in the domain of reflective practice and leadership by 20%.

Table 4: *Self-Assessment of Need Pre/Post Survey Questions*

From this program, I expect to increase/have increased my knowledge of and skills in the following:	Pre-Survey N=29	Post-Survey N=28
Approaches and Methods	26 (90%)	24 (66%)
Curriculum and Lesson Design	26 (90%)	27 (96%)
Instructional Planning and Strategies	27 (93%)	24 (86%)
Materials Development and Adaptation	24 (83%)	21 (75%)
Assessment	27 (93%)	21 (75%)
Structure of the Target Language and Pedagogical Grammar	21 (72%)	13 (46%)
Second Language Acquisition	18 (62%)	15 (54%)
US Educational Systems and Classroom Management	19 (66%)	19 (68%)
Educational Technology	20(69%)	22 (79%)
Reflective Practice and Leadership	18 (62%)	23 (82%)

Pathways to Certification	14 (48%)	10 (36%)
---------------------------	----------	----------

Several key themes emerged from an examination of participants' responses. First, approaches and methods, including methods of assessment, taught in the STARTALK program are quite different from what program participants are used to—given the fact that the majority were educated in China rather than in the United States. This helps explain the decrease in expected knowledge gains on this topic. Therefore, even though approaches and methods, including methods of assessment, is part of the core content curriculum, further attention to this topic may be necessary to help participants feel confident in teaching and assessing students.

What might account for the significant decrease in expected knowledge gain in structure of the target language and pedagogical grammar? Given that the majority of participants come to teaching from diverse careers (e.g., business, science and computing) they may have expected the STARTALK program to provide them with knowledge in structure of Mandarin and pedagogical grammar. However, due to the lack of time and current focus on standards and communicative language teaching approaches, the program's attention to the teaching of Chinese language structures mainly focused on the role of grammar in the communicative based language instruction. It is important to point out that additional support such as formal teacher certification programs and continuous professional development programs is needed to address strategies for effectively integrating grammar into communicative based approaches to teaching Mandarin.

Finally, it appears from survey data that participants increased their knowledge and skill regarding teaching practices. One of the highlights of the STARTALK program is the collaboration and feedback that participants receive throughout the entire learning process. For example, participants share key aspects of their planning and teaching processes, present model lessons and units to their colleagues and, in turn, receive feedback on their lesson plans. These practices work to build effective professional learning communities that support continuous professional growth. Additionally, they are an essential aspect of building successful professional networks that participants can rely on as they enter into the teaching profession.

Program Evaluation

Along with the self-assessment need questions, the post survey also had a section on program evaluation. Table 5 lists the survey questions and participant responses. Among the first 8 questions that dealt specifically with the implementation of the STARTALK program, the survey results showed that participants were very enthusiastic in their evaluation of the STARTALK program. Furthermore, all participants reported that their confidence in teaching Mandarin had been bolstered because of their participation in the program.

Table 5: Program Evaluation Post Survey Questions and Responses

Question	Agree	Disagree
The goals of the program were clear.	100%	0
The goals of the program were achieved.	100%	0
The program had adequate language materials (e.g., books, CDs, dictionaries).	89%	11%
The teacher trainers were interested in helping me become a better language teacher.	100%	0
The teacher trainers had adequate language proficiency in the language we teach.	96%	4%
The teacher trainers were knowledgeable about language education and are a good resource for information about program implementation, materials, etc...	100%	0
The program had adequate instructional resources (e.g., computers, overhead projectors, supplies)	100%	0
After participating in this program, my confidence in teaching Mandarin has increased	100%	0
I plan to become certified to teach Mandarin	96%	4%
I would like to participate in another summer STARTALK teacher training program	100%	0
I would like to teach in a STARTALK summer language workshop.	93%	7%

The final section of the survey consisted of two open-ended questions asking participants to comment on what they believed were the best parts of the program and what they thought could have been improved. While answers varied widely, two recurrent themes surfaced. Many of the participants appreciated the hands-on teaching experiences, demonstrations and mini-lessons that were aligned to national standards and curriculum frameworks. In addition, participants noted the effectiveness of the leadership and reflection component. In terms of program improvements, participants overwhelmingly noted the need for additional time—to learn more theories and instructional strategies, to practice mini-lessons, to digest material, and to provide a slower pace to the program.

Pathway to Certification

Besides self-assessment need questions and program evaluation, the post-survey also asked about participants' future plans in pursuing credentialing programs and continuing professional development. All except one participant planned on becoming certified to teach Mandarin. Thus, although the participants were already teaching Mandarin it appears that the STARTALK summer professional development

program motivated them to pursue a credentialing program that would enable them to move from part time positions to full time careers as language educators.

To further explore the question of whether STARTALK motivated participants to pursue a credential, we delivered a follow-up survey to participants. They were asked if they were currently enrolled in a teacher education credential program and if STARTALK had motivated or in some indirect way helped them to decide to become credentialed language teachers. 8 of 25 participants (32%) stated that they were currently enrolled in a teacher credential program and all reported that the STARTALK program had indeed motivated them to further their professional development by enrolling in a school of education teacher training program. Further, they indicated that their experience with STARTALK was helpful in their current credential program.

4.3. Qualitative Findings

To have a clearer and more detailed picture of the impact of STARTALK on participants, we interviewed six participants who had participated in both the 2007 and 2008 STARTALK Teacher Professional Development Program at XXX University. All provided very positive comments on the overall quality of the STARTALK program and pointed out a few aspects of the program that were especially useful and beneficial for their teaching practices. Their feedback indicated that STARTALK was a successful program that met its goals and participants' diverse needs.

General Impression

Participants praised the STARTALK program in general and stated its positive influence in their overall teaching practice. One participant said that STARTALK gave her a variety of strategies she could use in the classroom:

We can teach based on backward design and lesson planning. The programs give us a lot of strategies we can use in the classroom. When teaching, I always think about what the goals are, what activities I will do and what assessment tools I will use. I have learned all these elements from the programs...They are extremely helpful.

Another mentioned that the materials used in the STARTALK program were very helpful and she was even sharing them with colleagues:

I am a new teacher and don't have a teaching credential. The STARTALK program taught me how to teach. Actually, I am currently using what I have learned from the program to teach students. They are really helpful...We called the STARTALK binder "Bible". I also share it with my current colleagues. They also need this "team information". They said it was very helpful.

Interestingly, one participant who described herself as a housewife without any formal training in English before participating in the program expressed how

the STARTALK program had provided her with the confidence to receive instruction in English:

Before I went to the STARTALK program, I was a housewife without any formal education and credential in teaching (language). I was scared on my first day in the program because all the lessons were taught in English!

She also mentioned that STARTALK might not have an effect immediately, but, will do eventually:

Some content in the programs might not be applicable immediately. However, when you suddenly come across it one day, you know it's still useful. For example, I learned to use Youtube in teaching in the STARTALK program last year, but didn't get to use it because, at that time, I was teaching in a Chinese school. Now I'm teaching in another school which suggests teachers use Youtube in teaching. I turned to my STARTALK notes, and quickly found it!

Program Goals

Regarding the program goals, interview data indicated that the program goals were all fulfilled, which was consistent with the quantitative data. As mentioned in the program description, the program had specific curricular goals designed to help participants acquire pedagogical knowledge and teaching skills related to Mandarin instruction. Responding to these goals, participants stated that the program enhanced their pedagogical knowledge and teaching skills in general and especially deepened their understanding of backward design, lesson unit design, assessment skills, and peer coaching:

It helps me tremendously in my teaching. I am more confident about what I'm doing in the classroom... I am now trying to combine several of my lessons into a unit so it's more meaningful and integrated for my students... I am gradually adding varieties in my homework assignments to tailor to students' abilities and interests. I am also doing continuous assessments in the classroom. Using the backward design method I learned in STARTALK, I always remind myself to think about the final project when I design my lesson and units. I also think about culture and relevance in my design... The training has been great for me.

One teacher emphasized how the method of backward design she learned at STARTALK helped her with lesson planning:

It (STARTALK) helped me to plan the lesson. It helped me to think about the standards, whether my teaching is aligned with the framework...For STARTALK II, we were more focused on assessment and backward design. It gives me a strong guideline like what I want students to learn and what my teaching goal is. From there, I can push everything from the bottom to the front...

Another participant stated how peer coaching benefited her and the novice teachers she coached. The following reflection, brought on by the peer coaching experience, reinforced her knowledge and skills in Mandarin instruction and led to continuous improvement and learning:

Peer coaching is wonderful! We level II teachers coached level I teachers. It was great. And I even gained more from coaching the guest teachers from China (another program sponsored by Hanban, College Board and STARTALK). The teaching methodology in China is different from ours. We can share with each other. For example, I shared with them the lesson planning steps I had just learned from STARTALK level II program...In some sense, peer coaching reinforced my backward design. I really learned a lot from peer coaching.

STARTALK as a Career Pathway

All of the interviewees also mentioned that STARTALK, as a teacher professional development program, not only enhanced their knowledge and teaching skills related to Mandarin instruction, but also facilitated a career pathway for them by motivating and helping them to become credentialed, providing job opportunities, and developing a network among teachers in the field. This is also consistent with our survey findings.

For example, one teacher participant mentioned how she was motivated by STARTALK to obtain a single subject certificate for teaching in a public school:

This summer, a few weeks after our STARTALK program, I learned from Margaret [one of the staff that organized the STARTALK program and co-author] that SFUSD was looking for a full-time (Chinese) teacher to teach high school. That became a question for myself of whether I should go to a public school to teach single subject because I need to get a credential before being a public school teacher. It will be not an easy job for me...The trainings at STARTALK kind of motivated me to take the challenge of getting the credential and teach in a high school. I know I can do it!

Another participant explained how the STARTALK curricula helped her succeed in the credential program:

Last year after I finished the program I decided to work hard to get a credential and find a job in a public school. I did not think I would be able to become a credentialed teacher before I enrolled in the program...The content taught in the STARTALK programs provides me background knowledge when taking the credential courses...Once, a teacher at my credential program asked us to do a lesson plan for a specific topic. I used the knowledge of backward design and unit design I learned at STARTALK in the project. And the teacher gave me an A+, the highest grade among all students! I was so excited. I would attribute this high grade to my training at STARTALK.

Besides helping the participants understand the process to become credentialed, the STARTALK program also created job opportunities, directly or potentially, for teachers. Above we saw how one teacher secured employment through a contact with one of the STARTALK instructors. Another participant spoke of how STARTALK furnished her with the skills she needed to get her current job. She regarded the job opportunity as the biggest benefit STARTALK had brought her:

The biggest benefit that STARTALK II gave me was to help me find this current job. In the job interview, they asked me a lot questions. Without the STARTALK program, I wouldn't have been able to answer them...For example; they asked me how to teach a verb. I used the content of guided practice in the STARTALK programs I learned. They also asked me questions about classroom management which was also covered in the STARTALK programs. ... They were very satisfied ...

Another career benefit of the STARTALK program was the networking opportunities created for teachers who were new to this field:

Building up a network is an obvious benefit of STARTALK. I got to know more Chinese associations through this program. Without participation, I might not know these associations. Even if I know some of them, I might not know their credibility and take risks to join them. One more thing, I am now a substitute teacher at GUNN High School. My colleague is Liz, my previous teacher in STARTALK! She gives me a lot of support. Also, I substitute for Yanan (a teacher in STARTALK student program). Without participation, I would not have known Yanan and she would not have called me and asked me to be her substitute. It is a great opportunity!

5. DISCUSSION

The need to train teachers of Mandarin has reached a critical level because of the increasing interest in Mandarin instruction in K – 12 education in this country (Asia Society, 2005; Steinemann et al., 2001). In this article we first describe an intensive summer professional development program for participants who sought to increase their knowledge of sound pedagogical methods for teaching Mandarin. Then we report data that shows that the program met the needs of Mandarin speakers who sought professional development in order to improve upon their skills as language educators. In addition, we show how the program enabled participants to network with other Mandarin teachers and also to begin the process of becoming credentialed language teachers.

The participants included 29 individuals. The majority of these individuals were native speakers of Mandarin (27 out of 29 participants) most of whom possessed an advanced degree (70%) in a field unrelated to education. In addition, while not possessing formal knowledge about language teaching most were involved in some way in teaching Mandarin (e.g., Chinese community schools, or private

schools with Mandarin language offering). Also since most participants had not been educated in the United States they were not familiar with the process of becoming a credentialed world language teacher in this country.

The findings from both quantitative data and qualitative interviews showed that the program met participants' need to improve their understanding of how to teach Mandarin through instruction that emphasized the national standards for foreign language education, the California framework for teaching world languages, principles of second language acquisition, and specific skill building activities such as designing lesson plans and strategies for assessing proficiency attainment in Mandarin in order to drive their lesson plans. The participants reported that they felt uniquely privileged in being selected for the professional development program because they had the opportunity to meet and interact with experienced teachers who offered advice and suggestions on how to carve out a career pathway as a world language teacher. Participants also described how their knowledge of the process of becoming a credentialed language teacher had motivated many of them to seek out ways to become credentialed in the future.

Our experience with the STARTALK Mandarin professional development project is that there is much need for programs of the type described in this article. We know that there is an extensive and untapped resource of well qualified potential Mandarin teachers in many communities where there are native Mandarin speakers. We believe that local teacher associations, school districts, county departments of education, and local and state world language associations should assist in the identification, recruitment, and professionalization of Mandarin speakers to assume the role of language teachers in our public and private schools wishing to establish a Mandarin language program in their school. We also believe that schools of education must expand their world language credentialing programs to include a Mandarin track. We strongly encourage the development of credentialing programs in Mandarin for both elementary (i.e., FLES programs and Immersion) and secondary level schools.

Besides potential and non-credentialed Mandarin teachers, U.S. graduates from traditional teacher education programs with a specialization in Mandarin also benefit from professional development. Teacher licensure renewal or accountability requires that teachers engage in meaningful professional development in their discipline every three to five years. With the continuing increase in the number of Mandarin Chinese teachers, more professional development programs are needed to ensure that these teachers are able to meet their professional requirements. In addition, teachers who participate in quality professional development programs acquire strategies to ensure students to become culturally and linguistically competent.

Despite the success of this program, based on the pre and post-survey results, participants expected to have more knowledge gain in the areas including approaches and methods (including assessment methods) and structure of the target language

and pedagogical grammar. As American language teaching approaches and methods differ tremendously from Chinese approaches and methods, future professional development program might need to pay particular attention to this domain and contribute more time and resources in teaching this specific area of knowledge to Mandarin teachers. Further, as Chinese grammar and structure is complicated to learn and teach, it is very important that future professional development programs need to address strategies for effectively integrating grammar into communicative based approaches to teaching Mandarin.

Finally, funding from STARTALK has given us the opportunity to work with participants who are highly motivated to enter the teaching profession as teachers of Mandarin. However, STARTALK is mostly a summer program and research shows that professional development has to be a continuous process in order for it to make a difference in classroom practices. The Bay Area Foreign Language Project (BAFLP) offers ongoing year-round professional development programs for world language teachers (Steele, Peterson, Silva, & Padilla, 2009) and has begun to implement some of the content specific suggestions learned from the STARTALK program for Mandarin teachers who seek a more continuous professional development experience. Also in keeping with its mission BAFLP is also preparing Mandarin teachers to assume leadership positions in their schools and districts for the purpose of advocating for quality Mandarin instruction and for the professional growth and mentorship of a new cadre of world language teachers.

REFERENCES

- American Council on the Teaching of Foreign Languages. (2008). *Research for a Better Understanding: 2008 ACTFL Student Survey Report*. Retrieved December 15, 2008 from <http://www.actfl.org>
- Asia Society. (2005). *Expanding Chinese-language capacity in the United States: What would it take to have 5 percent of high schools students learning Chinese by 2015?* Retrieved September 1, 2008, from <http://www.internationaled.org>
- Asia Society, Business Roundtable & Council of Chief State School Officers. (2005). *Education in China: Lessons for U.S. educators*. Retrieved October 20, 2008 from <http://www.internationaled.org>
- Asia Society & The College Board. (2008). *Chinese in 2008: An Expanding Field*. Retrieved January 10, 2008 from <http://www.askasia.org/chinese/publications.htm>
- Barber, R. (2003). *Report to NEA: Trends in Foreign Teacher Recruitment Center for Economic Organizing*. Retrieved November 15, 2008 from <http://www.nea.org/teachershortage/images/foreignteacher.pdf>

- Commission on Teacher Credential. (2009). *Welcome to Commission on Teacher Credential*. Retrieved March 1, 2010, from <http://www.ctc.ca.gov/>
- International Education Center. (2007). *Seminar on Introducing Mandarin to the World and Mandarin Teacher Training in the U.S.* International Education Center, Peking Language University. Retrieved November 9, 2008, from <http://iec.blcu.edu.cn/info/2007926/200792683927.shtml>
- Joyce, B., and Showers, B. (2002). *Student Achievement Through Staff Development*. 3rd ed. London: Longman.
- McTighe, J., and Wiggins, G. (2005). *The Understanding by Design Handbook*, Alexandria, VA: Association for Supervision and Curriculum Development.
- National Center for Alternative Certification. (2007). *Preparing teachers for the classroom: The Role of Higher Education Act and No Child Left Behind*. Testimony of Emily Feistritzer to the Committee on Education and Labor in the U.S. House of Representatives. Retrieved December 1, 2008 from <http://www.ncei.com/>
- National Center for Education Statistics. (2007). *Contexts of Elementary and Secondary Education*. Retrieved November 1, 2009 from <http://nces.ed.gov/programs/coe/2007/section4/indicator33.asp>
- Roth, D., & Swail, W.S. (2000). *Certification and Teacher Preparation in the United States*. Pacific Resources for Education and Learning.
- Secondary School Chinese Language Center. (2002). *Secondary school Chinese language center newsletter*. Princeton University Department of East Asian Studies. Retrieved December 10, 2008 from <http://www.princeton.edu/ssclc/newletter.html>
- Steele, T. M., Peterson, M. D., Silva, D., & Padilla, A. M. (2009). A Year-round Professional Development Model for World Language Educators. *Foreign Language Annals*, 42 (2), 195-211.
- Steinemann, N.K., Fiske, E.B., & Sackett, V. (2001). *Asia in the schools: Preparing young Americans for today's interconnected world*. New York, NY: Asia Society.
- Teacher Prep Center. (2009). *City College Teacher Prep Center*. Retrieved March 2, 2010 from http://www.ccsf.edu/Departments/Child_Development/Teacher_Prep_Center/faq3.html
- Vu, P. (2007). *More U.S. schools pin fortune on Chinese*. Retrieved January 24, 2009 from Stateline.org Web site: <http://www.stateline.org/live/details/story?contentId=189934>
- Yao, T. (2003). *Newsletter of the Chinese Language Teachers Association*. Honolulu, HI: Department of East Asian Languages and Literatures.

Retrieved December 30, 2008 from
<http://eastasia.hawaii.edu/yao/clta/Newspdf/news0901web.PDF>