

The Development of Skills Required for Online Chinese Language Teaching (网上中文教师教学技能培养之探讨研究)

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Abstract: This paper describes and analyzes an intensive summer training program for development of skills required for effective online teaching in Mandarin Chinese. The program pioneered a blended training model featuring two weeks of online training followed by three weeks of onsite training in the United States. During the program, twelve in-service teachers received intensive training on effective pedagogy and technology use, followed by a supervised practicum of teaching online synchronous sessions. The study employed a combination of quantitative and qualitative analyses to document teachers' growth and development of required skills. Quantitative analysis, based on the results of a self-assessment checklist that teachers completed before and after the program, is the core of the assessment. Qualitative data, based on teachers' self-reflections that were partial requirements of their e-portfolios, supplements quantitative analysis. The results indicate substantial evidence of acquired skills in pedagogy and technology through the blended training model for online teaching. Directions for future research are recommended at the end of the paper.

摘要:此研究探讨网上中文教师在暑期密集培训项目中有效教学技能的培养。此培训项目采混合式培训模式，包括两周网上培训与三周面对面的网上试教现场指导，课程结合有效教学方法与电脑科技辅助工具之理论与实践两部分，参加培训的全部十二位中文教师皆顺利完成五周密集培训课程。此研究针对网上教学必备技能与教师专业能力的培养进行质与量的分析，以量的分析为主，质的分析为辅。在量化研究方面，针对项目开始前与结束后教师自我检测结果进行描述性统计；在质化辅助分析方面，根据教师于项目结束时，汇整完成的网上教学专业档案中的自我反思部分，针对量化分析紧密相连的部分进行归类分析描述。研究结果显示，教师透过此混合式的密集培训，于项目结束时在教学技能与电脑辅助工具的运用能力两方面有明显的提高。本文最后指出未来研究方向。

Keywords: teacher development, teaching skills for online Chinese language teaching, blended training model, STARTALK, self-reflections, quantitative and qualitative analysis

关键词: 教师培训, 网上中文教学技能, 混合式师资培训模式, 星谈计划, 教师自我反思, 质与量的分析

1. Introduction

As the Internet and online technologies grow ever more advanced and ubiquitous, online language learning grows just as rapidly. The popularity of online language courses has increased continuously over almost two decades, the latter of which saw a spike of research-based publications attempting to define the "best practices" of online language teaching (Berber-McNeill, 2015). Indeed, White (2003) reported more than 1,300 online distance language courses out of the 55,000 distance language courses registered in 130 countries. Queen and Lewis (2011) pointed out that more than 1.8 million students enrolled in K–12 distance learning courses in the United States, a number more than triple the 506,950 students in 2004–05 (Zandberg and Lewis, 2008). Watson, Pape, Murin, Gemin, and Vashaw (2015) analyzed different sources of data and estimated that in 2014–15, 2.2 million students were taking online courses. However, because online learning is "a relatively new phenomenon beyond the direct experience of many policy makers and parents" (Wicks, 2010), misconceptions related to professional development of online teachers abound. The assumption that teachers who are good at face-to-face teaching can transition flawlessly to online teaching is not uncommon. Davis and Rose (2007) identify three myths regarding online teacher qualification:

- Any regular classroom teacher is already qualified to teach online.
- Any highly qualified face-to-face classroom teacher is ready to teach a quality online course that has been previously prepared or purchased. Some say those who teach a section that is already online don't really teach at all!
- Newly qualified teachers who learn about virtual schooling in their preservice programs will be ready to teach online when they graduate.

Hubbard (2008) describes online language teachers as "pivotal players ... as they select the tools to support their teaching and determine what CALL (computer assisted language learning) applications language learners are exposed to and how learners use them," but demonstrates that although technology education is necessary for these qualifications, training programs specifically for language teachers is lacking. In addition, the technology used in online language teaching changes at least annually; while certain advances involve only the transfer of an existing pedagogical methodology to a new medium, others imply new methodologies that require more extensive training (Jones and Youngs, 2006).

2. Required Skills for Online Language Teaching

Although technologies for online teaching have been the subjects of much research, the training of online teachers has been neglected (Hampel and Stickler, 2005). Easton (2003) states that online teaching requires a paradigm shift regarding instructional time and space, virtual management techniques, and the ability to engage students through virtual communication, yet very few formal language teacher preparation program graduates feel equipped with the skills that enable them to dive into online teaching by the time they graduate (Kessler, 2006). Hampel and Stickler (2005) argue that teaching language online calls for unique skills that differ both from traditional face-to-face language teaching and from teaching other subjects online. However, although it is clear that online language teaching requires and prompts a set of unique skills, most instructional technology preparation in teacher training programs focuses on digital literacy or software-specific orientation (Kessler, 2006) rather than pedagogical techniques geared toward these new media. It has been indicated that the greatest shortcoming of technology-enhanced instruction is the lack of adequate teacher training for such use (Butler-Pascoe, 1995; Egbert and Thomas, 2001).

In an effort to provide guidelines for online tutor training, Bennett and Marsh (2002) identify three goals: a) demonstrate sufficient technical skills to tutor effectively using the online learning environment; b) identify the significant differences and similarities between face-to-face and online learning and teaching contexts; and c) identify strategies and techniques to facilitate online learning and help students exploit the advantages in relation to both independent and collaborative learning. Researchers have categorized three key areas of professional development for pre-service online teachers: socialization, active participation, and collaboration (e.g., Kelly and Jones 2003). Jones and Youngs (2006) argue that a novel aspect of online instruction is the combination of pedagogical goals with a course's technological underpinnings, and that "creating socialization is an important skill for teachers to learn in the online arena" (p. 267).

Hubbard and Levy (2006) recognize that both technical and pedagogical knowledge and skills are crucial for computer-assisted language learning (CALL): technical knowledge and skills are necessary for the competent operation of the computer technology, and pedagogical knowledge and skills prompt a teacher to consider the computer technology's impact on a learning environment in order to integrate it into the teaching and learning process appropriately and effectively. The following figure lays out details on the matrix.

	Technical	Pedagogical
CALL Knowledge	Systematic and incidental understanding of the computer system, including peripheral devices, in terms of hardware, software, and networking.	Systematic and incidental understanding of effective computer use in language teaching.

CALL Skill	Ability to use technical knowledge and experience both for the operation of the computer system and relevant applications and in dealing with various problems.	Ability to use knowledge and experience to determine effective materials, content, and tasks, and to monitor and assess results appropriately.
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Figure 1: Technical and pedagogical knowledge and skills for CALL

Social construction has been the focus of multiple studies on online language learning. The internet is uniquely equipped to connect people across distances, as recognized in Felix (2002). Kern et al. (2004) argue that using the internet as a new medium for language learning does not necessarily require teachers to "teach the same thing in a different way, but rather to help students enter into a new realm of collaboration inquiry and construction of knowledge, viewing their expanding repertoire of identities and communication strategies as resources in the process." More specifically, online language teaching calls for a pedagogical shift away from teacher-centered approaches and instead toward a personalized, small-group oriented, multidimensional model (Sun, 2011). It is vital for online teachers to create a collaborative environment for long-distance learners.

In *New Skills for New Classroom: Training Tutors to Teach Languages Online* (2005), Hampel and Stickler propose a skill pyramid that visualizes a hierarchy of key competencies of an online language tutor. The pyramid has seven levels that range from lower-level skills such as basic ICT competence to higher-level skills such as creativity and choice (depicted in the following figure).

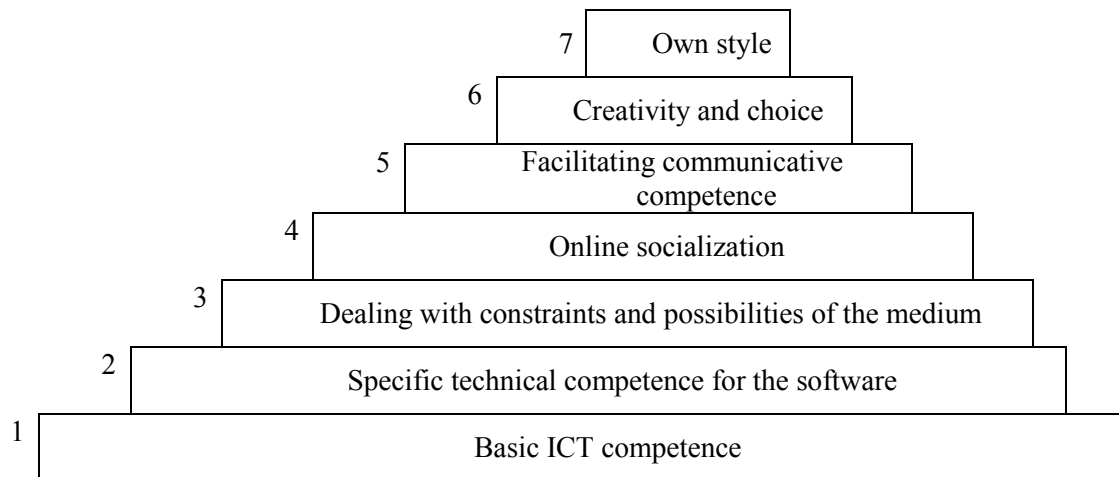


Figure 2: online language teaching skills pyramid (Hampel and Stickler, 2005)

Reflecting the bulk of research on online teacher preparation, though perhaps contrary to its theoretical focus, this model places technology related skills at the most basic level. Basic computer competence makes the other skills possible, but those higher-level skills take into account the full and rich potential of online learning. The base of the pyramid includes lower-level competences: basic ICT (information communications

technology) competence (level 1), specific technical competence for the software (level 2), and dealing with constraints and possibilities of the medium (level 3). The fourth level of skills relates to online socialization and community building, and Hampel and Stickler caution tutors to take extra care to ensure that all learners actively participate. The fifth level is effective facilitation of communicative competence. Creativity and choice are the sixth level, and these skills are crucial to the selection of "good, authentic language learning materials" and to the design of "online activities with the communicative principles in mind." The skill of creating new uses for online tools falls under this level as well. The highest level of skills for online language teaching relates to developing a "personal teaching style, using the media and materials to their best advantage, forming a rapport with students and using the resources relatively to promote active and communicative language learning."

Hampel and Stickler's model implies that these skills need to be developed sequentially, to "build on one another in a kind of pyramid, from the most general skills forming a fairly broad base to an apex of individual and personal styles" (p. 316). Compton (2009) argues that these skills can be developed concurrently as, for instance, "online socialization and facilitation of communicative competence are both pedagogical issues that can be dealt with simultaneously or in any order." Furthermore, online language tutors (as opposed to teachers) need to be able to facilitate second language acquisition rather than online socialization, since interpersonal learner-content interactions do not involve online socialization with other learners or the instructor. Other limitations of the model include its failure to indicate when an online language tutor is ready to teach or to include "other important skills and competences of online language teaching, such as application of language learning theories, online language assessment and task evaluation" (Compton, 2009).

Compton (2009) proposes an alternative framework that divides online language teaching skills into three categories: a) technology in online language teaching; b) pedagogy of online language teaching; and c) evaluation of online language teaching. These categories offer a more holistic perspective on an instructor's role that does not limit it to skills needed in virtual classrooms, which were the focus of Hampel and Stickler's model. Each of the sets of skills is organized into three levels of expertise: novice, proficient, and expert, to form a continuum of expertise rather than absolute divisions (see Appendix 2).

As in the first level of Hampel and Stickler's pyramid, Compton's novice level in the technology category involves basic technological skills, with emphasis on becoming a proficient and confident user of technology for teaching purposes. The proficient and the expert levels for this category correspond to Hampel and Stickler's sixth level: creativity and choice. However, in Compton, choice is identified as proficient, while creativity is the highest-level skill in the technological category. A proficient teacher can find available software, make informed decisions, and overcome limitations. An expert teacher can use the features of existing applications that are not intended for online language learning to provide online interactions, and in some cases to create basic applications using programming skills.

Pedagogical skills are categorized into the same three expertise levels: novice involves knowledge, proficient involves application of that knowledge, and expert, involves creativity. The novice online language teacher has the knowledge to build an online community and promote socialization, to facilitate online interaction, to adapt language learning theories for online language learning, to design curriculum for online language learning, and to use appropriate strategies for online language assessment. The proficient teacher applies that knowledge into the practice of online teaching by choosing suitable materials and tasks, adapting theories and frameworks, and assessing language learning with a range of assessment methods. The expert teacher creatively adapts materials and tasks, facilitates online socialization, and assesses language learning. The highest level in Hampel and Stickler's model, own teaching style, corresponds expert teachers in this category.

The evaluation category is divided much like the pedagogy category: the emphases of the novice and proficient levels are knowledge and application, respectively. At the novice level, the teacher should have knowledge of different types of evaluation and of one or more suitable evaluation frameworks, while the proficient teacher can apply different frameworks and use various strategies, including modifications if learning outcomes are not met. Expert teachers are able to integrate different methods and frameworks to conduct evaluations, and evaluations become intuitive, even sometimes subconscious.

Sun (2011) critiques both Hampel and Stickler's and Compton's frameworks, arguing that neither offers the necessary details that would directly apply to an online language teacher's practice:

... what [Hampel and Stickler; and Compton] have painstakingly drawn up for online teachers is, nevertheless, very much lacking in details. A frustrated overnight-classroom-turned-online-teacher could find very few practical guidelines or immediate help in their proposals. The answers as to what to do and how to do it, or what *not to do* are still anyone's guess.

Both Hampel and Stickler's and Compton's models cover general practices of online teachers. Guichon's (2009) framework focuses on identifying key competencies language tutors need to manage synchronous online teaching:

- (1) The competency of socio-affective regulation: refers to the capacity to establish a relationship with a learner or a group of learners, to maintain it despite distance, and to eventually build a learning community.
- (2) The competency of pedagogical regulation: concerns, first, the capacity to design learning scenarios adapted to distance that truly engage learners emotionally and cognitively, and, second, to manage learning experiences by providing feedback tailored to learners' individual needs.
- (3) The competency of multimedia regulation: relates to the interfacing role of the online tutor who has to learn to use the communication tools that are the most

appropriate to the learning scenarios, and to manage the ensuing interactions with the most adequate modalities.

Stickler and Hampel (2015) clarify that in their model, higher-level skills are built on accomplishment of lower level skills, although the levels are not necessarily achieved in chronological order. They thus adapt their earlier model to focus more on levels beyond the basic ICT competence.

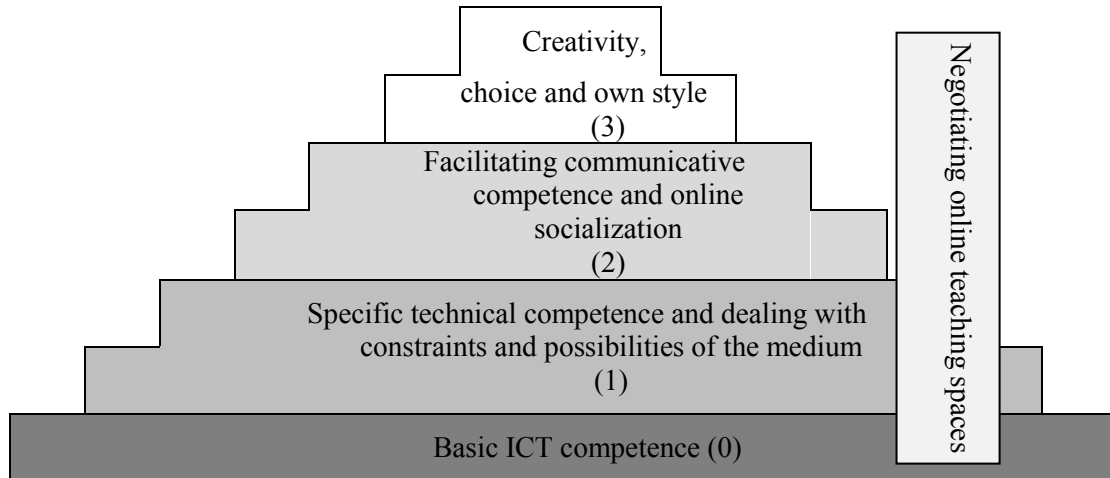


Figure 3: Skills pyramid (adapted)

Once teachers possess the specific technical competence and awareness of the constraints and possibilities of the different tools (level 1), they are able to make decisions that match pedagogical goals and technological tools.

Skilled level 2 teachers demonstrate competencies in developing social cohesion and fostering communication in online settings. They address the different spatial and temporal characteristics of an online setting, along with the resulting different rules of engagement, in order to cultivate engagement and communication successfully. Asynchronous online environments may lead to miscommunication and missed opportunities for communication due to wrongful interpretation and lack of social consequences of not engaging in a topic (Stickler et al., 2007; Ware, 2005): online teachers help language learners develop both linguistic skills and social and interactive skills by discovering common goals, supporting them in various forms, and ensuring an unthreatening environment for interaction.

Creativity in the highest level of the pyramid refers not only to teachers' creativity in making language practice varied and interesting (Richards, 2013), but also to supporting learners' creativity in language learning, namely tentative utterances, mediating between learners, and facilitating comprehension. Stickler and Hampel offer a list of specific ways in which teachers of online language classes can foster students' creativity:

- Selecting creativity-enhancing (online) tools

- Introducing and supporting the use of these tools without over-emphasizing the technological aspect
- Ensuring that creativity is a necessary element of all learning
- Explaining the pedagogical value of creativity in language learning
- Providing supportive evaluation and positive feedback
- Clearly demonstrating the delineation between re-use and plagiarism
- Furthering critical self-evaluative skills in learners

A new element of "negotiating online teaching spaces" is added to the skills pyramid: Stickler and Hampel explain that "defining a space as a 'learning space' is important in order to avoid misunderstanding, confusion of purpose and unacceptable behaviors." In other words, both students and teachers should be clear about rules for language use and assessment and guidelines for correct usage of tools. This crosses all skill levels, as rules should always be present in different level classrooms.

Stickler and Hampel conclude, "If teacher trainers can highlight the benefits of a collaborative construction of knowledge, link collaborative creativity to constructive pedagogy, and show clearly how to fully exploit the benefits of digital technology, this truly has the potential to advance online language pedagogy."

Following the above concluding remarks, this study responds to Sun's (2011) call for empirical studies that shed light on the detailed implementation of research-supported best practices for effective online language teaching. Specifically, it documents how teachers develop readiness skills and apply best practices to daily online synchronous teaching to meet expected curricular and programmatic goals. It begins to fill the gap between theory and practice and provides a valid account of the skills language teachers need for online language teaching and how they develop these skills to deliver real-time synchronous sessions. Asynchronous and synchronous components are hypothesized to be equally valued and important for online teaching. However, due to the limited length of the study, this paper focuses on synchronous real-time instruction. Moreover, this study adopts the three categories articulated in Compton's (2009) framework to guide the design and planning of the teacher training model for online teaching: technology, pedagogy, and evaluation. Although Guichon (2009) addresses and adds features for collaborative construction, that framework is geared toward online tutors instead of instructors. The lack of description for expected competence levels also limits its application to the program under study.

3. Method

Considering skills in light of Compton's (2009) framework, in the category of technology, teachers in the program were expected to demonstrate ability to use the online interactive platform and learning management system and to develop increasing independence and autonomy to select interactive technology tools within the online platform. In the category of pedagogy, teachers were expected to cyclically apply STARTALK endorsed principles for effective teaching and learning to lesson planning, teaching, observation, and reflections in different phases of program. With training and

practice in the program, teachers would move from the novice level of competence toward proficient, as evidenced by their ability to apply their knowledge to their online teaching practice, according to Compton's categorization. Teachers were not expected to achieve the same level of competence in the category of evaluation upon the completion of the program, as evaluating task and course design is out of the scope of the development of skillsets in the training program. The online course that teachers learned to teach in this program was pre-designed and pre-determined by the onset of the training program. All skillsets that teachers were to develop for online synchronous teaching centered upon the fulfillment of curricular and programmatic goals that were created by teacher trainers, but not by teacher participants. The limited time span and pre-designed curriculum and technologies prevented teacher participants from evaluating task and course design through one or more frameworks.

This study is the very first its kind to assess the development of required skills for online teaching through a blended training model specifically created for Mandarin Chinese language teachers in the US. Technology and pedagogy are the primary domains for the development of teachers' skillsets under study. The program employed a variety of formative and summative assessments, both quantitative and qualitative, to keep track of participants' progress toward newly gained knowledge and skills before, during, and after the program. The assessments that the training program implemented were multifaceted, including self-assessment checklists; UVaCollab Online Discussion Forum; online teaching; self-reflections and peer observations; classroom discussions, group projects and presentations and micro-teaching demonstration; and e-portfolios that highlighted their professional development and included the following eight components: cover page, teaching philosophy, curricula vitae, selected lesson plans, sample materials, videotaped teaching demonstration, self-reflections, and future professional goals. All types of assessments provided valuable data to further our understanding of how teachers progress toward effective online teaching. Due to the limited length of this paper, it is impossible to document the results of all types of assessments. This study therefore narrowed its scope to examine teachers' development of required skills for online teaching in Mandarin Chinese through only two types of assessments, self-assessment checklists and self-reflections in e-portfolios. Teachers completed the self-assessment checklists before the program started and after the program ended. They also completed self-reflections during the program. The former provided data for quantitative analysis, and the latter offered a wealth of information for qualitative analysis based on a total of 98 entries of self-reflections. This combination of quantitative and qualitative analyses provides a solid basis for the examination of the development of required skills for effective online teaching in Mandarin Chinese.

3.1 Context

Funded by a federal STARTALK grant in 2016, the program described in this paper took full advantage of current technologies and used an innovative pedagogical approach. It reflects the most recent research findings for effective instruction, aligning with the following principles for effective teaching and learning advocated by the STARTALK Central:

- Principle 1: Implement a standards-based and thematically organized curriculum
- Principle 2: Facilitate a learner-centered classroom
- Principle 3: Use target language and provide comprehensible input
- Principle 4: Integrate culture, content, and language
- Principle 5: Adapt and use age-appropriate authentic materials
- Principle 6: Conduct performance-based assessment

3.2 Participants

Twelve Chinese language instructors were recruited nationwide through a rigorous selection process. All participants were female and had three to eight years of experience teaching Mandarin Chinese in secondary and post-secondary educational settings in the US that included some combination of online, blended, and face-to-face instruction. Of the twelve teachers, five taught at universities, five in high schools, one in middle school, and one in elementary school. Their mean age was 35.8 years. All had master's degrees in various disciplines, and one was pursuing her doctorate in instructional technology with a concentration on foreign language education. Nine had received their teacher certificates in Mandarin Chinese in various states; one had completed required exams and was in the middle of applying for the certificate; and two did not have certificates. Four had experience teaching Mandarin Chinese online, with their online teaching experience ranging from one to four years. Of those four, one taught online in college and three in high schools. None of them used WizIQ as the online platform to deliver online instruction. All twelve had prior knowledge and skills in implementing online technology tools in teaching, and all demonstrated willingness to work collaboratively in exploring online teaching in Mandarin Chinese at the intermediate-low level according to the Proficiency Guidelines advocated by the American Council of the Teaching of Foreign Languages.

3.3 Teacher Training

In a survey on information and communication technology in relation to online world language teaching in Europe, Germain-Rutherford and Pauline (2015) found that teachers preferred a combination of online and face-to-face (F2F) training over either one individually. In their study, the majority of teacher participants welcomed hands-on training featuring concrete examples and activities. When the teachers who participated in the study were given a choice of training types, 80% supported a blended training model with a combination of online and face-to-face modules, 73% voted for face-to-face training, and 61% preferred a fully online training program. Building on that finding, the program created an innovative blended model that used both online and onsite training to prepare Chinese language teachers to teach online.

The summer teacher program involved five weeks of training. After two weeks of online training, teachers participated in three weeks of onsite training. The two-week online training included instruction in principles for effective teaching and learning, training in the online platform, and use of technological tools. Instructional modules closely aligned with program goals.

The three-week onsite training featured interactive workshops through which teacher trainees kept abreast of the most recent developments in evidence-based best practices for online teaching and learning. It consisted of one week of preparation followed by two weeks of a practicum, in which pairs of participants taught high school students online; the practicum was the core and focus of the program. For the last two weeks of the five-week teacher program, participants taught high school students online.

For the practicum, teachers were paired based on their backgrounds and experiences. The two teachers in each pair alternated between teaching and supporting roles. The supporting role engaged in technology trouble-shooting, classroom management, and other onsite logistics, as well as serving as a backup teacher in case of technology issues and observing her partner and completing a feedback sheet that she shared with her. Roles reversed every other day. Thus, for each day of the practicum, six teachers conducted online teaching while the remaining six teachers supported and facilitated that teaching. Days were divided into two sessions, with two students in the early session and four students in the later session. The practicum included thirty-five high-school students, whose targeted proficiency levels ranged from novice-high to intermediate-low at the entry point and who attained proficiency at the intermediate-low level at the exit point. During the practicum, all the teacher participants worked together to prepare lesson plans, rehearse teaching, and receive feedback from their peers and the program instructional team, which included teacher trainers, a technology coordinator, and practicum facilitators.

3.4 Teacher's Role

The teacher participants' major responsibilities during the practicum were: to deliver two-hour synchronous teaching sessions through the interactive online interactive platform WizIQ on a daily basis; to give feedback to students on their daily review assignments and tasks; and to respond to students' inquiries through the Group Board in the learning management system, in order to establish a strong rapport with the students. Program assistants conducted afternoon tutorial sessions. This allowed teacher participants to concentrate on their teaching preparation and online delivery, following daily program and curricular goals.

3.5 Instructional Technology

WizIQ was selected as the central online interactive platform for teacher participants to deliver daily real-time synchronous teaching, because of specific advantages over the other two widely used online platforms, Adobe Connect and Zoom. WizIQ's multifunctionality and potential to cultivate a student-centered fun online environment are clear in its design. Its user interface shows a vertical tool bar on the left side of the screen, with tools ranging from a simple drag-and-drop, marker, and eraser, to emoji icons. The center of the screen can support a range of instructional materials, from a PowerPoint presentation, to a spontaneous and/or pre-planned whiteboard, to video materials. The right side of the screen includes a live-stream headshot view of the learners and the teachers, a list of present participants, and a chatbox in which students can report technical issues, ask questions, and help teachers elaborate on words and

phrases as necessary. In addition to WizIQ, Zaption and Quizlet were used as technology tools to create flipped learning components for the program, and Padlet and Flipgrid were used to upload after-class review tasks.

3.6 Data Sources

Before the onset of the program and after its conclusion, all twelve teacher participants completed a detailed self-assessment checklist (see Appendix 1). During the practicum, teacher participants used the same form to prepare for online synchronous sessions and observe their peers. The form is divided into the following four general statements, which is then subdivided into components or items. The tools mentioned in the fourth category refer to technology tools, whereas the items in the first three categories pertain to pedagogical effectiveness that is achievable through the use of those tools.

1. Daily performance objectives are focused on proficiency targets and meaningful contexts.
2. Activities enable students to assess their attainment of the lesson's language objectives.
3. Activities enable students to meet daily performance objectives.
4. Through the learning tools, has the instructional objectives been achieved?

For each item, or specific task, within the above four categories, teachers chose one of three accompanying boxes to indicate their confidence in their ability to perform that task. The boxes were marked NC (not confident), PC (partially confident), and FC (fully confident). Complementing the quantitative analysis yielded by percentage of teachers choosing each box, qualitative analysis was based on teachers' self-reflections, one of the nine components in their e-portfolios. All twelve participants wrote self-reflections to keep track of their teaching and observations about their understanding of online teaching and teaching experiences during the program.

4. Results and Discussions

The following discussion summarizes the results of quantitative analysis, as expressed in the following five tables. They are supplemented by qualitative analysis, wherever applicable and relevant, through teachers' self-reflections on the targeted items of the tables under study. Each table presents frequencies and percentages regarding teachers' pre-program and post-program self-assessment and compares their growth in each item during the program. Teachers' self-reflections on their grasp of key concepts and application of principles for online teaching are used to enhance a deeper understanding of the underlying meaning of the figures presented in the tables.

All twelve participants completed the pre-program and post-program self-assessment checklists. They were given a statement or question with three choices, indicating confidence level: 1. NC=Not Confident, 2. PC=Partially Confident, and 3. FC=Fully Confident. The self-assessment criteria were divided into the four categories listed above. The first category focuses on daily performance objectives and is further

broken down into two subcategories, the first of which investigates the relationship between daily performance objectives and proficiency targets. Table 1 summarizes the frequencies and percentages of teachers' responses in the pre-program and the post-program self-assessment checklist.

Table 1: Pre-program and post-program confidence in Category 1a, "Daily performance objectives are focused on proficiency targets"

Item	Pre/Post	NC	PC	FC
1: Learning targets clearly state what students will know and be able to do by the end of the lesson	Pre	1 (8.33%)	1 (8.33%)	10 (83.33%)
	Post	0 (0%)	0 (0%)	12 (100%)
2: Well-organized/sequenced targets for students to show mastery at lesson's end	Pre	2 (16.7%)	3 (25%)	7 (58.33%)
	Post	0 (0%)	1 (8.33%)	11 (91.67%)
3: Students understand the learning targets	Pre	2 (16.67%)	0 (0%)	10 (83.33%)
	Post	0 (0%)	0 (0%)	12 (100%)

NC: Not Confident; PC: Partially Confident; FC: Fully Confident

Table 1 depicts teachers' self-evaluation of their confidence in each item in the general category, "Daily performance criteria are focused on proficiency targets." Results indicate a clear improvement over the course of the program in participants' confidence levels in all three items. For items 1 and 3, 83.33% of the participants felt fully confident before the program began, and all participants were fully confident after completing it, suggesting that all teachers were comfortable in their ability to state learning targets clearly and to closely align instructional delivery with those targets. However, before the program began, only 58% of the teacher participants were fully confident in item 2, their ability to teach students to show mastery at lesson's end through well-organized and well-sequence targets. Responses to this category show the highest percentage of "not confident" and "partially confident" prior to the onset of the program. Responses from the post-program self-assessment show that participants' confidence significantly increased after completing the program: 91.67% of participants felt fully confident, with only one teacher feeling partially confident.

The above three items in Table 1 closely relate to can-do statements that teacher participants generated during the first stage of backward designing, i.e., identifying desirable results or learning goals. In other words, the items can be interpreted as: can-do statements were clearly articulated (Item 1), well-sequenced and organized (Item 2), and understood by students (Item 3). They preceded, governed, and connected with the other two stages of backward designing in the remaining tables, i.e., determining acceptable evidence in how to access learners' performance, and planning learning experiences and instructional delivery. Items in Table 1 are central questions that teachers kept in mind in preparation for assessments in Table 3 and instruction for their practicum in Tables 2, 4, 5.

In teacher participants' self-reflections, teachers unanimously echoed that backward design was crucial for lesson planning. One teacher explained the flow of backward design and put that "[a]s we planned a lesson in the UVa STARTALK program, we always kept the learning targets and the ending performance tasks in mind. The last step we did in lesson planning was to think of what activities could best engage students and provide more opportunities for interactions between students." Recognizing the importance of starting from learning goals and sticking to them from the beginning till the end, another teacher commented that "[b]ackward designing helps teachers stay focused on the goals when planning a lesson. It is very important to bear in mind with the teaching objectives at all times as they also help with the design of engaging activities and tasks."

Table 2: Pre-program and post-program confidence in Category 1b, "Daily performance objectives are focused on creating meaningful contexts."

Item	Pre/Post	NC	PC	FC
1: Real communication focus, not grammar in isolation	Pre	1 (8.33%)	4 (33.33%)	7 (58.33%)
	Post	0 (0%)	1 (8.33%)	11 (91.67%)
2: Target language used for real-life purposes	Pre	1 (8.33%)	3 (25%)	8 (66.67%)
	Post	0 (0%)	0 (0%)	12 (100%)
3: Target language suitable for students' comprehension level	Pre	1 (8.33%)	5 (41.67%)	6 (50%)
	Post	0 (0%)	1 (8.33%)	11 (91.67%)

NC: Not Confident; PC: Partially Confident; FC: Fully Confident

The above table shows the results of the second half of the first category of self-assessment, which focuses on whether teachers were able to teach in meaningful contexts as their daily performance objectives. Pre-program results show a higher difference in confidence levels in the second subcategory (1b) than in the first subcategory (1a): before completing the program, one-third to one-half of the participants did not feel fully confident in each statement, which shows that focusing daily targets on meaningful contexts was difficult for some participants to achieve on their own. However, after completing the program, all or nearly all of the participants felt fully confident in their abilities to teach in meaningful contexts.

Using the target language to generate comprehensible input for students is easier to say than do. During the practicum, one teacher began her first entry of self-reflections by describing the teaching demo video created by a practicum facilitator as a great example of "how to design, organize, order, and implement wonderful teacher-led scaffolding techniques to lead students to the *i+1* level through the use of the target language." The "i" in the well-known phrase "*i+1*," meaning comprehensible input, refers to students' current comprehension level. "*1*" refers to moving one step further beyond students' current comprehension level. Before the program, many teachers had doubts

about using Mandarin Chinese almost exclusively in teaching. For example, one teacher confessed that switching to the use of the target language in class was a painful experience, but more than rewarding. Before she participated in the program, "the temptation of speaking English or give pinyin on PPT happened every day in her class." She did not see the harm in giving students English translation on PPT or supplying English phrases verbally. Neither did she realize that the way that she taught grammar in English, devoid of meaningful context, did little to help students achieve productive language output and perform the target language in a performance-based class. At some point during the program, it started to dawn on her that she did not phrase questions appropriately and that her habit of talking too much prevented her class from being communicative, interactive, and performance-based. After receiving training from the program, she wrote in her final entry that she would be able to "maximize her class time more efficiently" after she returned to her school. At the end of the program, the teachers unanimously agreed that it was very informative for them to apply the "i + 1" principle using three types of elicitation techniques to elicit meaningful output: mechanical drills, meaningful drills, and communicative drills.

Table 3: Pre-program and post-program confidence in Category 2, "Activities enable students to assess their attainment of the lesson's language objectives."

Item	Pre/Post	NC	PC	FC
1: Encouragement and descriptive feedback	Pre	2 (16.7%)	2 (16.7%)	8 (66.67%)
	Post	0 (0%)	1 (8.33%)	11 (91.67%)
2: Feedback from varied sources	Pre	3 (25%)	5 (41.67%)	4 (33.33%)
	Post	0 (0%)	2 (16.7%)	10 (83.33%)
3: Formative assessment checks throughout the lesson	Pre	1 (8.33%)	2 (16.7%)	9 (75%)
	Post	0 (0%)	2 (16.7%)	10 (83.33%)
4: Feedback on progress toward learning targets throughout the lesson	Pre	2 (16.7%)	3 (25%)	7 (58.33%)
	Post	0 (0%)	1 (8.33%)	11 (91.67%)
5: Learners have the ability to assess their own learning	Pre	2 (16.7%)	7 (58.33%)	3 (25%)
	Post	0 (0%)	4 (33.33%)	8 (66.67%)

NC: Not Confident; PC: Partially Confident; FC: Fully Confident

Table 3 shows data on teachers' confidence in whether the activities that they designed and conducted would enable students to assess their own attainment of the lesson's language objectives. Pre-program results show that the majority of participants felt fully confident in items 1, 3, and 4, which all have to do with feedback or assessment interactions between teacher and students. When assessment was independent of the teacher, however, teachers were less confident. Before the program, less than half of the teachers felt fully confident in items 2 and 5, suggesting that they had little confidence in their abilities to provide various sources of feedback to students and to develop students' ability to assess their own performance. Although teachers gained confidence, even after completing the program, about one-third still lacked full confidence in learners' ability to self-assess. This may be due partly to the immaturity of high school learners and the short length of the summer program, especially as the increase in teachers choosing "fully confident" for item 2 was significant (from 33.33% pre-program to 83.33% post-

program): item 2 has to do with teachers' abilities to provide feedback from various sources, while item 5 is strictly about teachers' abilities to teach and encourage students to self-assess.

Comparing Table 3 to Tables 1 and 2, it is clear that the results of the pre-program self-assessment for items 1, 3, and 4 in Table 3 are more consistent with the results in Tables 1 and 2: even before the program, more than half of the participants were fully confident in their self-assessments in these three items. This pattern does not hold for items 2 and 5.

It is important to note an interesting feature of response data for item 3, which measured teachers' confidence in their ability to give formative assessment checks throughout the lesson. Pre-program results for item 3 show that the majority (75%) of participants felt fully confident to begin with, and post-program results did not demonstrate a significant improvement: the number of teachers indicating full confidence increased only a little bit (75% to 83.33%), and although the percentage of participants who were not confident decreased from 8.33% to 0.00%, the percentage choosing partially confident remained the same (16.67%). One possible interpretation for this is that in the study, formative assessment checks included checks during both synchronous teaching and asynchronous self-paced learning that were supposed to be independently completed by learners themselves. After the practicum began, teachers diverted their full energy to online synchronous teaching, resulting in more focus on real-time checks than on monitoring learners' progress in their after-class assignments, which were partly the responsibility of the program assistants and teaching assistants. Unlike item 3, item 4 (providing feedback to students' progress) shows a much higher percentage (58.33%) in teachers' level of full confidence in their pre-program self-assessment and a higher percentage (91.67%) post-program as well, indicating a significant growth in confidence.

Interestingly but not surprisingly, the above items concerning assessments in Table 3 received very few reflective notes in teachers' daily self-reflections. During the practicum, teachers tried to develop students' can-do attitude through a positive mindset, and this contributed to the fulfillment of the first item, on providing encouraging oral feedback or visual clues such as emojis right in the initial practicum phase. Apparently, this was an easily achievable goal for teachers. Another point worth addressing here is that the program offered zero credits for students, so teachers did not create rubrics, checklists, or scoring guidelines to establish the kind of rigorous grading system that is normally required for credit-granting courses offered in a regular academic year.

The only area in which teachers indicated a lower confidence level after receiving intensive training through the program was in developing learners' ability to assess their own learning. This may be due to the fact that some of the formative assessments were supervised by program staff and assistants, and teachers were not directly involved in checking students' after-class review work. In addition, when students participated in the online learning program toward the end, they actually received online training by the program assistants and followed instructions to complete their individual online *LinguoFolio* self-assessment profiles before exiting the program. Since this was not handled by teacher participants themselves due to their key responsibility for delivering

online synchronous teaching, teachers may not have been fully aware of improvements in learners' self-assessment, resulting in lower confidence levels.

Table 4: Pre-program and post-program confidence in Category 3, "Activities enable students to meet daily performance objectives."

Item	Pre/Post	NC	PC	FC
1: Age appropriate	Pre	1 (8.33%)	0 (0%)	11 (91.67%)
	Post	0 (0%)	0 (0%)	12 (100%)
2: Level appropriate	Pre	1 (8.33%)	4 (33.33%)	7 (58.33%)
	Post	0 (0%)	1 (8.33%)	11 (91.67%)
3: Activity instructions are clear and easy to follow	Pre	1 (8.33%)	5 (41.67%)	6 (50%)
	Post	0 (0%)	1 (8.33%)	11 (91.67%)
4: Activities are meaningful and communicative-oriented	Pre	1 (8.33%)	4 (33.33%)	7 (58.33%)
	Post	0 (0%)	1 (8.33%)	11 (91.67%)
5: Multiple and various activities	Pre	2 (16.7%)	4 (33.33%)	6 (50%)
	Post	0 (0%)	1 (8.33%)	11 (91.67%)
6: Tasks provide a reason for engaging	Pre	1 (8.33%)	2 (16.7%)	9 (75%)
	Post	0 (0%)	1 (8.33%)	11 (91.67%)
7: Teacher models language production	Pre	1 (8.33%)	2 (16.7%)	9 (75%)
	Post	0 (0%)	1 (8.33%)	11 (91.67%)
8: Sufficient opportunities for understanding learned materials (input) before production (output)	Pre	1 (8.33%)	5 (41.67%)	6 (50%)
	Post	0 (0%)	2 (16.7%)	10 (83.33%)
9: Evidence of careful planning to manage activities in the virtual classroom	Pre	3 (25%)	2 (16.7%)	7 (58.33%)
	Post	0 (0%)	1 (8.33%)	11 (91.67%)
10: Activities build toward mastery through a logical sequence	Pre	1 (8.33%)	5 (41.67%)	6 (50%)
	Post	0 (0%)	1 (8.33%)	11 (91.67%)

NC: Not Confident; PC: Partially Confident; FC: Fully Confident

Table 4 shows results for items in Category 3, which relates to activities that enable students to meet daily performance objectives. After the program, most (83.33% or above) participants were fully confident in their experiences and none were not confident, indicating that the program increased their confidence level in objective implementation and achievement.

Results from the pre-program assessment show that items 3, 5, 8, and 10 were the most difficult to implement prior to the program, as only half of the participants started out fully confident in the statements. Examined as a group, these items focus on meaningful and effective arrangement of diverse and various activities. Item 9 also stands out, as 25% of the participants did not feel confident at all in their ability to provide evidence of careful planning to manage activities in the virtual classroom.

The results of the post-program self-assessment show significant improvements for the items mentioned above. None of the participants felt not confident, and 91.67% felt fully confident for all items except for item 8: 16.67% of the participants felt partially confident in their ability to provide sufficient opportunities for students to digest input before output.

During the practicum, each single one-hour online teaching session was a group effort that required many hours of preparation. While team spirit building created synergy among all members in the group, shared effort in teaching preparation built a strong teaching community and substantially enhanced the quality of activity design. This explains the high confidence level of the items in the above table upon the completion of the program. Not only did teachers collectively prepare for Powerpoint slides as the vital medium for online real-time teaching, but they also rehearsed the lesson each day before giving it in the practicum, using the PowerPoint files that they created to gather collective feedback from the group. The advantage of rehearsals, as one put it in her self-reflection, was to "help teachers see the big picture while focusing on details." Another teacher was inspired to reflect that "[t]he difference between mediocrity and excellence is attention to detail."

Group preparation and rehearsals greatly contributed to the successful design and diversity of interactive online activities. For example, one teacher created a chart in the shape of a pyramid while teaching a comparison structure on school life, with the most difficult course on the top and the least difficult one on the bottom. The chart was vivid and visually clear, so it enabled students to easily compare subjects on the top and at the bottom. Another teacher elaborated that the two videos that she adopted to teach extracurricular activities, one named "little apple," a very popular video in China, and the other Chinese Kong Fu, were extremely eye-catching and engaged students to fully use their senses. She also encouraged students to stand up and dance along with the song while watching the video. This activity helped both teacher and students to relax and revive with dynamic physical movements. The activity was followed by a question that explored students' critical thinking: "Which performance do you like and why?" This question enhanced students' language output on the comparison structure, the key structure in that day's lesson objectives, and concluded the lesson with joy and vitality.

One of the most successful activities was related to food. One teacher reflected that this activity was carried out with great fun and highest level of involvement. Students visualized what a Chinese hotpot was like and demonstrated the steps to eat and cook food in the hotpot after watching a video of a very famous restaurant at Donglaishun where hotpots were served. Teachers used Quicktime Player to voiceover the authentic video image using familiar vocabulary and phrases from the text. The result was wonderful! The video image definitely enhanced comprehensibility of the text. A group of teachers also found another video in English of two male students describing how to pick hotpot ingredients and the process of cooking them. When she voiced over this video, the addition of a female voice had an odd effect. Her team came together to help, and one team member got a voice recording from her husband, which made the voice-over feel much more natural. These videos definitely gave students an authentic sense of being in a hotpot restaurant, ordering hotpot ingredients, and cooking them in order, at the same time learning and practicing Chinese conjunction words that connect actions such as "first," "then," and "lastly."

Activity design is inseparable from the incorporation of authentic materials and technology tools through the online interactive platform for the program. Thus, it is clear that most of the items in Table 4 interrelate to and interconnect with the third item in Table 5, using a variety of authentic materials to facilitate the understanding of the perspectives behind culture products and practices. With the rapid development of advanced technology nowadays making it possible, incorporation of online authentic materials has become a key element for effective online language courses.

Table 5: Pre-program and post-program confidence in Category 4, "Through the learning tools, have the instructional objectives been achieved?"

Item	Pre/Post	NC	PC	FC
1: Evidence of using a variety of learning tools to help learners ACCESS language, culture, and content to meet performance objectives in three modes	Pre	2 (16.7%)	6 (50%)	4 (33.33%)
	Post	0 (0%)	1 (8.33%)	11 (91.67%)
2: Evidence of using a variety of applications to help learners PRODUCE language, interact with culture and content to meet performance objectives in three modes	Pre	2 (16.7%)	5 (41.67%)	5 (41.67%)
	Post	0 (0%)	2 (16.7%)	10 (83.33%)
3: Evidence of using a variety of authentic materials to facilitate the understanding of the perspectives behind culture products and practices	Pre	3 (25%)	5 (41.67%)	4 (33.33%)
	Post	0 (0%)	1 (8.33%)	11 (91.67%)
4: Use available technologies, via the	Pre	2 (16.7%)	2 (16.7%)	8 (66.67%)

platform, to help learners engage and meet performance objectives	Post	0 (0%)	1 (8.33%)	11 (91.67%)
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NC: Not Confident; PC: Partially Confident; FC: Fully Confident

Table 5 shows results for items in Category 4, which focuses on the utilization of a variety of technology learning tools and authentic materials in achieving instructional objectives. Before the program, the number of teachers who felt fully confident across all four items was the lowest among all categories. This is not surprising, as these items tested teachers' familiarity with interactive technology tools within the online platform WizIQ, interactive tools within WizIQ, and other technology tools that enhance flipped-learning and after-class learning outside of WizIQ. Since the majority of teachers did not have online teaching experience, they had never used WizIQ to deliver synchronous teaching. Even the several teachers who had taught online language courses before had had no experience using WizIQ. Post-program responses reveal a notably big increase in each of the items. This demonstrates the program's efficacy in developing teacher skills and ability through intensive training and substantial hands-on experiences. Overall, post-program results show a significant boost of confidence in all categories. Over 80% of teacher participants felt fully confident in their abilities to use technology effectively at the end of the program.

The online learning program in the study features three-stage learning: flipped learning, in-class real-time synchronous learning, and after-class learning. The design of flipped learning is one of the best practices that some teachers said that they would bring back to their own schools for future use and modification. The flipped learning components included a self-study guide, video and sound recording for matching characters and Pinyin, Quizlet, and interactive Zaption videos. Students watched Zaption videos, learned through three types of stimuli, (multiple choice questions, matching exercises, and free response questions), and then typed responses right after seeing each question on the video screen. At the end of the video, students were able to see their scores and performance. Several teachers expressed recognizable pedagogical values of the interactive Zaption videos, and one teacher commented that without pre-learning the Zaption videos, students were able to learn what they self-learned, pre-class flipped learning customized the pace of instruction and influenced the way that materials were taught. This, as one teacher reflected, created a positive tone taught. This, as one teacher here students do most of talking, writing, and thinking." Another teacher felt truly amazed by her students positive tone taught praised flipped learning as a contributing factor, as she expressed in her reflection journal. She reflected that students were much more engaged and knew exactly what to expect in class. She also noted that learning through Quizlet on vocabulary and content through Zaption videos and handouts already helped teachers do most of the teaching, so during the online class, students were able to practice major grammar points and use language to express ideas and opinions communicatively. In addition to flipped learning design, the technology tools that were adopted for after-class learning, padlet and flipgrid, were also considered new fresh experiences for many of the teachers. The teachers unanimously acknowledged that getting familiar with the newest technology tools was one of their delights in the program.

The program offers many takeaways for teacher participants in terms of the use of interactive technology tools. At the end of the program, one teacher summarized a comprehensive list of the tools she planned to apply to her future classes, including WizIQ, Zoom, screen-cast, flipgrid, padlet, canvas, Zaption, Quicktime player, and YouTube. Before she participated in the program, her YouTube account had no videos at all, and toward the end of the program she had 34 culturally relevant videos in the target language. She could not wait to try out these technology tools with her students, and she came up with concrete plans to enrich her class that included using YouTube to find authentic materials, and using Quicktime player and Zaption to create flipped materials. In line with program activities, she planned to use flipgrid and padlet to post oral and written homework assignments. Wise use of technology tools is beneficial not only for online teaching; it can facilitate face-to-face and blended instruction as well. Many teachers echoed such a statement and several used described their experiences with online technology tools as "eye-opening."

Teachers' post-program reminiscences summarize their perception of what knowledge and skills they learned for online teaching. All twelve teachers submitted reminiscences that offered a holistic view of the impact of the blended training program on their development for online language teaching effectiveness. One teacher concluded that the program had transformed her into a "significantly more impactful teacher." She improved in "applying backward design methods in lesson planning, using 100% of target language and authentic materials, and creating student-centered interactive activities." Another teacher gave a broader sense of her development at both the professional and personal levels:

"After this program, I become more attentive to details for instructional design and delivery. I had the chance to hone my elicitation skills and to observe how other teachers taught to help students generate maximal output. Personal spiritual enrichment-wise, I learned to have a growth mindset, which could not only be applied for teaching but also for a broader spectrum-life."

Pedagogical effectiveness was a main subject in teachers' self-reflections, especially in terms of its basis in the versatility of interactive technology tools. Based on the quantitative and qualitative analyses documented above, it is evident that teachers successfully acquired knowledge and skills needed to deliver online instruction despite varying degrees of initial confidence. The five-week intensive training for online teachers in Mandarin Chinese concluded with expectations satisfied. Transforming ideals to reality from F2F to online teaching is bold; the adventure of the blended training model was found to be effective and a very good investment for the preparation of online Chinese language teachers. After profound retrospection, it is hypothesized that the keys to the success of teachers' developed skills and confidence include, but are not limited to: program staff's full commitment to the program; their appropriate handling of program planning, implementation, and instructional design; teacher participants' determination to strive for excellence; and the successful recruitment of highly-motivated students nationwide.

One year before the program started, the core team started to plan for the five-week teacher training program. They met on a regular basis, both online or face-to-face, to investigate and determine programmatic pedagogical and technological needs. The decision making on different sets of technology tools went through several stages of discussion, planning, and testing, until the team felt that it reached a level of satisfactory stability and security. Workload for curriculum design and material development was huge, intensive, and very detail-oriented before the onset of the program. The screening process of teacher recruitment ensured the successful recruitment of twelve dedicated and passionate teachers, who were willing to explore the innovative model of online instruction by working with their peers and the core team. Each teacher's individual pace of professional growth was well respected and thoughtfully considered, resulting in careful pairing and grouping for discussions, microteaching, and online teaching-in-action. Through pre-program analyses and interactions, the core team was able to identify different individual needs and levels of competence in pedagogy and technology use among the teacher participants. This tremendously helped with many aspects of program preparation before and after the program moved toward the phase of practicum.

The program team carefully implemented the blended training model for both online and onsite training components. The two-week online portion of the program was clearly connected to the onsite content. Teacher participants were made aware of the curriculum template for the student program, and mini-teaching demonstrations in week 2 focused on aspects of the template. The first week onsite allowed participants to begin to plan lessons. All participants benefitted from the three-day cycle, which included lesson planning in pairs and groups, rehearsing, teaching in action, and receiving feedback and self-reflections. The cycle also created a balanced workload with teachers teaching only every other day. PowerPoint was integral to lesson design, and participants discussed and received feedback on the quality of their slides with a focus on designing slides that presented information clearly and in an interactive format appropriate to the online learning environment.

The program intentionally limited teacher participants' role to lesson design and online delivery. This allowed teachers to focus on online teaching without the challenges of managing or engaging a large group of students in a summer intensive training program. The teacher participants were not involved in decision making on curriculum development, core instructional materials, materials for pre-class and after-class assessments, or selection of the interactive online platform and language management system. This ensured that they focused their synergized efforts on teaching according to daily can-do statements and required language components. Teacher participants received immediate and constant support from the core team at the administrative, pedagogical, and technological levels, especially from practicum facilitators, who worked very closely with teachers from initial brainstorming to the end of online teaching. All the above may be key factors that contributed to the satisfactory outcomes of teacher development in the program.

5. Conclusion

The intensive five-week training model for online teacher development was created for the teacher program in conjunction with the twelve-day student program. What worked well under this study may not work well for regular semester programs. Setting aside the differences between summer and regular semester training, the program designers had strong faith that a combination of online and onsite training would work best. It is risky to rely completely on online training for teacher development in online teaching because constant discussions, close supervision and monitoring, and interactions among teacher participants all serve as determining factors in developing a robust training program. Conversely, training teachers to teach online through a pure F2F training model makes it impossible for teachers to get a real feel for online interactions, not to mention the costs of summer residential programs that include lodging and food. The quantitative and qualitative data analyses provide strong evidence for the efficacy of the blended training model. Further studies might discuss the designs of teacher training programs, blended and completely online, and the training outcomes in preparation for teachers to teach online. Data sources that are used as evidence of developed readiness skills are crucial. It is recommended that a series of studies be carried out to analyze the outcomes of different types of assessments that are used to document teachers' teaching effectiveness in online teaching. The current study focuses on teachers' self-evaluation by looking into their pre-program and post-program self-assessment checklists and self-reflections. A follow-up study could expand assessment to the analysis of evaluations completed by peer teachers, practicum facilitators, and key trainers through other types of collected data and evidence. For example, analysis of teaching videos and other components in the e-portfolio would provide evidence to complement teachers' self-assessments and self-reflections discussed in this study. In other words, more evidence-driven studies are worth exploring in the near future. Another direction for future research is teachers' conceptions and attitudes toward transitioning F2F teaching to online teaching. The perceived differences and similarities between F2F and online teaching, and the related difficulties and challenges that teachers face, are topics with immeasurable value for the field of teaching Chinese as a foreign language with technology-mediated instruction, either blended or purely online. While an increasing number of virtual schools have been established in this technology-explosive era, there still lacks recommendations and guidelines for transitioning to an online teaching mode from a traditional F2F classroom. The current study has collected individual and collective thoughts in this regard, and those will be dealt with in a separate paper due to the limit of the length of the study.

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Appendix 1**2016 Virginia STARTALK Chinese Teacher Academy Online Teaching Evidence Form**

Teaching Effectiveness for Language Learning (TELL): Planning P6 and Learning Tools LT1, LT2 and LT3

Teacher: **Observation Date:** **Observation Time:**

Directions – For each criterion, click the appropriate box to indicate the degree observed. Click in the corresponding field to begin typing observational evidence for each criterion as appropriate. (**FO**= Fully Observed; **PO**=Partially Observed; **NO**=Not Observed; **NA**=Not Applicable)1, 2, or 3

Criteria	Degree Observed	Observed Evidence
1a. Daily performance objectives are focused on proficiency targets...		
Learning targets clearly state what students will know and be able to do by the end of the lesson	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> FO PO NO NA	
Well-organized/sequenced targets for students to show mastery at lesson's end	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> FO PO NO NA	
Students understand the learning targets	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> FO PO NO NA	
1b...and meaningful contexts.		
Real communication focus, not grammar in Isolation	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> FO PO NO NA	
Target language used for real-life purposes	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> FO PO NO NA	
Target language suitable for students' comprehension level	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> FO PO NO NA	
2. Activities enable students to assess their attainment of the lesson's language objectives.		
Encouragement and descriptive feedback	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> FO PO NO NA	

Feedback from varied sources	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> FO PO NO NA	
Formative assessment checks throughout the lesson	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> FO PO NO NA	
Feedback on progress toward learning targets throughout the lesson.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> FO PO NO NA	
Learners have the ability to assess their own learning.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> FO PO NO NA	
3. Activities enable students to meet daily performance objectives.		
Age appropriate	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> FO PO NO NA	
Level appropriate	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> FO PO NO NA	
Activity instructions are clear and easy to follow	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> FO PO NO NA	
Activities are meaningful and communicative-oriented	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> FO PO NO NA	
Multiple and various activities	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> FO PO NO NA	
Tasks provide a reason for engaging	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> FO PO NO NA	
Teacher models language production	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> FO PO NO NA	

Sufficient opportunities for understanding learned materials (input) before production (output)	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> FO PO NO NA	
Evidence of careful planning to manage activities in the virtual classroom	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> FO PO NO NA	
Activities build toward mastery through a logical sequence	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> FO PO NO NA	
4. Through the learning tools, have the instructional objectives being achieved?		
Evidence of using a variety of learning tools to help learners ACCESS language, culture, and content to meet performance objectives in three modes	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> FO PO NO NA	
Evidence of using a variety of applications to help learners PRODUCE language, interact with culture and content to meet performance objectives in three modes	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> FO PO NO NA	
Evidence of using a variety of authentic materials to facilitate the understanding of the perspectives behind culture products and practices	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> FO PO NO NA	
Use available technologies, via the platform, to help learners engage and meet performance objectives	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> FO PO NO NA	<p>Interactive whiteboard Media</p> <p>Poll Chat/conversation panel</p> <p>Hand raising teaching tools</p> <p>Emoji/symbol Others observed:</p>

Areas of Strength:
Areas of Growth:
Notes for instructional flow in chronological order Time allotment, what the teacher does, and what student(s) do

Appendix 2: Proposed framework of online language teaching skills (Compton, 2009)

		Online language teaching skills		
		Technology in online language teaching	Pedagogy of online language teaching	Evaluation of online language teaching
Continuum of expertise	Novice teacher	Basic technological skills (prerequisite) ↓ <u>Usage</u> Ability to use a range of software Ability to identify features of different software Understanding of constraints and possibilities of different software ↓	Knowledge of strategies for online community building and socialization Knowledge of strategies to facilitate communicative competence and online interaction Knowledge of language learning theories for online language learning Knowledge of curriculum design frameworks for online language learning Knowledge of strategies for online language assessment ↓	Basic knowledge of task evaluation Basic knowledge of course evaluation ↓
	Proficient teacher	<u>Choice</u> Ability to choose suitable technology to match online language learning task Ability to deal with constraints and possibilities of different software Ability to create basic Web pages Ability to troubleshoot basic browser problems ↓	Ability to foster online community and socialization Ability to facilitate communicative competence and online interaction Ability to choose suitable materials to match online language learning task Ability to apply language learning theories for online language learning Ability to apply curriculum design frameworks for online language learning Ability to assess language learning using different assessment methods ↓	Ability to evaluate online language learning tasks based on one or more frameworks and to modify tasks accordingly Ability to evaluate online language course based on one or more frameworks and to modify components accordingly ↓
	Expert teacher	<u>Creativity</u> Creativity in using and adapting technology for online language learning tasks Ability to construct interactive web pages Knowledge of basic programming language	Creativity in using and adapting materials to create new online language materials and tasks to facilitate communicative competence and online interaction Creativity in facilitating online socialization and community building Intuitive and integrated assessment of language learning	Intuitive and integrated evaluation of online language learning tasks based on one or more frameworks Intuitive and integrated formative evaluation of online language course