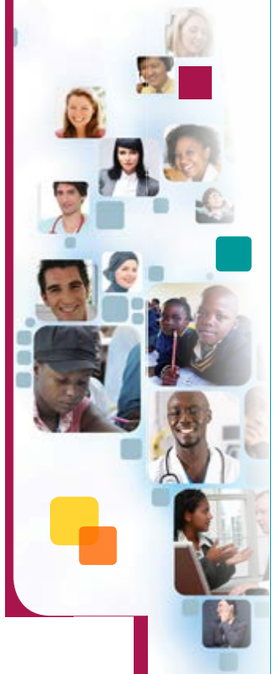
Online Language Teacher Education:

Participants' Experiences and Perspectives

Denise E. Murray & MaryAnn Christison

TIRF The International Research Foundation for English Language Education

TIRF



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Foreword

Since the incorporation of TIRF in 1999, the Foundation's Trustees have implemented a research and development program that is generating new knowledge, focusing on informing and improving the quality of English language teaching and learning around the world. The aim of these programmatic activities is to promote key investigations by setting research priorities, which are intended to promote original research in areas the Trustees consider to be crucial to language education.

One of TIRF's earliest research priorities focused on digital technology and language education. It was established in 2004 and updated in 2015. In 2010, language teacher education was added as a priority topic for TIRF-funded research. The present study combines the Foundation's foci on digital technology and teacher education. It is the second TIRF-funded research project about online language teacher education.

In 2013, TIRF published *Online Language Teacher Education,* by Denise Murray. (Click here to access that study in the form of a downloadable PDF on TIRF's website.) That project took the first step in understanding online language teacher education courses through the analysis of 18 case reports written by individuals in teacher education programs and courses.

The present study, co-authored by Denise Murray and MaryAnn Christison, takes the next step in investigating the perceptions of participants in OLTE contexts. By surveying both instructors (called "teacher educators" in this report) and enrollees (called "teacher students"), Murray and Christison have added substantially to our understanding of OLTE participants' attitudes towards and perceptions of providing and taking online courses, in various formats, over differing lengths of study, and via multiple types of technologies.

Online teacher education programs offer flexibility in terms of both time and location. People who cannot leave their jobs and/or families to attend training programs at brick-and-mortar institutions are now able to access educational alternatives through digital technology. What do we, as a profession, really know about the characteristics of such online language teacher education programs? What are their strengths and weaknesses, as viewed by the participants? How can aspects of OLTE be improved to better meet not only the needs of the participants, but also the demands of our profession? This paper provides some of the initial information the field needs in order to begin to address such questions about this important emerging medium for delivering teacher education instruction: OLTE.

The findings of the present study should be of value to both teacher students seeking educational opportunities and teacher educators who share their expertise in online contexts. Other stakeholders who will find this research project informative include program administrators, who may either support employees' enrollment in OLTE programs or may consider hiring graduates of OLTE courses. It is my hope that technology companies will also benefit from the results of this project, as they play a significant role in developing the software needed to produce high quality OLTE experiences. I also hope that other researchers will be motivated to pursue this line of inquiry further, as there are still many unanswered questions which warrant additional scrutiny.

On behalf of the TIRF Board of Trustees, I want to thank Dr. David Nunan and the administrators of Anaheim University. Their foresight and generosity have enabled TIRF to commission this research project.

Kathleen M. Bailey, PhD
President and Chair, Board of Trustees,
The International Research Foundation
for English Language Education

Dr. Maryann Christison

Professor

Department of Linguistics & The Urban Institute for Teacher Education University of Utah, Salt Lake City, Utah, USA

Dr. MaryAnn Christison is a professor in the Department of Linguistics and the Urban Institute for Teacher Education at the University of Utah in Salt Lake City, Utah, USA. She has a long history as an English language teacher, teacher educator, and language program administrator, having been the founding Director of the International Center and the Teaching Second and Foreign Languages (TSFL) Program at Snow College for 20 years and having worked in both K-12 contexts and in adult education. During the summer term and with special permission, she also co-teaches OLTE courses with Denise Murray for Anaheim University's doctoral program.

For seven years, she served on the Board of Directors of TESOL International Association, including a term as President in 1997-1998, and she served as a chair and co-chair for three TESOL conventions—1991 in New York City, 1995 in Long Beach, and 2002 in Salt Lake City. In 2012, she received the Alatis Award from TESOL International Association. In 2016, as part of TESOL's 50th anniversary, she was recognized with a "TESOL 50@50 Award," an award given to 50 TESOLers who have made a significant contribution to the TESOL profession through teaching, research, and leadership. She is on the TIRF Board of Trustees, serving as Chair of the Research Advisory Committee.

Dr. Christison's current research interests include content and language integrated learning, language teacher education, OLTE, teacher cognition, leadership in language education, and language and the brain. She has published over 100 articles in refereed journals and chapters in books and is an author, co-author, and co-editor of more than 20 books. She has trained English language teachers in over 35 countries.

Dr. Denise E. Murray

Professor Emeritus

Macquarie University in Sydney & San José State University in California

Dr. Denise E. Murray is Professor Emeritus at Macquarie University in Sydney and at San José State University in California. She has a long history as a language teacher educator, having been the Executive Director of the Adult Migrant English Program Research Centre and of the National Centre for English Language Teaching and Research at Macquarie University from 2000-2006. Prior to her appointment at Macquarie, she was founding Chair of the Department of Linguistics and Language Development at San José State University.

For seven years, she served on the Board of Directors of TESOL International Association, including a term as President in 1996-1997. In 2016, as part of TESOL's 50th anniversary, she was recognized with a "TESOL 50@50 Award," an award given to 50 TESOLers who have made a significant contribution to the TESOL profession through teaching, research, and leadership. She also received the James E. Alatis Service Award from TESOL International and the Sadae Iwataki Service Award from CATESOL.

Dr. Murray's own research interests include computer-assisted language learning; cross-cultural literacy; the use of the learners' L1 in the second language classroom; the intersection of language, society, and technology; settlement of adult immigrants; OLTE; language education policy; and leadership in language education. She has published her work in 17 books and more than 100 articles.

She has had a lifelong interest in distance education, focused on how to make education accessible to those whose physical place, available time, and other life circumstances make it impossible to attend a brick-and-mortar institution.

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Acknowledgments

This project was made possible through contributions from the many different people who offered support, advice, critiques, data, professional information, and interest in the topic of online language teacher education (OLTE).

The most important contributions come from the participants in the study, who were both instructors of and students in OLTE courses and programs. They volunteered their valuable time to complete the questionnaires, and in doing so, they provided detailed information about their perceptions of OLTE courses and programs. We are grateful for their willingness to participate, for their enthusiasm for OLTE, and for their deep commitment to the field.

TIRF's Board of Trustees and staff maintained an interest in the research throughout the project and continued to offer feedback and support. We are especially grateful to Dr. Kathi Bailey, President of TIRF and Chair of the TIRF Board of Trustees, for her enthusiasm for the project, her sense of humor, and her dedication to ensuring a quality project. Ryan Damerow, TIRF's Chief Operating Officer, has been a consummate professional, overseeing the publication and design process, and ensuring that the project is of high quality and presents a consistent image in keeping with TIRF's commissioned papers.

We would especially like to thank TIRF's donors who made this project possible. In particular, we want to thank Dr. David Nunan, the TIRF Trustee who made the initial donation for this phase of TIRF's commissioned research on OLTE and then spurred the research forward by securing additional funding from Anaheim University through a challenge grant. We are grateful to both Dr. Nunan and Anaheim University for their commitment to promoting research in the field and for furthering our understanding of the variables involved in creating effective online language teacher education courses and programs.

Thank you.

Denise E. Murray
MaryAnn Christison

List of Acronyms and Abbreviations

ACRONYM	TERM
ACCET	Accrediting Council of Continuing Education and Training
ACTDEC	Accreditation Council for TESOL Distance Education Courses
ASQA	Australian Skills Quality Authority
BYOD	Bring Your own Device
CAEP	Council for the Accreditation of Educator Preparation
CALL	Computer-assisted Language Learning
CMS	Course Management System
CoP	Community of Practice
DEAC	Distance Education Accrediting Commission
DL	Distance Learning
edX	Non-profit Provider of MOOCs
Eurodl	European Journal of Open, Distance and e-Learning
f2f	Face-to-face
IATEFL	International Association of Teaching English as a Foreign Language
IRRODL	International Review of Research in Open and Distance Learning
LMS	Learning Management System
LOA	Learning Oriented Assessment
MOOC	Massive Open Online Course
NNS	Non-native Speaker
NS	Native Speaker
OECD	Organization for Economic Cooperation and Development
OLC	Online Learning Consortium
OLTE	Online Language Teacher Education
OTTSA	Online TEFL & TESOL Standards Agency
SST	Social Shaping of Technology
TA	Teaching Assistant
TEFL	Teaching English as a Foreign Language
TESL	Teaching English as a Second Language
TESOL	Teachers of English to Speakers of Other Languages/ Teaching English to Speakers of Other Languages
TESP	Teaching English for Specific Purposes
TEYL	Teaching English to Young Learners
TIRF	The International Research Foundation for English Language Education
UCLA	University of California, Los Angeles
USC	University of Southern California
VOIP	Voice Over Internet Protocol
WASC	Western Association of Schools and Colleges

Other Conventions Used

- US spelling and syntax are used, except where quoting directly from another source.
- Different countries use different terms to describe various qualifications. US conventions are used, except when naming titles of specific qualifications. Therefore, certificates, diplomas, and degrees taken beyond a first degree are referred to as graduate certificates, diplomas, and degrees. Similarly, education beyond secondary level is referred to generically as post-secondary. Institutions that are universities or post-secondary degree-granting colleges are referred to as universities/colleges.

Executive Summary

The use of computer technology in education has grown, especially since the advent of Web 2.0 (i.e., the collection of second-generation internet services that were built on the expansion of social media technologies), with its affordances for teaching and learning. Increasingly, technology-enhanced education is being delivered online, rather than in stand-alone computer labs. The online delivery of education ranges from some online support for face-to-face (f2f) classes, to totally online courses including online language teacher education (OLTE). The need for OLTE has increased with the demand for English teaching and for qualified instructors as English use as a global language has increased.

The study reported here built on that of Murray (2013). Murray's study provided an overview of the types of OLTE available and included in-depth snapshots of 18 OLTE courses/programs. The Murray 2013 study laid the groundwork for understanding more about OLTE courses and programs, in other words, what is being offered and by whom. Since the publication of Murray's 2013 study, we have had numerous conversations about OLTE with instructors and students in courses and administrators in and directors of OLTE programs, as well as other researchers. What has become increasingly apparent to us as a result of these discussions is that we need to learn more about the experiences and perceptions of the individuals involved in OLTE. What are the characteristics of OLTE participants? Why do participants choose online, rather than on-campus or f2f courses and programs? What types of technology and course configurations have they experienced and which do they prefer? What are participants' perceptions of online learning and the applications available for learning? Understanding what OLTE participants think, know, and believe about OLTE can be enormously useful in creating more effective online learning environments, designing courses and programs, and assuring quality of OLTE. Therefore, the focus of the current study reported here is the experiences and the perceptions of both instructors of and students in OLTE courses and programs.

To carry out the study, we developed two online questionnaires, one for instructors of OLTE (i.e., teacher educators) and the other for students in OLTE (i.e., teacher students). The items in the questionnaire were developed based on current literature on online education and our own experiences in OLTE in several different settings and programs. The questionnaires included multiple-choice, rank-order, and short-answer questions, often with an option for write-in responses. The questionnaires sought to discover who is participating in OLTE courses/programs and why; the types of OLTE courses and programs available; the configurations of these courses/programs, including activities and technologies; participants' preferences for OLTE activities and technologies; and participants' perceptions of the effectiveness of OLTE courses and the applications for the delivery of the course. We classified OLTE into five configurations: (1) enhanced, (2) blended/hybrid, (3) flipped, (4) totally online with a synchronous component, and (5) totally online with no synchronous component. The term *configuration* is being used specifically to talk about how online technologies are being implemented in the design of courses.

One hundred eighty-five (185) programs/courses were contacted directly via email and invited to participate. They were asked to distribute the call for participation to their teacher educators and teacher students. In addition, the call for participation with the URL link to the questionnaires was posted on several TESOL professional websites and listservs. A total of 137 teacher educator questionnaires were returned and 309 teacher student questionnaires for a total of 446 responses. The quantitative data were analyzed using *Qualtrics*, while the qualitative data were searched for themes and then coded to create categories that were related to the main constructs represented in the questions.

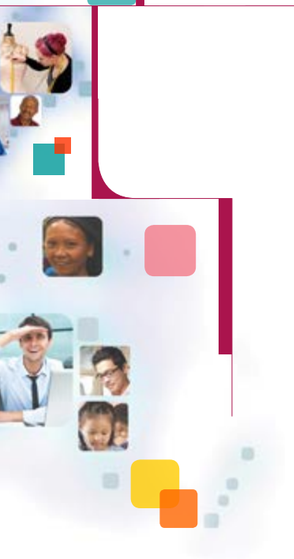
Findings

While there was some agreement between teacher educators and teacher students, their experiences and opinions differ considerably on many key factors.

Participants

Both native speakers (NS) and non-native speakers (NNS) of English participated in the OLTE surveys. It is important to note that the terms NS and NNS are used in this report only as useful heuristics. Participants were located in many different contexts around the world, including Asia, Australia, Europe, the Middle East, North America, and South America. Teacher educators were a considerably older cohort (the largest group was in their 50s) than their teacher students (the largest group was in their 20s). Perceptions of workload for OLTE courses varied a great deal between teacher students and teacher educators. Teacher educators indicated that the workload is much heavier in online courses than in f2f courses, while teacher students perceived the workload as being similar to f2f courses.

Reasons for Choosing OLTE



Data were collected about general reasons for choosing OLTE courses and reasons for choosing OLTE over f2f courses. Teacher students reported that they chose to study OLTE in general and to obtain credentials in English language teaching, whereas the teacher educators' perception was that their teacher students mainly wanted to travel or took courses required by their employers. The reasons for choosing OLTE over f2f for teacher students were related to flexibility; consequently, teacher students did not welcome synchronous lectures or discussion groups. They wanted to take full advantage of the any-time, any-place affordance of online learning. In contrast, teacher educators wanted to encourage interaction and facilitation of group work. To this end, they used a variety of different technologies to promote both synchronous and asynchronous participation. The teacher educators did perceive that their teacher students took online courses for their flexibility, but they included learning activities that made their courses less flexible.

Configurations of OLTE

Both teacher educators and teacher students had the most experience with asynchronous online OLTE courses, followed by blended/hybrid for teacher students and enhanced for teacher educators. Teacher educators did, however, use a variety of synchronous applications. In terms of preferences, teacher educators ranked a totally online course with no synchronous component the lowest, whereas teacher students ranked it as their highest preference. These preferences reflected the differing beliefs that teacher educators and teacher students had about the value of OLTE—teacher educators preferred modes and configurations that allowed for interaction, whereas teacher students preferred modes that gave them the greatest flexibility. They both ranked enhanced courses quite high, but flipped courses quite low. The participants also taught in or learned in a range of courses and programs, from short courses measured by hours to multi-year-long degree programs.

Quality

Neither teacher educators nor teacher students were particularly interested in or often aware of accreditation as a measure of quality. Indirect measures of quality indicated that neither teacher educators nor teacher students believed OLTE was easier than f2f study. Flexibility reflected quality for teacher students, whereas the availability of applications for promoting interaction suggested quality for teacher educators. Teacher educators in this study were experienced as teacher educators and considered themselves qualified to teach OLTE and support their students' learning because most had taught and/or designed OLTE, had undertaken formal technical training, and had obtained experience as teacher educators. Teacher students reported that their teacher educators were experienced and qualified. Most were instructors, only a few being tutors or teaching assistants.

Technical Support

Teacher educators, even those with considerable experience and/or training with OLTE, did not have high levels of confidence in their technological competence. In contrast, teacher students were confident. Teacher educators

did, however, provide some technical support to their teacher students, and teacher students' perceptions of the technical support provided by teacher educators were more positive than the perceptions that the teacher educators had of themselves. In addition, a number of OLTE programs had technical support staff persons who were available to answer questions about the technology.

Learning Management System (LMS)

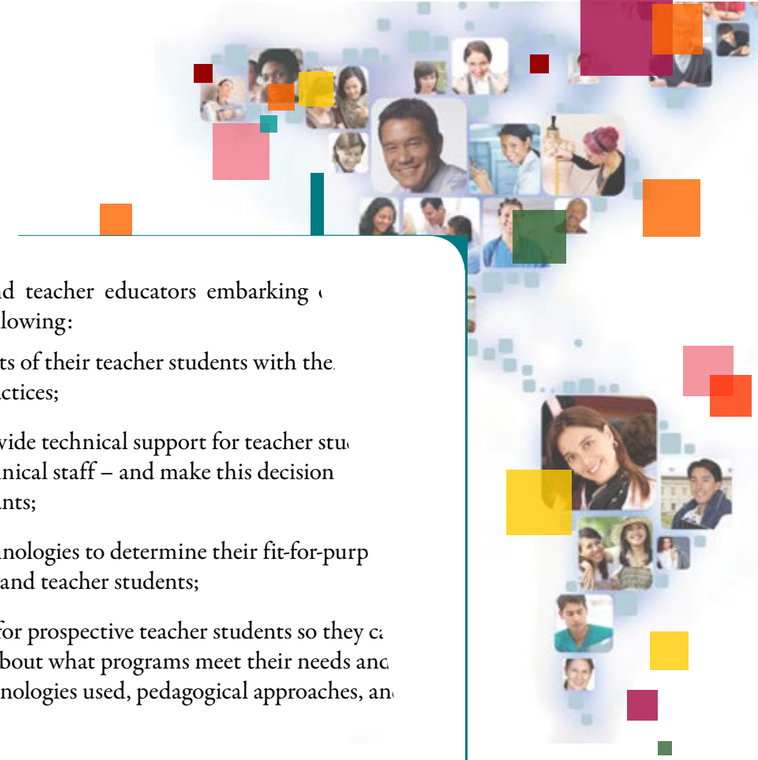
The most commonly used LMSs for teacher educators were Blackboard, followed by Moodle, Canvas, WebCT, and locally designed LMSs. Teacher students most frequently used Moodle, followed by Blackboard, WebCT, locally designed LMSs, and Canvas. Teacher educators preferred WebCT while teacher students preferred locally designed learning LMSs. However, teacher educators ranked "other" LMSs and applications as second in their overall list of preferences and teacher students ranked "other" as first in their list of preferences. Both provided extensive lists of other LMSs and programs. Although the preferences for specific features expressed by the two groups were similar (e.g., flexibility, transparency, messaging system, and synchronous applications), there were some differences. Teacher educators placed a high priority on features that promote interaction, group work, and communication. In contrast, teacher students placed a high priority on features that assist them in doing well in the courses, such as features that allowed them to track their own progress and have access to grades.

Assessments

Exams still figured quite prominently as a form of assessment, even though teacher educators and teacher students agreed that online quizzes that allowed for multiple attempts and provided immediate feedback, peer assessments, and practice quizzes that included answers and explanations were all useful in promoting learning.

Implications

These findings produced a rich understanding of the world of OLTE. For OLTE to meet its full potential of providing quality education for those who choose not to attend brick-and-mortar institutions requires institutions to rethink why they are providing OLTE and what configurations they have



chosen to adopt. Institutions and teacher educators embarking
therefore, need to consider the following:

- balance the needs and wants of their teacher students with the
pedagogical beliefs and practices;
- determine who should provide technical support for teacher stu
– teacher educators or technical staff – and make this decision
understood by all participants;
- carefully evaluate new technologies to determine their fit-for-purp
for both teacher educators and teacher students;
- provide clear information for prospective teacher students so they c
make informed decisions about what programs meet their needs an
preferences, including technologies used, pedagogical approaches, an
types of assessments;
- evaluate their compensation for teacher educators by examining
additional workload in terms of time and in terms of role, such as
technical expert; and
- constantly evaluate the quality of their OLTE programs or courses,
using tools such as accreditation or the Online Learning Consortium's
scorecard.

Potential teacher students need to carefully examine not only the availability of OLTE, but also the exact configurations used in the program or course, the qualifications and expertise of the teacher educators, the administrative and technical support provided, and the underlying curriculum design. Professional associations in TESOL should consider advocating for quality accreditation principles for OLTE. Other stakeholders, such as software companies, should also examine the findings so that their products more effectively match the needs of OLTE teacher educators and teacher students.

Additional research is needed to

- fill the gap in our understanding of the impact of OLTE on hiring practices of graduates and the perceptions of how well prepared OLTE graduates are for their language teaching work, and
- examine the compensation for OLTE teacher educators.

1. Context of the Study

The use of computers in education has grown exponentially over the past several decades, including in language teaching (computer-assisted language learning—CALL). (See, for example Healey, Hanson-Smith, Hubbard, Ioannou-Georgiou, Kessler, & Ware, 2011; OECD, January, 2008; Reinders & White, 2011; The Sloan Consortium, 2005; Thomas, Reinders, & Warschauer, 2013.) This growth can also be seen in general teacher education (Collis & Jung, 2003; Robinson & Latchem, 2003) and language teacher education (England, 2012; Hall & Knox, 2009; Hubbard, 2008; Murray, 2013). The recent growth has come from Web 2.0, the collection of second-generation internet services that were built on the expansion of social media technologies. These technologies have resulted in connectivism (Siemens, 2005), which is a theory of learning that is based on the notion that internet technologies have created unique opportunities for individuals to learn from one another. Connectivism allows individuals to share information in an environment in which the core elements are constantly shifting and evolving and are not entirely under the control of the individual.

In 2001, Warschauer (2001) characterized the historical development of CALL as falling into three stages as follows:

- Structural (1970s-80s)
- Communicative (1980s-90s)
- 21st-century integrative

He stated that 21st-century integrative CALL is driven by multimedia and the internet, which have allowed for content-based language teaching, the use of authentic discourse, and learner agency. However, since his portrayal of CALL in the 21st century, social media have blossomed and handheld devices have become common, resulting in new opportunities and affordances for teachers and learners. These affordances have included collaboration, communities of practice (CoP; Wenger, 1998), and a focus on social media.

2. Key Research Questions

The study reported here builds on Murray's 2013 study, which examined online language teacher education (OLTE) through (1) a literature review, (2) desktop evaluation of websites of OLTE providers globally, and (3) 18 case reports of programs from a variety of different countries that offer different types of OLTE courses and programs. The Murray 2013 study laid the groundwork for understanding more about OLTE courses and programs, in other words, what is being offered and by whom. Since the publication of Murray's 2013 study, we have had numerous conversations about OLTE with instructors and students in courses, administrators in and directors of OLTE programs, and other researchers. What has become increasingly apparent to us as a result of these discussions is that we need to learn more about the experiences and perceptions of the individuals involved in OLTE. This report analyzes data from large-scale, extensive questionnaires for both instructors of OLTE and students in OLTE to determine the following:

We need to learn more about the experiences and perceptions of the individuals involved in OLTE.

1. Who is participating in OLTE courses and programs?
2. What courses are offered?
    a. What types of courses and programs are offered?
    b. What are the length and intensity of OLTE courses and programs?
    c. Are OLTE courses accredited by either governmental or non-governmental agencies?
    d. What are the different configurations for OLTE courses?
    e. What are participants' perceptions of the different configurations of OLTE courses?

3. What applications and technologies are used in the delivery of OLTE courses?

    a. What LMSs are used?

    b. What features of LMSs are perceived as most useful for the delivery of OLTE courses?

    c. What online assessments are used?

    d. What are participants' perceptions of online assessments for promoting assessment for learning?

Throughout the report, we use *teacher educator* to refer to instructors in the OLTE courses. We philosophically consider learning to be a teacher as a life-long enterprise; thus, we reject the term *teacher trainee*, which describes the acquisition of a specific set of skills over the short-term. We use the term *teacher student* to refer to all types of students in the OLTE courses (i.e., both pre-service and in-service teachers), while the students they teach or will teach (i.e., language learners) we refer to as *students*.

At this point in OLTE, we believe it is essential to gather information from as many participants in OLTE as is possible.

3. Methodology: How the Research was Conducted

Building on Murray's 2013 research, the current study sought to investigate both what and how OLTE is being delivered and to solicit from both teacher educators and teacher students their opinions about the affordances and limitations of OLTE, as well as their preferences for configurations of OLTE. As such, our research is concerned with gathering data related to what teacher educators and teacher students in OLTE courses and programs, think, know, and believe. Therefore, we draw on the research on teacher cognition (i.e., the unobservable dimension of teaching that is represented in teachers' cognitive processes) to provide theoretical support for our work (see Borg, 2003, 2006; Freeman & Richards, 1996; Munby, Russell, & Martin, 2001; Phipps & Borg, 2007). Teacher cognitions are influenced by teachers' experiences as both learners and teachers and can exert persistent and long-term influence on teachers' practices. The importance of this research for us resides in our own belief that understanding what language teacher educators and teacher students think, know, and believe about OLTE can be enormously useful in creating more effective online learning environments, as well as addressing issues related to designing courses and programs and assuring quality.

Teacher cognitions are influenced by teachers' experiences as both learners and teachers.

We explored several methods for data gathering, such as interviews and focus groups. In the end, we determined that the online questionnaire method was preferable, given that it is cost effective and that we could capture a greater number of teacher voices from many different contexts than could be captured using other methods, such as interviews or focus groups, given our resources. At this point in OLTE, we believe it is essential to gather information from as many participants in OLTE as is possible. Advanced survey software, such as *Qualtrics* (the one to which we had access), allowed for many options for data collection and the use of many different item types for the individual questions.

Based on the literature review of previous studies (e.g., Murray, 2013), we developed two questionnaires, one for teacher educators and one for teacher students. The questionnaires (see Appendices A and B) included items to elicit (1) bio-data information from participants, (2) short descriptions of the OLTE courses and programs, and (3) participants' opinions and preferences regarding the value of OLTE. The length of the questionnaires was always an issue for us. There were so many potential questions to ask; however, we were also cognizant that if the

questionnaires took longer than 20 minutes to answer, we would get few participants. One way to encourage participation was to set up the questionnaires so that participants could complete the questionnaires in multiple sessions rather than all at once. As long as participants used the same device each time and completed the questionnaires by the deadline, they were automatically returned to the point in the questionnaire at which they stopped. We also created a URL link, which took participants directly to the questionnaire without any login necessary.

We queried the same concepts in both questionnaires and introduced the items in the same order. We made changes in the wording in each question to accommodate the different perspectives for each group. For example, in the questionnaire for the teacher students in OLTE courses, most of the questions were written in second person and edited to reflect the personal experiences of the participants, such as in Question 9, which follows:

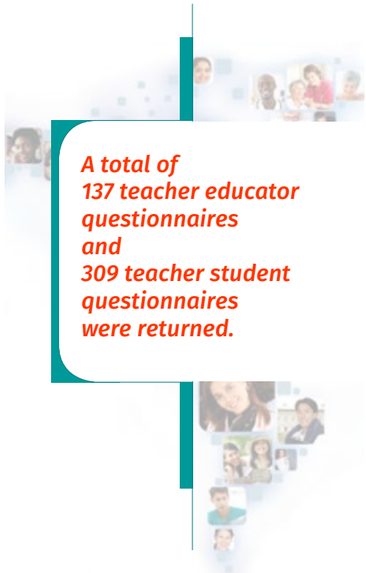
> Question 9 for teacher students: Why did you choose an OLTE course rather than a totally face-to-face (f2f) one?

> Question 9 for teacher educators: Why do you think students take online courses rather than totally face-to-face (f2f) courses?

The questionnaires were trialed and adjustments were made, based on the feedback we received. The questionnaires were entered into *Qualtrics*, which was used for data collection and analysis. Questions were primarily multiple choice, rank order, and short answer. For the short-answer questions and for many of the multiple-choice and rank-order questions, there was an option for write-in responses so that we could collect and analyze individual perceptions of OLTE courses and programs, in addition to the data for questions for which we had previously established categories.

Teacher education institutions offering OLTE were contacted via email. The OLTE program director was contacted personally if we were able to find the director's contact information on the program's website. Some programs only had a generic admin@address and provided no individual to contact. Other websites were directed to potential students only; these prospective students had to complete an online form, and there was no email address given. A total of 185 institutions had identifiable email addresses and were contacted directly via email. (See Appendix C for the list of institutions contacted.)

We asked the programs' representatives who provided a contact email address to (1) complete the teacher educator questionnaire themselves, (2) distribute the teacher educator questionnaire to all instructors in their OLTE program, and (3) distribute the teacher student questionnaire to their students, both current and former. We had no direct way to contact teacher students, except for those in our own programs. In addition, the call for participation was posted on TIRF's website and various listservs, such as TESOL International Association's CALL Interest Section, TESOL International Association's Teacher Education Interest Section, UCLA's listserv, USC's listserv, and IATEFL's listserv. A total of 137 teacher educator questionnaires and 309 teacher student questionnaires were returned, for a total N of 446 respondents.



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4. Literature Review

4.1 What is OLTE?

First, we need to define what is meant by OLTE. Traditionally, *online education* has been defined in terms of the percentage of time the students in the course spend online, compared with other activities. The most commonly used classification was developed by the Sloan Consortium, now the Online Learning Consortium (Allen & Seaman, 2013), which studies online trends in higher education in the US. Their four-part classification is displayed in Table 1.

Table 1: Online Learning Consortium Course Classification

Proportion of Content Delivered Online	Type of Course	Typical Description
0%	Traditional	A course where no online technology is used – content is delivered in writing and orally.
1 to 29%	Web Facilitated	A course that uses web-based technology to facilitate what is essentially a f2f course. May use a course management system (CMS) or web pages to post the syllabus and assignments.
30 to 79%	Blended/hybrid	A course that blends online and f2f delivery. A substantial proportion of the content is delivered online. The course typically uses online discussions, and typically has a reduced number of face-to-face meetings.
80+%	Online	A course where most or all of the content is delivered online. Such courses typically have no f2f meetings.

OECD's (2005) study of e-learning in tertiary education in 13 countries developed a similar typology: none or trivial, web supplemented, web dependent, mixed mode, and fully online. Within each of these classifications, the online technologies are configured in many different ways in terms of content, activities, and the sequencing and timing of instructional components.

While considering the percentage of instruction delivered online as a method for discussing different delivery types may be useful, other criteria also need to be considered in terms of classifying and conceptualizing online instruction: Is the learning synchronous or asynchronous? Is it a MOOC (Massive Open Online Courses? Is it a flipped course? Does the course involve videoconferencing? Is there a learning management system (LMS) for course delivery? Is social media being used?

Having examined the literature and Murray's previous study, for the purposes of this study, we classified OLTE as displayed in Table 2. This typology better captures the range of options currently available in OLTE than does the one based solely on time spent online. For the purposes of this study, OLTE courses were configured into five different types based on how online technologies are being implemented in the design of courses—enhanced, blended/hybrid, flipped, online with a synchronous component, and asynchronous online.

Table 2: Course Classification Used in the OLTE Questionnaire

Type of OLTE	Characteristics
Enhanced	F2f) classes supported by some course activity online
Blended/hybrid	F2f and online activity with the number of f2f meeting times reduced
Flipped	Key content delivered online outside of f2f classroom; f2f time is devoted to interactive problem solving
Totally online with a synchronous component	Students meet online at the same time
Totally online with no synchronous component	Students do not meet online at the same time

Considerations of MOOCs, videoconferencing, and LMSs were addressed in individual questions on the questionnaire because any of the types of OLTE courses listed in Table 2 could include these components or not.

4.2 The Role of Technology in Education

While new opportunities for teaching and learning have developed, technology in and of itself is not deterministic. There has been a long history of research and theory concerning whether new technologies lead to progress by determining social and economic outcomes and even human thinking and behavior. (See Williams [2005] regarding television and Richardson [2006] regarding blogs and wikis.) The opposing view, the Social Shaping of Technology (SST), notes that historically, users have shaped technology for their own uses, often uses not envisioned by the creators of the technology, and that technologies amplify trends already occurring in society. (See, for example, Lewis & Jhally, 1998; Prinsloo & Walton, 2008.) Babbage and Turing, the inventors of computers, for example, would likely be surprised that their computational machine became a social networking tool.

The SST view is particularly pertinent when discussing the role of technology in education, given that education is deeply embedded in social practices that may not be the social practices of the students being served. This is especially the case in second language teaching. A challenge in the use of technology in education has always been the normalization of the technology, which Bax first defined in 2003 and later expanded on as "the stage when a pedagogical technology such as a textbook or pen, has become, in effect, invisible, so seamlessly is it employed in our everyday practice in the service of language learning" (2011, p. 1).

To understand the extent to which OLTE has become normalized, we first need to situate OLTE in terms of the following:

- the sociocultural and economic contexts that affect access,
- the various configurations for delivery of OLTE,
- the changing roles of teacher educators and teacher students, and
- the quality of OLTE.

Each of these issues will be addressed in turn.

4.2.1 Sociocultural and Economic Contexts that Affect Access

The goal of providing access to those who cannot attend brick-and-mortar institutions is embedded in online education. Online education has its roots in distance learning (Murray, 2013; Murray & Christison, 2017), which originated to provide education to those who lived far from educational institutions or had time constraints, such as jobs or family responsibilities. Over time, pen and paper learning was replaced by audiotapes, then video and television, and now by online learning opportunities. In fact, a quick scan of the pre-eminent journals *Distance Education* and *The International Review of Research in Open and Distance Learning* (IRRODL) shows that their contributions are increasingly about "virtual" environments, such that in IRRODL and other publications, *online* and *distance* are often used interchangeably. The European journal, *European Journal of Open, Distance and E-Learning (Eurodl)*, in contrast, has chosen to acknowledge this aspect of DL in its title. The increasing use of online delivery is due to its any-time, any-place affordance.

This history of DL is essential for understanding OLTE. It raises the question of whether OLTE serves the community by making education more easily available, or whether it serves the economic function of supplementing declining f2f enrollments in state colleges or the revenue generation of for-profit institutions, publishers, or companies.

While OLTE has been characterized as providing equal access to all potential or current teachers, it has also been shown that digital technologies, if examined and implemented as autonomous, rather than as socially embedded, are capable of replicating current inequalities. The marginalized will not be able to take full advantage of the affordances of these technologies. If OLTE is to provide equal access to quality English language teacher education, then it must be examined as ideological, conditioned by the contexts in which it occurs. The contexts of OLTE need to be addressed by the institutions and teacher educators providing such programs. This perpetuation of the digital divide goes beyond access. Since 1997, Murray has tracked the percentage of populations online, as indicated in Table 3.

Table 3: Percentage of Online Users Worldwide Over Two Decades

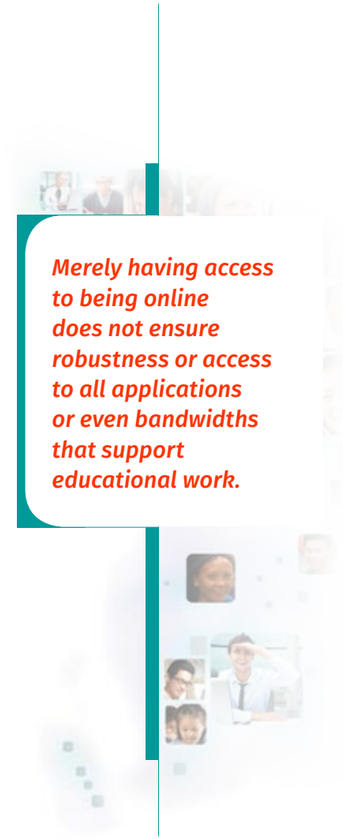
Percentage of Online Users Worldwide				
1997	**2002**	**2007**	**2010**	**2014**
Network Wizards (reference no longer on the web)	GlobalReach (reference no longer on the web)	Internet World Stats	Internet World Stats	Internet World Stats, 2015
6%	9%	18.9%	28.7%	42.3%

Note: Only the Internet World Stats site has the most recent information.

These raw data indicate the incredible growth of online usage worldwide and, therefore, of access. A closer look at specific regions from Internet World Stats, 2015 shows growth in all regions. However, the rate of growth is much lower in developing nations in Africa, for example. What these data do not indicate is the tool being used for access. Researchers have recently expressed concern that much of the growth has been in mobile access. Mobile technologies were heralded as the equalizing devices par excellence because they were a leapfrog technology that did not require the expensive infrastructure of cabling that wired technology does.

Studies are not always easy to untangle, however, because authors frequently refer to the term "mobile" to include all WiFi devices, whereas there are considerable differences in affordances among mobile devices, for example cell phones, compared with large tablets (Hockly, 2013). Studies of students in Japan (Thornton & Houser, 2003) and Taiwan (Chen, Hsieh, & Kinshuk, 2008) have indicated that these students prefer to use mobile phones for everything, including their language learning. In English language teacher education, graduate students found using social media, such as YouTube on their mobile phones, to be motivating (Kim, Rueckert, Kim, & Seo, 2013). A further complexity is the need to determine *what* or *who* is actually mobile. Pegrum (2014) makes a distinction among (1) devices being mobile, (2) learners being mobile, and (3) the learning experiences themselves being mobile, and many authors conflate these distinctions.

However, the reason for the concern is that mobile technologies have not lived up to their potential of providing equal access. Merely having access to being online does not ensure robustness or access to all applications or even bandwidths that support educational work. One concern today is the gap in broadband access. For example, a recent study in California (Avalos, 2015) found that 21% had no broadband access and 8% had access only via smartphones, which do not allow for "productivity tasks, or kids doing school work" (p. B6). Many schools are turning to BYOD (bring your own device) policies because of the expense in keeping current with new technologies. However, such a policy only exacerbates the situation for those students who have older technologies or only mobile phones and so cannot access the sites and applications the teachers require. An extensive study of online K-12 charter schools in 18 US states (Woodworth et al., 2015) found that (1) the online nature of these schools may be a good fit for some students, but does not serve most students well; (2) academic benefits from online charter schools are currently the exception rather than the rule; and (3) not all families may be equipped to provide the direction needed for online schooling.



Merely having access to being online does not ensure robustness or access to all applications or even bandwidths that support educational work.

It is often assumed that younger generations are *digital natives* (Prensky, 2001) and so will not need any help using the technology in an OLTE program. While digital natives respond well to online activities because of their familiarity with digital technology, many have limited knowledge of and practical experiences with all computer-based technology. As Kim et al. (2013) have cautioned about assuming all language students have access to and are familiar with all new technologies, this point is equally true for teacher students in teacher education.

Another way of considering the issue of sociocultural and economic contexts of access is to examine multimodal literacy. We use the term *multimodal literacy*, rather than *digital literacy* because the latter is usually confined to the technical skills required to use the technology. Anstey and Bull (2011), in discussing multimodal texts, state that "[a] text may be defined as multimodal when it combines two or more semiotic systems. There are five semiotic systems in total, which are conceptualized as follows:

1. Linguistic: comprising aspects, such as vocabulary, generic structure, and the grammar of oral and written language.

2. Visual: comprising aspects, such as colour, vectors, and viewpoint in still and moving images.

3. Audio: comprising aspects, such as volume, pitch, and rhythm of music and sound effects.

4. Gestural: comprising aspects, such as movement, speed, and stillness in facial expression and body language

5. Spatial: comprising aspects, such as proximity, direction, position of layout, and organisation of objects in space. (n.p.)

In OLTE courses, teacher educators and teacher students interact with digital texts that most frequently include at least two semiotic systems.

In using the term *technological literacy*, we include the ability to interact with digital texts that may include linguistic, visual, spatial, and/or audio semiotic systems. Motteram (2013), in discussing CALL, says that "[i]n order to access the web effectively, to gain maximum language learning from any material or activity, we need to make sure that the learners have the necessary skills to be able to approach and interpret a text" (p. 186). If literacy is viewed as socially constructed, then, according to Prinsloo and Walton (2008):

> [r]eading 'effectively' and 'correctly' does not involve just the finding and decoding of words, images, and multi-media screens but also includes the practices of 'seeing through' the representational resources of the texts to make sense in particular ways, which vary across social settings. (p. 112)

The recent proliferation of MOOCs has been proclaimed as providing expert instructors to the world. MOOCs have been seen as a way of providing free access to high quality courses from elite institutions "that many only could dream of [having access to] in the past" (BDPA Detroit Chapter, n.d.). Some researchers suggest that MOOCs have the potential to change the future of higher education

(Carey, 2012). MOOCs began with George Siemens's 2008 course, "Connectivism & Connected Knowledge," and Sebastian Thrun's 2011 course, "Introduction to Artificial Intelligence." These two courses present very different models of online learning, models that reflect conflicting views of education. Siemens' course has its roots in DL and research with the philosophy that "network connectivity, and all of the connections humans and computers can make both with each other as well as themselves, is essential for learning in the modern digital age" (Moe, 2015, p. 1). Learners are considered co-creators of content and activities, with the instructor's content acting as a springboard for new interactions and knowledge creation in a truly open environment. In contrast, Thrun's course has its roots in artificial intelligence, with an economic goal of delivering expert content to as wide an audience as possible with as little cost as possible in a closed LMS. Learners are viewed as acquiring "sophisticated skills" through memorizing an expert's content to help them get "high paying jobs" (BDPA Detroit Chapter, n.d.). These two courses reflect the conflict discussed above—whether going online serves the community or economics.

This conflict can be seen in OLTE. For example, England (2013) noted that Shenandoah University had made a push to grow enrollment and so had encouraged online delivery, while Pearson, which is a for-profit publishing company, also made a push for online delivery. This practice contrasts with the reports of Copland (2013), Hall and Knox (2013), and Skyrme (2013), whose universities all have long traditions of providing DL. Likewise, Donaldson (2013), reported that the professional organization, TESOL International Association, provides professional development to its worldwide members. In the latter cases, OLTE was an option chosen to provide access to those who otherwise could not access English language teacher education.

4.2.2 Configurations for OLTE Delivery

How then can OLTE be configured so that it ensures participating teacher students can contribute equally? *Configuration* refers to both the choices of available technologies, and the curricular arrangements. Because of the importance of this issue in OLTE, in Murray's 2013 study, participants were asked to describe how their program helps students understand the local contexts in which they are studying, so that they can work together with others in the global context of OLTE. Additionally, because these teacher students could work with students from a variety of global contexts, we also asked them to describe how their program helps prepare students for the local contexts in which they will work.

While all programs considered these issues as important to address, their solutions varied. They all had students explicitly focus on applying their course content to their own contexts and sharing that contextual application with their class peers. Some also carefully configured the technological requirements to fit the different contexts, such as providing YouTube videos on the LMS or sending them via email for teacher students in countries where YouTube is banned (Ciancio & Diaz-Rico, 2013). Copland's (2013) program does not "always us[e] the latest technological advances, if we feel that these innovations may result in an inferior learning experience for those without access to new developments." TESOL International Association (Donaldson, 2013) also used technology that was compatible with local contexts because of the lack of bandwidth available to many of their participants. Others also had paper-based copies or CDs for teacher students who had technological difficulties (Hall & Knox, 2013; Skyrme, 2013) or peers who copied materials for those who were unable to access them through the LMS or virtual library (Bailey, 2013). Other alternatives included being able to read a transcript as well as listen/watch (Ciancio & Diaz-Rico, 2013). Others focused on collaborative work to help the teacher students examine key concepts through different lenses (Heitmen, 2013; Nunan, 2013) or through developing CoPs (Liyanage, 2013).

To address the issue of how to prepare teacher students for a variety of future teaching contexts, many programs focused on developing reflective practitioners (for example, see, Richards & Lockhart, 1994), ones who understood their own teaching approaches and how those approaches could be adapted to different contexts. Many also included intercultural communication components (see, e.g., Liyanage, 2013). Most included observations in different classroom settings that were then shared and discussed. OLTE teacher educators and their administrators need to be flexible to accommodate the range of technological issues of access so that all teacher students have comparable learning experiences.

First, we need to understand what is meant by *online*. Parker (2004) recognizes that "with the shift to wireless technologies, 'online' education may well appear to be an outmoded shorthand for computer or Web-enabled activities" (p. 389). However, she also notes that it is a powerful term because "it carries the sense of a linked community of learners" (p. 389). Because motivation and engagement are essential for learning, Sims, Dobbs, and Hand (2002) believe that online learning "must be conceptualized as an environment that integrates collaboration, communication, and engaging content with specific group and independent learning activities and tasks" (p. 138). What then are some of the applications and curricular models that can help teacher educators achieve this goal? We will next examine the applications that are asynchronous or synchronous, learning management systems, and social media. We also examine MOOCs and flipped learning as curricula models, as well as learning oriented assessment.

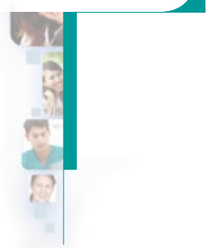
4.2.2.1 Synchronous vs. Asynchronous Courses

Synchronous and asynchronous online interactions predate Web 2.0. In the past, people logged onto interconnected computers, whether through a local area network or the internet. They were then able to email or chat, the former being asynchronous, the latter synchronous. Educators have found affordances and limitations with each mode. Asynchronous interaction is by far the most commonly used (Meloni, 2010) because many applications are free and readily available. Many studies in CALL have compared the two modes. The asynchronous mode allowed OLTE teacher educators to better organize, prepare, and deliver their answers and to ask questions (Gakonga, 2012), while teacher students were able to actively participate in their own learning

in their own time. This mode gave them more time for reflection, collaboration, and interaction with other teacher students.

However, OLTE actually places greater time demands on teacher educators, especially for activities that involve collaboration and/or forum or discussion board posts (Gabriel, 2004). The teacher educators in Murray's 2013 study indicated that they chose asynchronous over synchronous course configurations when there were large time zone differences among teacher students and the teacher educator. This suggests a logistical choice rather than a pedagogical one. Two institutions in Murray's study (Filback & Chun, 2013; Nunan, 2013), however, used real-time videoconferencing for both delivery of content and discussion. Several used Skype for interactions with students (see, e.g., England, 2013; Gomez, 2013; Hughes, 2013) or for content delivery and discussion (Copland, 2013). Elluminate was also used (Bailey, 2013; Skyrme, 2013), as well as Instant Messaging (Ciancio & Diaz-Rico, 2013). Ciancio and Diaz-Rico also used Skype to play websites or videos that were blocked in the countries of some of their teacher students.

OLTE actually places greater time demands on teacher educators, especially for activities that involve collaboration and/or forum or discussion board posts.



Videoconferencing is the synchronous tool par excellence. Both Nunan's (2013) and Filbak and Chun's (2013) programs included videoconferencing as a major tool for content delivery and teacher student interaction/discussion. Videoconferencing has become popular in online learning, although there are still limitations for some students because of lack of bandwidth. At its simplest use, videoconferencing can be employed to relay videotaped materials directly to students. However, its main affordance comes from the ability to include real-time discussions, where both teacher educators and teacher students can display their screens with text or PowerPoint when they are presenting and/or talking. The webcam allows for any participant to be visible to the rest of the group, while the microphones allow for all to be heard. These videoconferencing applications provide interaction and connectivity, essential for learning, especially in an online environment (Bonk & Zhang, 2006; Moe, 2015). Additionally, the sessions can be recorded and become part of the library for the course, so that absent teacher students, or those who want to review, can re-play the entire session. They can also patch in distant visiting speakers if required.

4.2.2.2 Learning Management Systems

LMSs can be from for-profit companies, open source, or developed as proprietary systems by individual institutions. LMSs are used for the creation, storage, and management of course content, as well as the administration, documentation, tracking, reporting, and delivery of OLTE. Because an LMS is a comprehensive system, it can include videoconferencing, social media, email, and chat. As a pre-packaged program, an LMS provides options and flexibility to instructors and course designers.

Because LMSs are pre-packaged, they may come with their own philosophy of learning that is contrary to the learning philosophy of the instructor.

However, also because LMSs are pre-packaged, they may come with their own philosophy of learning that is contrary to the learning philosophy of the instructor. An LMS that views education as courses and content, for example, will facilitate cognitive behaviorist pedagogies at the expense of constructivist or connectivist ones (Anderson & Dron, 2011). Therefore, teacher educators need to carefully consider what LMS they want to adopt and which features they want to use in their teaching. Many systems do provide opportunities for collaboration with shared documents, discussion lists, chat boxes, and so on. Most of the teacher educators in Murray's 2013 study used one LMS. Seven programs used Blackboard, seven used Moodle, one of which was a proprietary version, while one institution had its own proprietary LMS. Three programs did not use an LMS as such because different instructors were in disparate places, with different access to technology. These instructors, therefore, used applications that were familiar to them from other contexts.

4.2.2.3 Social Media

As mentioned above, social media are changing the landscape of human interaction and online learning, with their focus on connectivism (Siemens, 2005). They bring together communication, collaboration, community, creativity, and convergence (Friedman & Friedman, 2008) through technologies, such as blogs, Facebook, forums, Instagram, Skype, Snapchat, Twitter, and wikis. They are Web 2.0-based technologies that facilitate user-generated content that can be shared, exchanged, and commented on to create virtual social networks. Social media have become increasingly popular, now consuming 22% of people's online time (Nielsen Group, 2010). They require multimodal

literacy from their users. While social media offer the promise of community, several scholars have shown that they can exacerbate inequality between those who have the multimodal literacy and those who do not, and also that people confuse social media use with authentic communication (Turkle, 2012). However, teacher educators can exploit the affordances of social media to help create CoPs. As already discussed, to achieve CoPs equitably requires institutions and teacher educators to modify activities for the different contexts in which their teacher students live and work.

Murray's 2013 study found that the 18 institutions that wrote case reports mostly did not use social media, except for recruitment. Several did, however, use Skype. This finding is not unexpected because social media are still quite a young application, but they have potential as teacher educators find ways to incorporate them into their curricula. Already English language teachers around the world have exploited social media to develop their own CoPs, especially through the use of blogs and dedicated Facebook pages, "resulting in an enormous number of daily conversations around every area of the profession" (Dudeney & Hockly, 2012, p. 539). OLTE teacher educators can easily encourage their teacher students to engage in these conversations, ones that will likely continue well into their future professional lives.

4.2.2.4 Flipped Learning

We discuss flipped learning separately, even though it has features in common with the other course classification systems because it has been treated as innovative and as a major affordance of online technology. Flipped learning is a pedagogical model in which the typical lecture and the homework elements are completed online, usually via video prior to the f2f meetings. The f2f class time can be transformed into an interactive learning environment where the teacher educator guides the teacher students as they apply key concepts and course content to real-life problems and engage interactively in discussions and problem-solving. It "flips" the typical f2f classroom where the f2f time is spent largely on content (especially at the college level) and extensions and applications are expected to be completed as homework assignments. Although these key elements are common in discussions of flipped learning, there is no commonly agreed upon definition (Abeysekera & Dawson, 2015). Flipped learning has become popular with both instructors and students (Hamdan, McKnight, McKnight, & Arfstrom, 2013), based on its focus on active learning, where "an instructor stops lecturing and students work on a question or task designed to help them understand a concept" (Andrews, Leonard, Colgrove, & Kalinowski, 2011, p. 394). Despite this assumption, Abeysekera and Dawson (2015) found little evidence to support the effectiveness of flipped learning.

The potential for flipped learning is one of the reasons that MOOCs have been promoted so strongly. However, using a MOOC from a prestigious institution as content input in other colleges has been met with some resistance. The administration at San José State University asked the Philosophy Department to assign a MOOC course called "Justice" offered by edX and taught by a Harvard professor as online content homework, and to conduct discussions of the content in class. The Department resisted, arguing that:

> two classes of universities will be created: one, well-funded colleges and universities in which privileged students get their own real professor; the other, financially stressed private and public universities in which students watch a bunch of videotaped lectures and interact, if indeed any interaction is available on their home campuses, with a professor that this model of education has turned into a glorified teaching assistant. (Philosophy Department at San José State University, 2013)

A further fear was that, not having to provide the content themselves, the professors would be able to teach more courses, acting like tutors of discussion sessions.

4.2.2.5 Learning Oriented Assessment

Formative assessment is also known as *assessment for learning* and *learning oriented assessment* (LOA). The term generally refers to assessment conducted by teachers during the learning process. It places an emphasis on helping learners achieve success through their own efforts and developing and using strategies for learning that work for them as individual learners (Marzano, 2010). Giving a wrong answer,

making a mistake, or struggling to understand something is a necessary and formative part of learning. The goal of formative assessment is to monitor learning and provide ongoing feedback on learning. It is, therefore, logical to conclude that feedback enhances learning and should be an important component of the learning cycle. In fact, after reviewing about 8,000 research studies, Hattie (1992) concluded that the single most powerful modification that enhances achievement is feedback. Learners use feedback to improve learning by identifying the strengths and weaknesses of their performances and their progress toward the achievement of learning outcomes.

Our interest in learning oriented assessment began almost two decades ago with the work of Sadler (1989), Hattie (1992), and Black and Wiliam (1998). It continues up to the present with a volume on learning oriented assessment edited by Jones and Saville (2016), which focuses on how assessment can promote better learning and measurements of learning and also contribute to useful interpretations of learning. The latter work is separated by a span of almost 20 years from the early works cited, indicating that LOA has been and still is an important focus in most educational contexts.

In online courses delivered through LMSs, there are a variety of assessment instruments available, such as discussions, quizzes, and peer assessments.

The purpose of the Black and Wiliam (1998) review was to spark an interest in improving the quality of assessments for learning during classroom instruction. The intended focus was on teachers who had to work within the constraints of national tests and examinations. There are many important findings from the Black and Wiliam paper; however, the two findings on which we focus for OLTE are the following: (1) If assessments are implemented successfully in instructional settings, including online, they can raise the standard of achievement for all learners, and (2) if learners are supported in their learning with quality feedback, they take greater ownership of their learning and learn more effectively.

In online courses delivered through LMSs, there are a variety of assessment instruments available, such as discussions, quizzes, and peer assessments, and also the technical means for obtaining instant feedback on learning. Consequently, the online environment should provide an excellent context for learning oriented assessment. In addition, the feedback streams can be built into the instructional design allowing for similar assessment across modules within courses and courses within programs, thereby creating opportunities for ongoing learning through the assessment process.

4.2.3 Measuring Quality of OLTE

The issue of quality has been of major concern to providers, potential providers, and teacher students (Murray, 2013; Prescott, 2010). Murray found that different providers used different measures or proclamations of quality, with many online for-profit providers asserting dubious claims to the quality of their instructors, without providing names or qualifications of these instructors or tutors. Still others claimed accreditation from agencies that had very few institutions they accredited and had no oversight for their accreditation system. Colleges and universities, on the other hand, by regulation in their individual countries were accredited by government approved accrediting agencies. While the quality indicators of these agencies varied, most included "1) providing clear statements of educational goals; 2) sustaining the institutional commitment to support learners; and 3) engaging in a collaborative process of discovery, which contributes to 4) improving the teaching and learning environment" (Parker, 2004, p. 386).

As the major US-based online consortium, the Online Learning Consortium (OLC), established a framework around their five pillars of quality: learning effectiveness, cost effectiveness and institutional commitment, access, faculty satisfaction, and student satisfaction (Moore, 2005). This framework includes quality scorecards for both online and blended models to help institutions "determine strengths and weaknesses of their program, and initiate planning efforts towards areas of improvement" (OLC, n.d.). The elements of quality the online scorecard covers are institutional support, technology support, course development/instructional design, course structure, teaching and learning, social and student engagement, faculty support, student support, and evaluations and assessment. The blended learning elements are the same with the omission of "social and student engagement." The elements include indicators of achievement.

In response to this growth in OLTE, a number of accrediting agencies have developed to assert the quality of instruction in the institutions they

accredit. In the UK, there are three such agencies. The Accreditation Council for TESOL Distance Education Courses (ACTDEC) awards three certificates and a diploma through its accredited institutions around the world. Its Chair, Secretary, and Treasurer are elected annually from accredited member institutions. The Online TEFL & TESOL Standards Agency (OTTSA) moderates and accredits institutions that apply to it. At the time of writing (2016), ACTDEC has six accredited members and no applicants, while OTTSA has accredited courses at four institutions, all of which are part of the same larger organization. ACCREDITAT, part of a larger international learning and development body, accredits both in-class and online TEFL and TESOL programs and has accredited 14 thus far, seven of which offer online courses (although some institutions have no details about their courses). In contrast, the College of Teachers in the UK, which also accredits TESOL courses, is under royal charter and patronage and is more than a century old. The Open and Distance Learning Quality Council is also well established and is responsible for accrediting in areas in addition to TESOL.

In the US, a number of accrediting agencies also exist. ACCET, the Accrediting Council of Continuing Education and Training, is a long-standing accrediting body approved by the US Department of Education since 1978. DEAC, the Distance Education and Training Council, also approved by the US Department of Education, was founded in 1926 under the name of National Home Study Council to promote education quality and ethical business practices for correspondence education programs. In 1955, the Accrediting Commission was established. It created and implemented accreditation standards and procedures to examine and approve distance-learning institutions. In 1959, the Accrediting Commission received its first grant of federal recognition and was listed by the US Commissioner (now Secretary) of Education as an institutional accreditor. In 1994, the name of the organization changed from the National Home Study Council to the Distance Education and Training Council, and in 2015, it was changed to the Distance Education Accrediting Commission (DEAC, 2016). DEAC accredits high schools, military schools, and postsecondary institutions in Australia, Canada, and the US. TESOL is one of the subject areas the council accredits. The US also has a system of regional associations of schools and colleges, such as the Western Association of Schools and Colleges (WASC), which accredit all aspects of these schools and universities, including online programs.

While accreditation is a direct measure of quality, other indirect means include participant preferences, which may measure engagement. Additionally, perceptions of workload can be considered a measure of OLCs category of institutional support. Have institutions providing OLTE examined the actual workload of teacher educators and adjusted compensation accordingly? An additional indirect measure that is not addressed in the quality standards discussed above is attitudes towards online education by a variety of stakeholders. Research in this area reports mixed results. The series of Babson reports on online higher education in the US (Allen & Seaman, 2013) indicates that fewer than one-third of chief academic administrators believe that their faculty accept the value and legitimacy of online education. This proportion has remained constant since 2003. Similarly, Huss's study of 326 principals in the US found that "[p]rincipals expressed apprehension about teacher dispositions and the 'social' aspects of teaching that may be compromised in an online program, as well as the general ethicality surrounding online courses" (2007, n. p.). These negative attitudes contrast with those found in a large-scale, multi-year study of online and on-campus graduates from K-8 teacher education programs in a large public education system (Chiero & Beare, 2010). They found that employment supervisors considered program completers to be well prepared or adequately prepared and that teacher students considered themselves well prepared or adequately prepared, using 12 measures of teaching. The measures of teaching included planning instruction, motivating learners, and teaching mathematics. Ratings for supervisors ranged from 80% (for teaching subjects other than math and reading) to 87% (for teaching math), while those for teacher students ranged from 76% (for teaching subjects other than math or reading) to 91% (for teaching reading). That study compared teacher students from online programs with those from on-campus programs. Supervising teachers found the online teacher students better prepared than the on-campus teacher students, while the online teacher students rated themselves as better prepared than their on-campus cohorts rated themselves. The researchers note that the online teacher education programs are rigorous and use a continuous improvement model, and that the online configurations they used were largely responsible for the high levels of preparation.

While accreditation is a direct measure of quality, other indirect means include participant preferences.

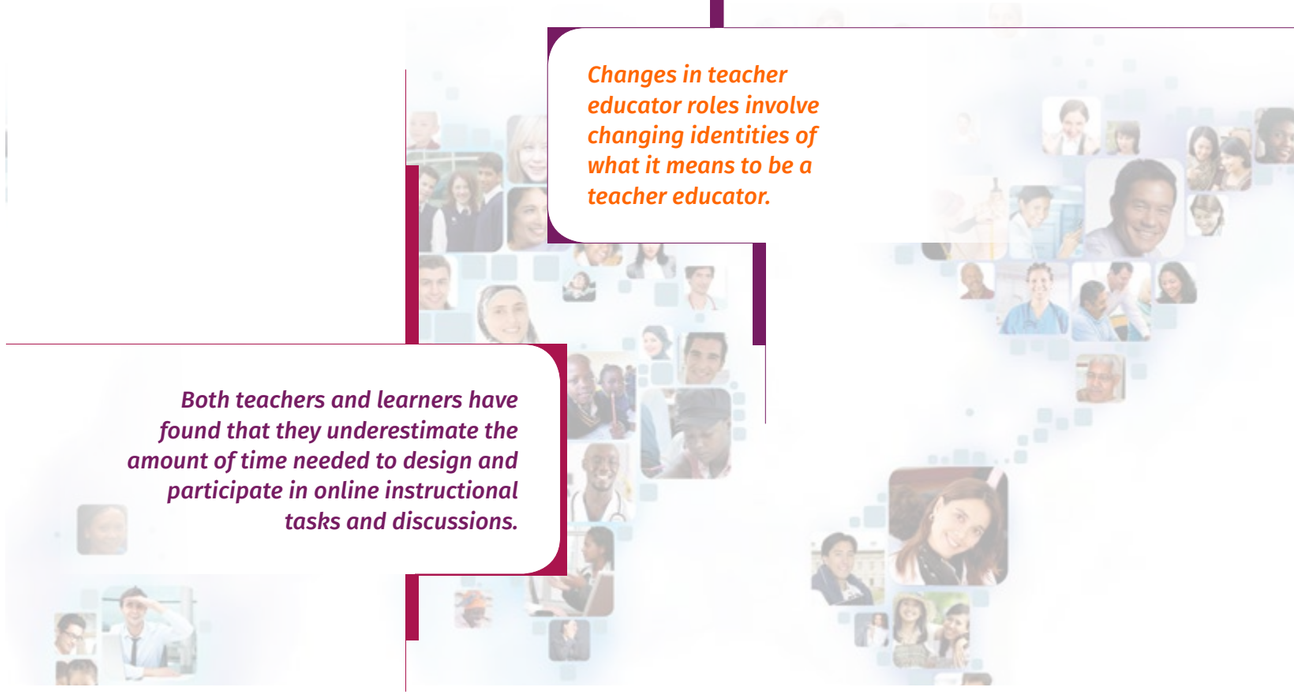
Because quality can be a very subjective characteristic, we sought to uncover quality through asking about teacher educators' qualifications and institutional accreditation, as well as participants' preferences for the various configurations of OLTE. We assumed that the quality of a course would have a bearing on one's preferences.

4.2.4 The Changing Roles of Teacher Educators and Teacher Students

One of the most commonly held beliefs about online learning is that the teacher acts as "the guide on the side" rather than the "sage on the stage." While these are catchy phrases, this view fails to address some of the major issues relative to the roles of teacher educators and teacher students in OLTE. Other researchers and practitioners have noted that for online learning to be effective, it requires scaffolding of learning (Wood, Bruner, & Ross, 1976) by the instructor (Bax, 2011; Lai, Ni, & Zhao, 2013; Lee, 2008; Murray & McPherson, 2006).

"In recent years, it has been recognised that eLearning is not merely another medium for the transmission of knowledge but that it changes the relationship between the teacher or trainer and learner" (Gray, Ryan, & Coulon, 2012, n.p.). Corbel asks the question, "How can I [the teacher] mediate most effectively between my learners and the content of the Internet? And how can I use the communication options of the Internet to enhance that mediation?" (Corbel, 2007, p. 1121). Motteram (2013) has argued further that "[w]e do not need to wait for phases of technological development [such as described by Warschauer] to succeed others or for technologies to become 'normalised', we simply need to use them to mediate our practice and explore the outcomes" (p. 182). Teaching online does not necessarily include being able to program or become a "techie," but rather modifying content, customizing systems for specific needs, and choosing and integrating applications appropriate for learner needs (Corbel, 2007).

Both teachers and learners have found that they underestimate the amount of time needed to design and participate in online instructional tasks and discussions. Teachers, for example, find that the time required to both design and teach online is far greater than in f2f teaching (Mills, Yanes, & Casebeer, 2009), and that they need additional time to read teacher student emails and respond to discussion list posts (Hall & Knox, 2009). Hall and Knox (2009), in their survey of OLTE, found that teachers needed to tailor their online discourse so that they were more precise than in f2f teaching in order to prevent misunderstandings. Other changes that have been identified include providing technical support, understanding the contexts and needs of distance learners, prompting to elicit online interaction, and developing an online social presence, as well as a cognitive presence (Murray, 2013). In the Murray 2013 study, teacher students, too, often took on the mediation role because some had greater technological expertise than their peers. These changes in teacher educator roles involve changing identities of what it means to be a teacher educator (and a teacher student) in a hyper-connected, globalized world.



5. Data Analysis

Quantitative data were analyzed using the *Qualtrics* software, which provided reports of both individual data and aggregated data. We were most interested in the aggregated data and in the descriptive statistics that allowed us to see the percentage of participants who responded to each of the questions and to different items within the questions, for example, on Likert-scale questions, on multiple-choice questions with multiple responses possible, and on rank-order items in which participants indicated their preferences. We focused on percentages in reporting findings from the quantitative data to make them easily accessible for the largest number of people. By carefully analyzing the participants' responses to these questionnaires, we hoped to provide a more complete picture of OLTE practices than the one we had prior to this study.

The purpose of collecting and analyzing qualitative data as well as quantitative data is to delineate some of the essential qualities of OLTE and help us better understand what OLTE is like in practice—how it works and how individual participants are affected by the processes and the choices available to them. In this research, we hoped to gather a large number of teacher voices (both teacher educators and teacher students), so that we can accumulate knowledge about OLTE from practitioners and, therefore, make informed instructional decisions. In analyzing the qualitative data, we focused on identifying a few central themes that could help us explain why and how OLTE operates as it currently does.

We had no way to estimate or predict the total number of qualitative responses that participants would provide for the individual questions on the questionnaire. In fact, the total number of people responding to items ranged from "no responses" to as many as 35% of the total participants for the questions that were analyzed for this report. (Note: Question Numbers 29, 30, and 31 on the questionnaire were not analyzed for this report but will appear in future reports.) We also gave participants considerable freedom to write as much or as little as they wanted. (That is, there were no word restrictions on the amount of prose that could be written for most items, and participants could always move on to the next question without writing or responding in prose.) We hoped that this system would allow participants to write about their experiences with OLTE that were most pertinent and that the process would allow them freedom to express their views. We reviewed the responses for each individual item for each survey. In some cases, we simply noted the responses because they were short answers or one- or two-word comments. We tracked the concepts that were repeated. In other cases, the questions generated considerable prose so that it was necessary to study the prose carefully and look for emergent and recurring themes among the responses. In these cases, we moved the responses to a spreadsheet and coded (and sub-coded) them until we had analyzed the data into succinct categories that were related to the main constructs represented in the questions.

By carefully analyzing the participants' responses to these questionnaires, we hoped to provide a more complete picture of OLTE practices than the one we had prior to this study.

In analyzing the qualitative data, we focused on identifying a few central themes that could help us explain why and how OLTE operates as it currently does.

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6. Findings

The findings are grouped under the research questions: participants, types of OLTE courses and programs, marketing of OLTE, accreditation of OLTE, reasons for choosing OLTE, configurations of OLTE, and perceptions of the effectiveness of OLTE. Each section includes data for both teacher educators and teacher student responses.

6.1 Participants

In trying to answer the first research question about who is participating in OLTE courses and programs in English, we focused on whether the participants were native speakers (NS) or non-native speakers (NNS) of English, their ages, and whether they had experience with OLTE in languages other than English. We use the terms *NS* and *NNS* as useful heuristics, even though they are highly contested and overlapping terms.

Because these surveys were taken online and could be taken from anywhere, we were less concerned about countries of origin, citizenship, and residency and more concerned with participant data as they relate to OLTE. An analysis of email and IP addresses shows that participants who took the survey were located in North America, Europe, Asia, South America, Australia, New Zealand, and the Middle East. We have no participant data on whether the different addresses that participants used in taking the surveys are related to their nationalities or citizenships, only that they are representative of where the participants were located when they took the surveys.

6.1.1 Age and Language Backgrounds

There were 446 participants in total in this study. A total of 137 teacher educators completed the first questionnaire (see Appendix A). In terms of age, the greatest number of participants (57%) were 50 or older, followed by 23% in their 40s, 19% in their 30s, and 1% in their 20s. Seventy-six percent (76%) were NS of English and taught in English, while 23% were NNS of English and taught in English. The remaining 1% were NNS of English who had taught OLTE courses in English, but also in other languages, such as Spanish, German, and Korean.

A total of 309 teacher students took the second questionnaire (see Appendix B). The greatest number of participants (42%) were in their 20s, 23% in their 30s, 18% in their 40s, and 17% in their 50s. Seventy-two percent (72%) were NS of English and took OLTE courses in English, and 24% were NNS of English and took courses in English. Four percent (4%) were NNS of English who had taken OLTE courses in languages other than English, such as Spanish, Hindi, Portuguese, and Arabic. It is interesting to note that the largest group of participants for teacher students is comprised of the youngest participants and that the largest group of teacher educators was made up of the oldest participants, which is likely a reflection of the ELT profession in general (see Table 4).

Table 4: Rank Ordering of Groups by Size

Teacher Educators		Teacher Students	
Rank order by percentage of total	Age of participants	Rank order by percentage of total	Age of participants
1 (57%)	50 +	1 (42%)	20 – 29
2 (23%)	40 – 49	2 (23%)	30 – 39
3 (19%)	30 – 39	3 (18%)	40 – 49
4 (1%)	20 – 29	4 (17%)	50 +

6.1.2 Course Instructors

Questions 10 and 11 on the questionnaires focused on who was teaching OLTE courses—experienced online instructors, experienced teacher educators, qualified instructors (i.e., with formal training in OLTE), tutors, or teaching assistants (TAs). We also added the category "other" and a space for comments. There is no formal qualification, such

as a certificate or degree, for teaching OLTE courses. We were, therefore, interested in how many teacher educators considered themselves to be "qualified" instructors based on either formal training (e.g., having taken courses or workshops) or experience in designing, developing, and delivering OLTE, and whether they would note any misgivings about their qualifications.

In addition, we were interested in how the teacher students perceived their OLTE course(s) and program teacher educators. Ninety-one percent (91%) of the teacher educators indicated that they were experienced teacher educators. Seventy-eight percent (78%) considered themselves to be experienced online instructors because they had taught online courses and 72% because they had specifically taught OLTE courses previously. Sixty-seven percent (67%) had taken courses or workshops about teaching online and considered themselves also to be "qualified" OLTE instructors. Seventy percent (70%) had designed and developed OLTE courses, and so considered themselves to be "qualified" and experienced. Several teacher educators said that they had been asked to mentor others and believed their positions as mentors were recognition of the fact that they were qualified. Five percent (5%) were tutors and 3% were teaching assistants (TAs). Ninety-one percent (91%) of the teacher students said that they had taken courses that were taught by experienced instructors, as well as qualified instructors, 6% by tutors, 11% by TAs, and 6% said they had no instructor but simply worked through materials on their own.

6.1.3 Experience with Technology

Question 12 on the questionnaire addressed participants' experiences with technology. We were most interested in the confidence levels of participants involved in OLTE, because understanding confidence levels for teacher students is important for teacher educators, course designers, and administrators. Confidence levels impact how successful teacher students will be in learning new concepts and materials online, how much technology support they will need during the courses, and whether or not online tutorials will need to be created. Teacher educator confidence levels are also important and affect both teacher student learning and resource allocation. Key questions are (1) who is responsible for answering students' questions concerning the use of the LMS, and (2) if teachers are responsible, are they qualified to do so?

Twenty-two percent (22%) of the teacher educators said that they were worried and not confident about using the technology required for the OLTE courses and programs. Forty-four percent (44%) said that they were somewhat worried, but thought they could figure it out. About one quarter of the teacher educators (23%) said they were confident, and 11% said they were very confident.

While the above data provide a useful snapshot of confidence levels for the teacher educators at one point in time, qualitative data are also useful. Seventeen percent (17%) of the teacher educators provided additional comments concerning their experience with technology. Several respondents commented on the importance of understanding the developmental process related to technology and reiterated that skills relative to the use of the technology develop in many different ways for different individuals. Teacher Educator 1 explained how her skills developed as she migrated bit by bit from a f2f course to an online course:

> *I first taught one of my online courses as a f2f course for two years and began supplementing it [the f2f course] more and more with online materials. Each time I taught the course, I migrated additional components online (e.g., threaded discussions and chats). Then in 2000, I moved the entire course online, using my own Web pages and YahooGroups for interaction and file/link uploads. Finally, the course was migrated to a course management system (eCollege), which housed all components in one space and made things even easier to manage technologically speaking. The synchronous component, however, was still conducted outside of the CMS, using YahooGroups at first, then YahooMessenger, then Skype because the CMS did not provide for two-way communication. I developed my skills with the technology over time and little by little as my course developed.*
>
> *(Teacher Educator 1)*

Teacher Educator 2 reminds us of the importance of having mentors in the development of technical skills. The mentor/apprentice relationship has been one of the major ways in which expertise with technology has been developed among teacher educators, as shown in this comment:

> *I did not have confidence in the beginning, but I had a mentor in whom I had confidence, and I had taught the content in other modes (e.g., f2f), so I was fairly confident with the content and was sure I could get the right advice about technology when I needed it.*
>
> *(Teacher Educator 2)*

Teacher Educator 3 reminds us of how expertise in OLTE has developed for many teacher educators.

> *To mimic the real classroom environment as much as possible (it would allow for f2f interaction, group work, sharing ideas etc.).*
>
> *(Teacher Educator 3)*

Teacher students present a somewhat different profile from the teacher educators in terms of their overall confidence with the technology. Only 14% of the teacher students said that were worried and not confident, and 30% said they were somewhat confident but knew they could figure it out. On the other hand, 24% of the teacher students stated that they were confident with the technology, and 32% said they were very confident, as compared to 11% for the teacher educators.

6.1.4 Technical Support

Question 12 on the teacher educators' questionnaire asked about teacher educators' level of confidence in providing technical support to teacher students. Question 12 on the teacher students' questionnaire and Question 13 on the teacher educators' questionnaire asked participants about the effectiveness of the technical support they received (or provided by the teacher educators). Question 13 on the teacher students' questionnaire and Question 14 on the teacher educators' questionnaire asked participants about the effectiveness of the technical support they received from technical support staff. There were several concerns that provoked these questions. First of all, we were particularly interested in teacher educators' responses because of the changing roles for teacher educators in OLTE courses and programs. Some programs assume that teacher educators will offer technical support to teacher students in their courses, thereby proposing a new role that teacher educators in OLTE are expected to fulfill. We also see that programs that have the expectation for teacher educators to provide technical support to teacher students provide no technical support for the teacher educators.

Another concern we had was about the availability of technical support staff. Some programs provide technical support personnel to answer questions for both teacher educators and teacher students, while others do not. We wanted to learn more about the prevalence of each type of program. A related concern was whether the expectation for teacher educators to provide technical support to their teacher students was part of their job descriptions as instructors of OLTE courses. Finally, we wanted to know more about technical support personnel, the roles they played, and students' perceptions of their effectiveness.

6.1.4.1 Technical Support from Teacher Educators

Given the levels of confidence expressed by the teacher educators in answer to Question 12 on the questionnaire (i.e., only 11% stated they were very confident with the technology), we were interested in how well they addressed the teacher students' questions related to the technology. When asked about the quality of technical support they

offered their teacher students, they provided the following responses: 25% believed they were helpful depending on the question, 40% offered a reasonable amount of help, 5% believed they were helpful, and 19% believed they were very helpful. Only 1% indicated that they were not helpful and 11% provided no technical support because there were technical support personnel designated to provide technical support to students.

Teacher educators were also asked about the support they received from technical support personnel. Six percent (6%) stated that they did not receive assistance from technical support staff. In terms of the effectiveness of the support they did receive, most teacher educators found the support reasonable (19%), helpful (11%), and very helpful (45%). In the category of technical support personnel, a number of teacher students included their teacher educator mentors and other experienced online teachers, rather than purely, non-teaching technical support personnel, so it is difficult to sort out the variables. Here are some sample comments from the teacher educators:

> *I think I was asked to teach an online course because I was quite good with technology, or at least figuring things out for myself. I was completely unprepared for the questions and issues that my students were having. They had no one to ask but me.*
>
> *(Teacher Educator 4)*

> *Most of the time, the IT staff at my college had no clue how to deal with an online course (mine was the first one in 2000), so I had to figure it out myself. Technical support offered by the CMS [content management system] was sometimes helpful.*
>
> *(Teacher Educator 5)*

> *Fortunately in our program both staff and students can take the truly technical questions to a good designated technical support person. I know that some programs don't have that benefit.*
>
> *(Teacher Educator 6)*

> *I worked in two different institutions, one with the expectation that teachers were the technical support and one that provided technical support..*
>
> *(Teacher Educator 7)*

> *I've responded, but in all honesty, my response greatly depends on the situation and the program that I am working in when I am being contacted. It's been all of the above.*
>
> *(Teacher Educator 8)*

> *My mentor was my technical support!*
>
> *(Teacher Educator 9)*

> *We teacher educators support one another and try to solve problems; we have no technical support.*
>
> *(Teacher Educator 10)*

The responses for the teacher students relative to the technical support they received from the teacher educators were very similar to the perceptions the teacher educators offered on their own performances. Table 5 presents the perceptual data in terms of the percentages in each category of response.

Table 5: Perceptions of Technical Support Offered by Instructors

Perceptions of Technical Support Offered by Instructors	Teacher Educators	Teacher Students
Not helpful	1%	3%
Dependent on question	25%	20%
Reasonable	40%	20%
Helpful	4%	24%
Very helpful	19%	20%
Not provided	11%	13%

There are two ways in which we might look at the quantitative data in Table 5. We might view teacher educators' and teacher students' perceptions of the technical support as quite similar to each other, especially if we combine the response categories of "reasonable" and "helpful," as both total 44% across the two groups. In addition, about one-fifth to one-quarter of the participants noted that the teacher educators' abilities to provide technical support were dependent on the questions they were asked, indicating that the role for teacher educators as technical support staff was an evolving one with overall expertise likely developing over time. It should also be noted that about one-fifth of the participants in each group perceived teacher educators as "very helpful" in providing technical support, and a very small percentage from each group (i.e., 1% of teacher educators and 3% of teacher students) perceived the course instructors as "not helpful" in providing technical support. It is clear that there are teacher educators who do not provide technical support and that there is agreement between the two groups relative to this point. This fact suggests that the role of providing technical support for teacher students is not a role that teacher educators in some programs are expected to provide.

We might also view the data from the two groups as quite different from each other. The most prominent differences in these data can be seen in the responses between the two groups at the level of "reasonable" and "helpful," which contrast more strongly than do the other data. This result suggests that there may be a type of perceptual threshold or a point at which perceptions of the effectiveness of technical support diverge between the two groups. In this case, teacher students' perceptions are more positive than teacher educators' perceptions. Forty percent (40%) of teacher educators thought that the amount and quality of the technical support they provided was "reasonable," while only 20% of the teacher students thought that this was the case. Only 4% of the teacher educators thought the technical support they provided was "helpful" compared to 24% for the teacher students. It seems that teacher students had more favorable perceptions of the technical support provided by teacher educators than did the teacher educators themselves. (see qualitative data presented in Section 6.1.3, Experience with Technology.)

In the qualitative data, several teacher students mentioned the fact that their course instructors (i.e., the teacher educators) did not provide technical support. The teacher students were clear on the fact and stated that it was not an expectation for the course instructors to do so. However, other teacher students were critical of the technical support that their course instructors provided, as is evident in their concerns about delays in responding to technical questions, instructors offering possible solutions to technical problems (which sometimes did not work), offering "emotional" support with no definitive answers relative to the technical issues, or stating that they could not answer the question but would find out. Clearly, these data show that the roles and responsibilities of teacher educators relative to providing technical support are evolving and that in a few cases, teacher students have expectations and needs for technical support that are not being provided.

The roles and responsibilities of teacher educators relative to providing technical support are evolving.

6.1.4.2 Technical Support from Technical Support Personnel

Some OLTE courses and programs have non-teaching technical support staff for teacher educators and teacher students, and we were

interested in the perceptions of participants relative to the support they received from this group. The responses for the teacher educators and teacher students were quite different for two response categories. Forty-five percent (45%) of the teacher educators perceived the support provided by the technical support staff to be "very helpful," while only 16% of the teacher students responded in this category. The differences in these responses could be related to the fact that teacher students requested very little support from technical support personnel. Only 3% of the teacher educators stated that they did not receive technical support from technical support staff; however, 44% of the teacher students indicated that they did not receive support from technical support staff.

When technical support staff was available, only 3% of the teacher educators did not take advantage of it compared to 44% of the teacher students. These data make sense when we consider that the largest group of teacher educators is made up of individuals aged 50+ years, and the largest group of teacher students is made of up individuals in their 20s, many of whom are digital natives (Prensky, 2001) with possibly high confidence levels in their own technical abilities. The difference between these two groups is also evident in the fact that 32% of the teacher educators were not confident with the technology, while only 11% of the teacher students responded in this category. These data suggest that the teacher educators in this study would be more likely to reach out to technical support staff and that teacher students would be less likely to do so.

6.2 OLTE Courses and Programs

We use the term *course* to refer to individual units that either comprise a program or are stand-alone events, such as workshops. We use the term *program* to refer to a unified set of courses that collectively form a curriculum leading to a certificate or degree. In trying to answer Research Question 2 and its subcategories, we first tried to identify the courses and programs that are offered within OLTE and then tried to understand the online offerings relative to these two concepts. We also focused on how courses and programs were being marketed and on whether they were accredited, because information about accreditation may give us some insights into issues related to quality assurance.

6.2.1 Courses vs. Programs

We asked participants to tell us if the OLTE courses in which they were involved were stand-alone courses or workshops or were part of a program. We also wanted to know if the courses led to some type of certificate or certification, if they were part of a college or university, and if the latter, whether they were masters-level or doctoral-level courses. Table 6 presents data for both teacher educators and teacher students relative to their understandings of the basic conceptualizations of courses and programs. The left-hand column lists the types of courses and programs that were queried in the survey. The middle and right-hand columns show the percentages of teacher educators and teacher students who were participating in the different types of courses and programs. Courses and programs that lead to certificates or certification and masters-level courses were the most frequently selected by these participants. However, it is also important to note that about one-quarter of the participants (25% of teacher educators and 23% of teacher students) chose to participate in courses and programs that were stand-alone courses and not connected to certificates, certification, or degrees.

Table 6: Types of Courses and Programs

Courses and Programs	Teacher Educators	Teacher Students
Stand-alone courses or workshops	25%	23%
Courses leading to certificates or certification	58%	45%
Courses in college or university programs	26%	40%
Masters-level courses	48%	45%
Doctoral-level courses	10%	7%

6.2.2 Time Descriptors for Courses and Programs

Online courses are described and then marketed in many different ways relative to time. Some OLTE courses and programs are described by the number of hours required, while others use terms such as *days*, *weeks*, *months*, and even *years*. Table 7 presents data on the use of these terms in the courses and programs for which participants were involved. The time descriptors used for OLTE courses and programs appear in the left-hand column. The percentages for the number of participants who were involved in courses and programs using the descriptors appear in the middle and right-hand columns.

Table 7: Marketing OLTE Courses and Programs

Time Descriptors	Teacher Educators	Teacher Students
Hours	34%	28%
Days	8%	5%
Weeks	32%	23%
Months	11%	8%
Years	20%	23%
Quarter, semester, or term	36%	51%

The most frequently used descriptors for OLTE courses and programs in schools, colleges, and universities were *quarters, terms*, and *semesters* to describe the length of the OLTE courses and programs. The time descriptors *hours* and *weeks* were also regularly used. The most common descriptor for *years* was a *two-year* MA (masters of arts). *Months* and *days* were less frequently used to market OLTE courses and programs.

6.2.3 Accreditation of OLTE Courses and Programs

We were particularly interested in whether the courses and programs in which the teacher educators and teacher students were involved were accredited by governmental or non-governmental agencies, and if so, which accreditation bodies might be involved. We were also interested in knowing if the participants knew whether the courses and programs were accredited, as this fact may give us insight into the importance of accreditation as a factor that OLTE participants used in deciding either to teach OLTE courses or participate in them as teacher students.

The data show that 64% of the teacher educators and 40% of the teacher students indicated that the courses or programs in which they were involved were accredited by governmental agencies, such as WASC (the Western Association of Schools and Colleges) or non-governmental agencies, such as CAEP (the Council for the Accreditation of Educator Preparation) and ASQA (Australian Skills Quality Authority). Nine percent (9%) of the teacher educators and 13% of the teacher students said that the courses or programs were not accredited. Furthermore, 27% of the teacher educators and 47% of the teacher students indicated that they did not know. For 36% of the teacher educators and 60% of the teacher students responding to these questionnaires, accreditation was apparently not a factor in making a decision to participate in OLTE courses and programs.

6.2.3.1 Indirect Indicators of Quality

Accreditation of OLTE courses and programs is only one indicator of quality. In the qualitative data there were indirect indicators of quality as reflected in the comments teacher students made about teacher educators' experiences. These comments included the fact that they had taken formal courses and workshops about online teaching, the satisfaction expressed by the teacher students relative to the responsiveness of the teacher educators, the teacher educators' knowledge about teaching, the feedback and assessments provided, and the technical support provided by the teacher educators. Here are some illustrative comments from the teacher students:

I was lucky to have such a knowledgeable teacher in this course. She knew so much about teaching.

(Teacher Student 15)

When I had a question about the course, and even questions about my teaching assignment, my course instructor was helpful.

(Teacher Student 20)

I was worried about taking an online course, but my instructor was so supportive in the beginning. It really helped relax me about online stuff.

(Teacher Student 7)

My instructor knows so much about TESOL! Very knowledgeable! I want to be like her. I re[a]lly do.

(Teacher Student 62)

My instructor read everything that I wrote and commented on my work. She made me feel so excited about teaching. The class was personal. I received more feedback from her in the online course than I ever receive in my other courses.

(Teacher Student 42)

6.2.4 Types of Support for OLTE Courses and Programs

OLTE courses and programs vary greatly in terms of teacher educators' and teacher students' access to different types of support. About half of the participants indicated that they had access to a brick-and-mortar library, while three-quarters had access to an online library. Over half of the participants (62% for teacher educators and 70% for teacher students) had convenient access to open-source materials, and about three-fourths of the participants indicated that they also had access to online tutorials.

6.2.5 OLTE Course Workload

The question about workload for online OLTE courses in comparison to f2f courses is particularly interesting for us as researchers, because we have been involved in OLTE as teacher educators for a number of years; consequently, we have our own opinions and perceptions about the relationship between the workload for OLTE courses and f2f courses. In addition, we have also queried teacher students in our own courses, both during and after the OLTE courses and in both written and oral feedback forms. The data in the current study relative to the perceptions of workload in OLTE courses differ between teacher educators and teacher students in important ways (see Table 8).

Table 8: Perceptions of Workload between OLTE and f2f Courses

Perceptions of Workload	Percentage of Teacher Educators Responding	Percentage of Teacher Students Responding
Very light compared to f2f courses	4%	3%
A little lighter than f2f	10%	16%
The same as f2f	12%	43%
A little heavier than f2f	28%	26%
Much heavier than f2f	46%	12%

Teacher educators and teacher students expressed very different perceptions of workload in two categories. Forty-three percent (43%) of the teacher students believed that the workload for OLTE and f2f courses was about the same, while only 12% of the teacher educators expressed this belief. However, 46% of the teacher educators believed that the workload for OLTE was much heavier than f2f while only 12% of the teacher students did so, suggesting that teacher educators and teacher students experience the workload much differently.

6.3 Learning Management Systems

LMSs vary greatly in terms of the features they employ to promote learning and manage the learning environment. Even though learning management systems have greatly improved in recent years, there is likely no single LMS that includes all features that teacher students and teacher educators value. To answer Research Question 3, we tried to determine which of the LMSs were most commonly used by the participants, which ones they preferred, what features they included, and how they evaluated these features in terms of their own experiences as teacher educators and teacher students.

6.3.1 Commonly Used LMSs

We selected five primary LMSs that were most prominently mentioned in the literature and asked students to rank the LMSs based on frequency of use. The most commonly used LMSs for teacher educators in this study were Blackboard, followed by Moodle, Canvas, WebCT, and locally designed LMSs. Teacher students most frequently used Moodle, followed by Blackboard, WebCT, locally designed LMSs, and Canvas.

6.3.2 Preferences for LMSs

We were also interested in participants' preferences relative to the five LMSs and also their preferences for other applications they may have used in their OLTE courses and programs. In terms of their preferences for the specific LMSs in the questionnaire, teacher educators preferred WebCT, followed by locally designed LMSs, Blackboard, Moodle, and Canvas. Teacher students preferred locally designed LMSs, WebCT, Moodle, Blackboard, and Canvas.

However, collectively teacher educators ranked "other" LMSs and applications as second in their overall list of preferences and teacher students ranked "other" as first in their list of preferences. Both groups provided an extensive list of "other" LMSs and applications they used in the OLTE courses and programs to supplement features of LMSs. These applications appear in alphabetical order in the list that follows:

Adobe Connect	Edmodo	SabaCentra
ANGEL	Electa	Sakai
ANVILL	Fronter	Schoology
Course Forum	Googledocs	SecondLife
Coursera	GoToMeeting	Skype
Desire2Learn (D2L)	Jupiter Grades	TopHat
Dropbox	Ning	Wiki pages
eCollege	ObaVerse	WizIQ
eDx	Pbworks	Yahoo Groups

6.3.3 Features of LMSs

As teacher educators, we have both taught numerous OLTE courses, using at least five different LMS platforms between us. We have experience in using different features of LMSs and have our own opinions about their effectiveness. Therefore, the items on the questionnaires that specifically queried teacher educators and teacher students about features of LMSs were motivated, in part, by our own experiences and interests. We created a list of features of LMSs based on reviews of LMSs, our own experiences in using them, and on the frequency and prominence of the features in the literature. These LMS features are conceptualized as follows:

- Applications for asynchronous discussions
- Applications for synchronous discussions
- Assessment for learning

- Easy upload of files and online text entry for assignment
- Effective messaging and communication system
- Flexibility
- Online tutorials
- Opportunities for interaction
- Space to store personal files
- Tracking student progress and determine grades
- Transparency

These concepts were presented in the questionnaires as statements that related to the specific experiences of teacher educators or teacher students. For example, "opportunities for interaction" was restated for teacher students as "I have opportunities to interact with my peers and the course instructor" and for teacher educators as "My students have opportunities to interact with peers and with me as the course instructor." We also included a category of "other" to encourage participants to identify features of LMSs that may not have been included in our list.

6.3.4 Participants' Preferences for Features of LMSs

We asked participants to provide us with a list of their preferred top four features for LMSs from the list above. The percentages are derived from the total number of participants who selected the feature as one of their top four features. The rankings were derived from the percentages. Because there was a tie in the rankings for the teacher educators' data, we have followed the convention used in statistical reporting (see Bailey & Curtis, 2015, pp. 129-130). We use this convention because we have no way of knowing which identical score should be ranked 3 or 4 or 9 or 10. These ranks do not exist because they have been averaged (i.e., 3 + 4 ÷ 2 = 3.5 and 9 + 10 ÷ 2 = 9.5). These data for teacher educators and teacher students appear in Table 9.

Table 9: Preferences for Features of LMS

Features of LMSs	Rankings and Percentages for Teacher Educators	Rankings and Percentages for Teacher Students
Applications for asynchronous discussions	6 (51%)	7.5 (48%)
Applications for synchronous discussions	9.5 (39%)	11 (39%)
Assessment for learning	9.5 (39%)	7.5 (48%)
Easy upload of files and text entry for assignments	3.5 (58%)	2 (92%)
Effective messaging and communication system	2 (59%)	3 (90%)
Facilitation of group work	3.5 (58%)	10 (42%)
Flexibility	5 (53%)	4 (78%)
Online tutorials	12 (37%)	9 (47%)
Opportunities for interaction	1 (67%)	5 (68%)
Space to store personal files	11 (38%)	12 (31%)
Tracking course progress and grades	8 (40%)	1 (95%)
Transparency	7 (46%)	6 (52%)

Preferences expressed by the two groups were similar in a number of ways in terms of how the items were ranked. For example, "easy upload of files and text entry for assignments," "effective messaging and communication system," "flexibility," and "opportunities for interaction" were ranked in the top five in each list while "space to store personal files" was ranked 11 and 12 on the lists. However, in terms of preferences configured as percentages, we see differences between the two groups. The three highest percentages for the teacher educator group were 67%, 59%, and two items at 58%, while the highest percentages for the teacher student group were 95%, 92%, and 90%, showing that there was stronger agreement among teacher students as to the features of LMSs they preferred. There were five features for teacher educators that differed very little in terms of the percentage of responses: "online

tutorials" (37%), "space to store personal files" (38%), "assessment for learning" (39%), "tools for synchronous learning" (39%), and "tracking course progress and grades" (40%), although they were ranked 8 – 12. A similar situation is apparent in the percentages for teacher students. The top three items, "tracking course progress and grades," "easy upload of files and text entry," and "effective messaging and communication system" differ very little in terms of percentages even though they were ranked 1, 2, and 3.

In addition, 9% of the teacher educators and 11% of the teacher students responded in the "other" category, identifying additional features, such as the importance of an "intuitive interface" and the need for features to be "user-friendly." Twenty (20) participants among the total group of participants stated that they did not believe that they knew enough about learning management systems to offer any additional suggestions (e.g., "This is my first online class, and I hardly know where to click or how to do anything. What would I know?" [Teacher Student 68]), while other participants wrote rather sophisticated comments about the LMSs (e.g., "I find it frustrating that Blackboard accepts only a limited number of file types for uploads and that teachers don't anticipate file types in setting up assignments" [Teacher Student 42]). The differences in these statements indicate that teacher students had a wide range of skills and experiences with LMSs.

Teacher students showed greater agreement than did teacher educators as to the features of LMSs they preferred. The highest percentages for teacher students were 95%, 92%, and 90%, followed by 78% and 68%. In contrast, the highest percentage for teacher educators was 67% with the next highest percentages being 58% and 59%.

6.4 Reasons for Choosing OLTE

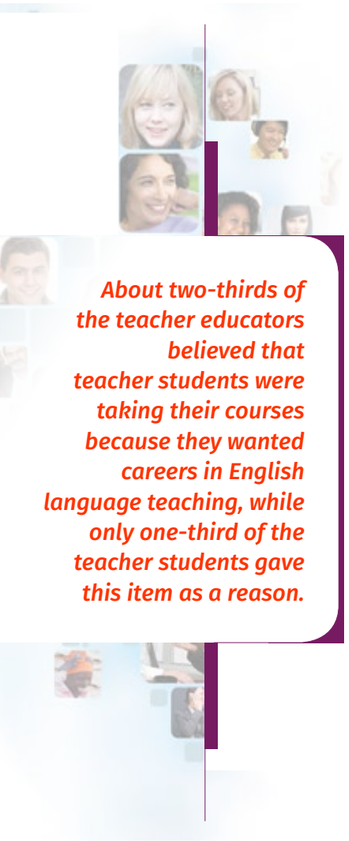
Understanding the reasons why individuals choose to participate in OLTE courses and programs is important for program administrators who have the responsibility for developing and marketing programs, and for instructors who are often responsible for course design, in addition to the delivery of content and the management of learning. It is also important for program administrators and directors who sponsor teachers' OLTE course enrollments. They must therefore be concerned with teachers' perceptions of the effectiveness of the courses as well as with course outcomes in terms of teacher performance as a result of participation in the OLTE courses.

We were interested in the primary and specific reasons for participants' choices. Questions 8 and 9 on the questionnaires were designed to collect data concerning participants' reasons for choosing OLTE courses; Question 8 reflected general reasons and Question 9 the specific reasons for choosing OLTE over f2f courses. We created two finite lists based on information that teacher students had given us in previous surveys in our own OLTE courses and that we compiled from an online search. We also added a category called "other" for both lists, in which we gave all participants the option of including reasons that were not among the top seven. In other words, in the survey for teacher educators, we asked participants to tell us the reasons they thought their teacher students chose the OLTE courses and programs. In the survey for teacher students, we asked the participants to tell us why they personally chose the OLTE option.

Question 8 listed eight reasons for choosing OLTE courses:

1. A requirement for the school or institution.
2. For overseas travel or to earn money while traveling.
3. To pursue a career as an English as a second/foreign language teacher.
4. To upgrade teaching credentials or skills.
5. To improve teaching and knowledge of the profession.
6. A requirement for a certificate or degree program.
7. A recommendation or requirement from my employer.
8. Other. Please write in the space provided.

The primary reasons that teacher students said they were enrolled in OLTE courses and programs were because they were part of the certificate or degree program (61%) or they were required by their school or institution (43%), suggesting that many teacher students in this study were in the process of gaining credentials for English language teaching. About one-third of the participants in each of the following categories indicated that they chose their OLTE courses and programs because they wanted to improve their teaching and gain more knowledge



About two-thirds of the teacher educators believed that teacher students were taking their courses because they wanted careers in English language teaching, while only one-third of the teacher students gave this item as a reason.

about the profession (39%), upgrade their teaching credentials (30%), or have a career as an English language teaching professional (33%). Few teacher students were enrolled in OLTE courses and programs because they wanted to travel or teach English and travel. Only 12% indicated that the courses were recommended or required by their employer. This result should be considered against the backdrop of the overall profile of the total number of participants who responded to the questionnaire who were involved in academic rather than workplace contexts. Another reason mentioned by teacher students that was not on the list was that they were living overseas or far from a campus offering programs for English language teaching.

Teacher educators' perceptions of the reasons that teacher students were taking their courses differed considerably. About two-thirds of the teacher educators believed that teacher students were taking their courses because they wanted careers in English language teaching, while only one-third of the teacher students gave this item as a reason. Forty-four percent (44%) of the teacher educators believed that their courses had been recommended or required by employers, while only 6% of the teacher students cited this fact as a reason. Forty percent (40%) of the teacher educators cited overseas travel and teaching English as a reason the teacher students were taking the OLTE courses and programs, while only 11% of teacher students actually gave overseas travel as a reason.

Question 9 listed specific reasons for choosing OLTE courses over f 2f courses:

1. Schedule conflicts between work and f2f classes.
2. Schedule conflicts with commitments other than work.
3. Online courses are easier.
4. No option.
5. Friends or colleagues recommended the course.
6. Online courses are cheaper than courses on campus.
7. Online courses offer more flexibility than f2f courses.
8. Ability to study at one's own pace.
9. Other. Please write your reason(s) in the space provided.

Table 10 presents the percentages for each group for each of the top reasons. Participants were asked to check all reasons that applied to them.

Table 10: Reasons for Choosing OLTE Over f2f Courses

Reasons for Choosing OLTE	Percentage of Teacher Educators Responding	Percentage of Teacher Students Responding
1. Schedule conflicts between work and f2f classes.	84%	42%
2. Schedule conflicts with commitments other than work.	57%	25%
3. Online courses are easier.	26%	13%
4. No f2f option.	48%	37%
5. Friends or colleagues recommended the course.	41%	11%
6. Online courses are cheaper than f2f courses on campus.	16%	6%
7. Online courses offer more flexibility than f2f courses.	88%	60%
8. Ability to study at one's own pace.	52%	40%
9. Other. Please write your reason(s) in the space provided.	23%	21%

Item 7, "Online courses offer more flexibility than f2f courses," ranked the highest in both groups. Eighty-eight percent (88%) of teacher educators believed that their teacher students chose OLTE options because the online option offered so much flexibility in terms of managing their time, and 60% of the teacher students stated that they chose an OLTE option for the same reasons. The item with the second highest percentages in each group was Item 1. Eighty-four percent (84%) of teacher educators believed that teacher students chose OLTE

because they worked and could not attend f2f classes, and 42% of the teacher students indicated that they chose the OLTE option for that reason. As discussed above, DL and its online form of delivery are often designed for those who cannot attend brick-and-mortar institutions for various reasons. This observation is borne out by these data. The items that were ranked the lowest (i.e., Items 3, 5, and 6) were also ranked the same between the two groups. The percentages for the teacher students (i.e., 13%, 11%, and 6%) were similar for these rankings.

When we look at percentages, we see that teacher educators' and teacher students' perceptions differed in a number of areas that were surprising. For example, a greater percentage of teacher educators thought that teacher students chose OLTE courses over f2f courses because of conflicts with work schedules (84%) and non-work commitments (57%), while only 42% and 25% of teacher students indicated they chose OLTE courses for these reasons. Forty-one percent (41%) of teacher educators believed that the teacher students were taking their courses because they had been recommended, while only 11% of teacher students indicated that was so. Another surprising difference was that 26% of the teacher educators thought that teacher students would choose the OLTE courses because they would be easier than f2f courses, but, in fact, only 13% chose this issue as a reason. It seems that teacher students did not choose OLTE courses because they were easier or cheaper.

Twenty-three percent (23%) of participants (N = 103) offered additional reasons for taking OLTE. We mention three reasons that were noted multiple times. Six (6) teacher student participants believed that the OLTE option would provide them with courses that would be of higher quality than the f2f option, stating that because of the use of technology the courses would be more up to date than the f2f courses and present current research. Other teacher students mentioned that they chose the online option because the professor was experienced and well recognized. Ten teacher students (10%) affirmed that the online option was the only one available and that if the f2f option had been available, they would have chosen it. Two (2) teacher educators said they loved computers and technology and wanted to learn more about online education; therefore, they chose to teach the online version of the course.

6.5 Configurations of OLTE

For the purposes of this study, OLTE courses and programs were configured into five different types—enhanced, blended/hybrid, flipped, online with a synchronous component, and asynchronous online, based on how online technologies are being implemented in the design of courses. (See Table 2 for more information on these different course configurations.)

6.5.1 Experiences with Configurations of OLTE

We were particularly interested in the total number of participants (both teacher educators and teacher students) who had experience with these different configurations, because this knowledge may give us more information about the types of OLTE courses being offered and frequency with which they are being offered, as reflected in the percentage of teachers who had experience with the different configurations. Table 11 presents the total percentages for each of the configurations for each group of participants based on experience.

Table 11: Participant Experience with Different Course Configurations

Types of Course Configurations	Teacher Educators	Teacher Students
Enhanced	52%	39%
Blended/hybrid	43%	43%
Flipped	15%	6%
Online with a synchronous component	38%	28%
Asynchronous online	57%	60%

Both teacher educators and teacher students had the most experience with asynchronous online OLTE courses, followed by blended/hybrid for teacher students and enhanced for teacher educators. Blended/hybrid courses have become popular in recent years. The sample quote

below from Teacher Student 29 offers additional information about the reasons for the growth in popularity of blended or hybrid courses:

> *I like the blended/hybrid courses because my feeling is that sometimes organic questions and discussions come up in a f2f class that wouldn't necessarily come up in an online course, so it's good to have at least some f2f contact.*
>
> *(Teacher Educator 29)*

Both groups of participants indicated that they had the least experience with flipped courses and totally online courses with a synchronous component (meeting virtually in real-time).

6.5.2 Perceptions of Delivery Configurations

In addition to participants' experiences with the different configurations of OLTE courses and programs, we also asked participants to tell us which configurations they preferred and the reasons for their preferences. The rank order of preferences based on percentage of responses for participants on each of the questionnaires appears in Table 12. Items ranked "1" are the highest ranked items.

Table 12: Participants' Preferences for Configurations of OLTE

Configurations of OLTE	Rankings for Teacher Educators	Rankings for Teacher Students
Enhanced	2	2
Blended/hybrid	1	4
Flipped	4	5
Online with a synchronous component	3	3
Asynchronous online	5	1

Teacher educators and teacher students show some similarities in their preferences for the different configurations of online courses, for example, an enhanced course and a totally online course with a synchronous component are ranked the same (i.e., "2" and "3") across groups. However, there are also major differences between the preferences. The most striking difference is for a totally online course with no synchronous component, which was ranked "5" by teacher educators and "1" by teacher students. Blended/hybrid configurations are ranked "4" by teacher students and "1" by teacher educators.

6.5.3 Reasons for Participants' Preferences

In order to determine the reasons for participants' preferences, we created a list of possible reasons that participants might prefer some course configurations. We asked participants to check all of the reasons that applied in determining their preferences. The list was not meant to be exhaustive, so we added an item category "other" so that participants could suggest other reasons that might not have been included on the list, which appears as follows:

1. More f2f interaction between students and instructors.
2. More opportunities for peer interaction.
3. Flexibility in scheduling assignments.
4. More opportunities for students to work at their own pace.
5. More opportunities for using online technologies.
6. Preference for using online technologies.
7. Less overall work.
8. Preference for working alone
9. Ability to access course materials anywhere in the world.
10. More opportunities to solve problems and develop critical thinking skills.
11. More interesting.
12. Other reasons. Please specify.

The teacher educators in this study placed importance on providing teacher students with opportunities for interaction and on designing and delivering OLTE courses and programs with interactional components.

Teacher educators and teacher students ranked Items 3, 4, and 9 as their top three reasons for preferences for configurations of courses (see Table 12). What these three items seem to have in common is that they focus on flexibility—flexibility in terms of access to course materials, scheduling, and individualized learning. Item 6—a preference for using online technologies—was ranked fourth by teacher students, and Item 8—a preference for working alone—was ranked fifth. The fourth and fifth rankings for teacher educators were Items 1 and 2, and these items are related to opportunities for interaction, suggesting that the teacher educators in this study placed importance on providing teacher students with opportunities for interaction and on designing and delivering OLTE courses and programs with interactional components. Ranked seventh by teacher educators and eighth by teacher students was Item 10, which focuses on problem solving and the development of critical thinking skills.

6.6 Synchronous vs. Asynchronous Online Learning

The most commonly experienced OLTE course configuration for both teacher educators and teacher students is a totally online course with no synchronous component (see Table 11). In addition, we see in Table 12 that the totally online course with no synchronous component is the preferred choice for teacher students. The preference is likely predicated on the individual flexibility that is built into the asynchronous course design. Teacher educators prefer totally online courses with synchronous components instead of totally online courses with no synchronous component. The preference is likely predicated on the importance that teacher educators place on interaction, networking, and developing communities of practice.

In Table 10, we see that the top ranked reason that teacher students chose OLTE is that "online courses offer more flexibility," and an online course with no synchronous component offers teacher students more flexibility in terms of course design than an online course with a synchronous component.

[An asynchronous online course] allows for greater flexibility of the students; they can adapt the course to their own competencies.

(Teacher Educator 11)

Part of the reason I took online courses was so that I could work at my own schedule. When we have synchronous components, it no longer fits part of my schedule.

(Teacher Student 5)

Other teacher students mentioned the advantages of the asynchronous online course in terms of promoting their own learning.

I like learning at my own pace. I work better and my grades are higher when I am not under pressure.

(Teacher Student 15)

I can schedule time to work on my course that works for me, and I can manage my complicated life because I have to work fulltime to go to school.

(Teacher Student 17)

I love the forum discussion because it's asynchronous. I can read the posts and contribute late at night when I've finally finished work and my kids are in bed. I really stress each week about making it to the real-time sessions.

(Teacher Student 35)

Teacher students also enjoyed working with classmates in other contexts using asynchronous formats.

I enjoyed the fact that my classmates were across the world in different time zones and in different teaching contexts. It wouldn't have been possible for us to learn together with synchronous components.

(Teacher Student 10)

Teacher students who had experience with online courses with synchronous components also commented on some of the reasons they had reservations about taking courses with synchronous features of online courses.

Matching schedules with classmates is always difficult. Especially when they are in other parts of the world.

(Teacher Student 12)

Different time zones are painful to deal with in online courses, especially when we have to work together. I did a course once when the team leader was in Barcelona, and I was in Australia. It was a nightmare especially because my other team members were in Kazakhstan and London. Even with doodle we were doomed!

(Teacher Student 24)

Additionally, I find the listening to a lecture with group chat to be annoying and distracting.

(Teacher Student 30)

Maybe I'll get better at the real-time thing. After the real-time class, I usually download the recording and go through the posted slides on my own anyway.

(Teacher Student 31)

Even though the online course with a synchronous component was not the teacher educators' top ranked configuration for OLTE, there were many positive comments in the data related to the synchronous component with explanations about how it was valued by the teacher educators and teacher students. Some participants admitted that familiarity with the software was an important factor in having a favorable predisposition toward having a synchronous component.

> *I really like the real time meeting with my students, and as I get used to the software, I like it even more. I am now comfortable with chatting/texting as a format for asking questions. It was weird at first, but now I like it.*
>
> *(Teacher Educator 15)*

> *I think it's important for students to interact with one another; so even though it's hard for some students, and I have had issues with the software, I am in favor of a synchronous component for online courses.*
>
> *(Teacher Student 60)*

In terms of course design for totally online courses, teacher students prefer having access to all course modules and materials at the outset so that they can work through them on their own and work ahead when they have time.

> *I like to be able to access future assignments so that I can stay on top of my assignments instead of waiting for the exact date for them to open.*
>
> *(Teacher Student 27)*

> *I do enjoy the flexibility of wholly online courses. I would like to point out that "I have more opportunities to work at my own pace" only applies if students are allowed to look ahead to future modules. Many times online teachers only unlock content for one module at a time. I would much prefer if at least one module ahead were unlocked; isn't this part of the benefit of an online class??—that you can get a little ahead in the class if you know your life is going to be busy? I would argue that teachers that unlock only one module at a time take away that benefit.*
>
> *(Teacher Student 29)*

> *We register for online courses to gain flexibility. If we don't have access to all of the materials so that we can work at our own pace and when we want, the flexibility is lost. It's frustrating.*
>
> *(Teacher Student 39)*

Teacher educators, on the other hand, prefer a course design in which the modules open on specific dates rather than all at the same time, thereby giving them some flexibility in terms of course preparation and design. Teacher students also prefer online courses that have specific deadlines and dates for submitting assignments and taking quizzes and exams. Several of the teacher students mentioned that without deadlines, they knew they would have a hard time completing assignments regularly throughout the course and would leave everything until the last minute, thereby not doing their best work.

6.6.1 Synchronous Applications

Of the five different types of OLTE course configurations, a totally online course with a synchronous component ranked fourth in terms of how often participants had taken this type of course. Even though OLTE courses with synchronous applications ranked lower than asynchronous courses, the fact that they offer opportunities for real-

time, virtual interaction is highly valued by teacher educators. This finding is consistent with data presented in Table 9, indicating that teacher educators want an LMS to provide opportunities for interaction and group work.

We also wanted to know what types of applications were being used to promote synchronous communication. We based the choices on a review of the literature and on our own experiences and conversations with other teacher educators involved in OLTE courses. Table 13 presents data related to the frequency with which these applications are used. The types of synchronous applications that we investigated appear in the left-hand column. The rankings for teacher educators and teacher students based on the frequency of responses appear in the middle and right-hand columns. Items ranked "1" are the highest ranked items based on total percentage of responses.

Table 13: Frequency of Use for Synchronous Applications

Synchronous Applications	Rankings for Teacher Educators' Responses	Rankings Teacher Students' Responses
Adobe Connect	7	3
Elluminate	2	2
GoToMeeting	4	4
Other applications not listed	3	1
Skype	6	6
Text chats (within the LMS or on smartphones)	5	7
Video conferencing (within the LMS)	1	5

All of the primary synchronous applications that we identified were being used by at least some of the participants, indicating that OLTE courses and programs are using a wide range of applications to promote synchronous communication. Teacher educators and teacher students ranked Skype at Number 6, Elluminate at Number 2, and GoToMeeting at Number 4. This finding is not surprising because the total participant pool for teacher educators and teacher students is a subject pool of opportunity, meaning that we do not know the degree to which teachers and students from the same OLTE courses and programs are represented in this study. The choice of synchronous applications is generally not driven by the desires of either the teacher educators or the teacher students, but is an administrative choice at some level.

What seems to be more interesting than the actual ranking of the primary synchronous applications to us as researchers is the fact the category "other" was ranked first by teacher students and third by teacher educators. What this fact tells us is that there are potentially many other lesser-known synchronous applications being used in OLTE courses and that the sum total of these applications for teacher students is greater in terms of the frequency of use than for any of the primary synchronous applications we identified. In the experiences of teacher educators, "other" ranked third, making the sum total of these synchronous applications more frequently used than the three lowest ranked applications.

6.6.2 Features of Synchronous Applications

We also asked participants to tell us what features of synchronous applications they liked the most. The coded data fell into seven recognizable categories, which we refer to in the sample comments as "coding categories." The coding categories are as follows: (1) reliability, (2) flexibility, (3) capability for audio and video, (4) clarity of sound, (5) transparency and ease of use, (6) screen sharing, and (7) a range of ways in which interaction can take place. Sample comments from both teacher educators and teachers students appear below with the coding category in parentheses (e.g., 2 and 7).

6.6.2.1 Sample Comments from Teacher Educators

Clear sound is essential with (1) voice and (2) video.
(Teacher Educator 10) (Coding Categories 3 and 4)

There must be ease of use for students. They often complained that they couldn't get Blackboard collaborate to work, the mic, etc.
(Teacher Educator 14) (Coding Categories 5 and 1)

The ability for both instructors and students to share a screen and see documents.
(Teacher Educator 19) (Coding Category 6)

The ability to have breakout groups; ability to share [the role of] moderation.
(Teacher Educator 7) (Coding Categories 2 and 6)

The tools must be transparent in use (i.e., easy to check microphone, log in, participate, etc.).
(Teacher Educator 8) (Coding Category 5)

To mimic the real classroom environment as much as possible (it would allow for f2f interaction, group work, sharing ideas etc.).
(Teacher Educator 43) (Coding Category 7)

Ability to hold sessions for any length of time, record and derive mp4 and mp3 files and chat transcripts, control over setup and access to recordings, no barriers to joining or having access to recordings (open access).
(Teacher Educator 71) (Coding Category 2)

A wide range of ways that students and instructions can interact with the whole class, with designated groups, or in private conversations.
(Teacher Educator 83) (Coding Categories 7)

Ease of getting in and out of the virtual classroom.. Cleaner interface (most are very cluttered with multiple video windows, text boxes, boxes for posting content such as PPTs).
(Teacher Educator 87) (Coding Category 5)

6.6.2.2 Sample Comments from Teacher Students

Web-based so there's nothing to set up or download as long as your device meets the system requirements.
(Teacher Student 27) (Coding Category 5)

Ability to see only whoever is talking at the moment &/or the professor—not all of the students continuously.
(Teacher Student 35) (Coding Categories 3 and 6)

The possibilities of interacting with professors and peers "live," and the possibility of students presenting their own work while getting immediate feedback from professors and peers.
(Teacher Educator 38) (Coding Categories 3, 6, and 7

Multimedia capabilities and being able to share photos and videos instantly.
(Teacher Student 19) (Coding Categories 3 and 6)

Reliability is the most important. It has to be able to cope with Internet lag and still be usable.
(Teacher Educator 105) (Coding Category 1)

Reliability of the quality of video and audio integrity.
(Teacher Educator 27) (Coding Categories 1 and 3)

Ease of use and no technical glitches. I am sick of tools that usually freeze or have lag time, so I don't use them.
(Teacher Educator 205) (Coding Categories 1 and 5)

Ease of access. If the process of logging in is too laborious or complicated then it quickly becomes not worth it. It also needs to be reliable and able to keep up with the conversation.
(Teacher Educator 235) (Coding Category 5)

Again, ease of use is key. After that it's reliability. You can have a great tool but if users are frustrated, they won't use it (or drop the class). And if it's easy to use, it has to perform at 110%.
(Teacher Student 237) (Coding Categories 5 and 1)

It needs to be simple to use, reliable and allow for some basic functions like muting one's microphone, using text as well as voice to communicate, and the ability to integrate visuals (beyond video of people in the tool).
(Teacher Student 267) (Coding Categories 1, 3, 4, and 7)

Teacher educators also mentioned that tensions exist between the flexibility that teacher students would like to have in terms of access to course materials and to the teacher educator. Students want to be able to access courses from their smart phones and teachers prefer to work within the LMS. While teacher educators certainly want flexibility for themselves and their teacher students, they also resist smartphone use in their OLTE courses. We believe that this resistance is in part related to teacher educators' concerns about how much interaction they can manage and how frequently they can communicate with teacher students. We also recognize that teacher educators have beliefs about effective learning and its relationship to group work and interaction. There is research (for example, see Avalos, 2015) to support teacher educators' views that smart phones are not suitable for class work, such as projects.

Also, some students want to call me, but I don't want to give out my mobile phone number or to have a green light that is always on for them like Skype. I'd like to use a tool in the online course, but students want to call in or text from their smart phones.

(Teacher Educator 23) (Coding Categories 2, 5, and 7)

Teaching online has been an adjustment for me. My students seem to think I'm supposed to be online ALL the time and expect immediate answers.

(Teacher Educator 73) (Coding Categories 2 and 5)

If an hour goes by and they don't hear from me, they send me another message again. I've explained to them the I am not online every minute, but changing the online communications culture seems impossible!

(Teacher Educator 45) (Coding Categories 2 and 7)

6.6.3 Social Media in Totally Online Courses

Several teacher educators had tried to use social media as a means of promoting communities of practice and networking among their students, and a number of teacher students specifically mentioned their experiences in using Facebook and blogs. Overall, the 35 comments about social media (eight from teacher educators and 27 from teacher students) in the qualitative data, suggest that teacher students were excited about using social media, especially Facebook, in their online courses as a means of developing communities of practice, socializing, and networking. Teacher students did not mention the usefulness of Facebook (or other social media) as a means of discussing and clarifying concepts in the course. There were three comments about issues related to teaching and blogging.

6.6.3.1 Sample Comments from Teacher Educators and Teacher Students

We were all excited to have a Facebook page for the course. It has been very helpful.

(Teacher Student 17)

I loved the fact that we had a Facebook page for the course.

(Teacher Student 45)

I got to know some of the other teachers in the course quite well. We've become "regular" Facebook friends now.

(Teacher Sutdent 59)

The course Facebook page continued after the course ended for a bit, but there's not as much activity.

(Teacher Educator 44)

We decided to start a blog (four of us) about our teaching, and we kept it up for several months. I think we had about 12 regular followers.

(Teacher Student 217)

6.7 Assessments

We were particularly interested in what types of assessments were being used and with what frequency and how the online environment was being used to promote the use of learning oriented assessment (LOA), which is also referred to as assessment for learning (rather than assessment of learning). LOAs encourage and promote learning through the process of assessment.

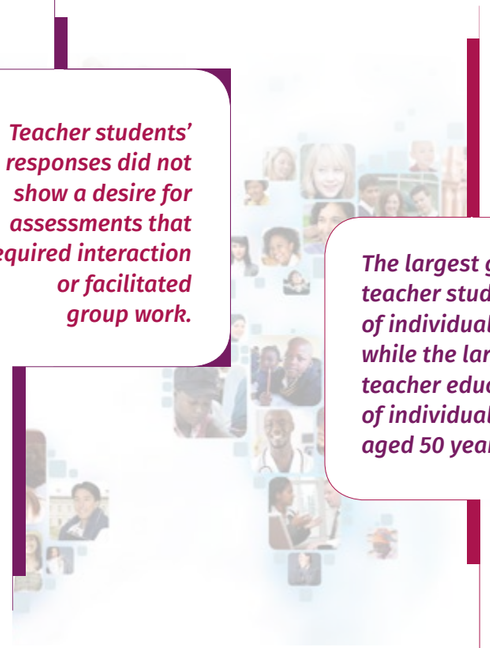
We created a list of 12 different types of online assessments that are commonly used. These assessments appear in the left-hand column of Table 14. We asked both teacher educators and teacher students to tell us which types they had used. We used the frequency of the responses to create a rank ordered list with "1" representing the highest ranking. The list for teacher educators appears in the middle column and the list for teacher students appears in the right-hand column of Table 14. Types of assessments with the same scores were ranked the same. Because the list was not intended to be exhaustive, we also included a category called "other types of assessments" to capture assessments that may not have been included in our list. We were interested in the frequency of the occurrence of the "other" category. The most frequently marked assessment was ranked Number 1 and the least frequently marked Number 13. Because there was a tie in the ranking for the teacher educators' data, we have followed the convention used in statistical reporting and given the value as a rank of 5.5. We use this convention because we have no way of knowing which identical score should be ranked 5 and which one should be ranked 6. Ranks 5 and 6 do not exist because they have been averaged (i.e., 5 + 6 ÷ 2 = 5.5).

Table 14: Frequency of Types of Online Assessments

Types of Online Assessments	Ranking for Teacher Educators by Frequency of Responses	Ranking for Teacher Students by Frequency of Responses
Exams (taken offline and uploaded online)	12	10
Graded discussions	3	3
Group projects	1	5
Multi-media projects	9	11
Online presentations	5.5	12
Other types of assessments	13	13
Peer assessments	8	8
Portfolios	7	9
Practice quizzes	4	4
Quizzes	2	1
Quizzes with multiple attempts	5.5	2
Timed exams (text entry online)	11	6
Untimed exams (text entry online)	10	7

To capture the concept of learning oriented assessment, or assessment for learning, we asked participants to let us know which assessments they believed to be most helpful in promoting learning. Teacher educators and teacher students were in agreement that online quizzes that allowed for multiple attempts and provided immediate feedback, peer assessments, and intelligent practice quizzes (i.e., quizzes in which answers and explanations are provided for learners) were all useful in promoting learning. An interesting contrast can be seen in the responses to the assessment type "group projects." Based on the total number of responses, group projects as an assessment type was ranked the highest by teacher educators and fifth by teacher students. That teacher educators would see group projects as helpful in promoting learning would be consistent with data for teacher educators in Table 9, thereby emphasizing their preferences for interaction and group work. The result would also be consistent with data for teacher students, emphasizing that teacher students' responses did not show a desire for assessments that required interaction or facilitated group work.

Teacher students' responses did not show a desire for assessments that required interaction or facilitated group work.



The largest group of teacher students is made up of individuals in their 20s, while the largest group of teacher educators is made up of individuals who are aged 50 years or older.

7. Discussion

The two questionnaires used in this study allowed us to collect a wealth of information about the OLTE participants, the courses being offered, and the applications being used to deliver the OLTE courses. In addition, we collected important data on participants' beliefs and perceptions about OLTE courses and applications for the delivery of those courses. To frame our discussion we return to the research questions that motivated the study.

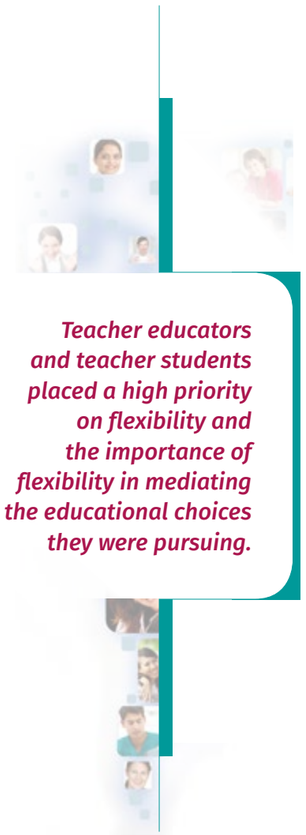
7.1 Research Question 1: Who is participating in OLTE courses and programs?

The participants (N = 446) in this study are much like English language teaching professionals in general. They are both NS and NNS of English, and they are located in many different contexts around the world, including North America, South America, Asia, Europe, Australia, and the Middle East. The largest group of teacher students is made up of individuals in their 20s, while the largest group of teacher educators is made up of individuals who are aged 50 years or older. In our experience, this age difference between the two groups seems to be representative of the profession because English language teaching professionals often become teacher educators after a number of years in the classroom or after seeking additional formal education for advanced degrees (i.e., doctoral degrees); consequently, they are older.

Given the average age of the participants who are teacher students, it is not surprising that the younger group of teacher students had higher levels of confidence relative to technology than did the teacher educators. As mentioned previously, most of the young teacher students are likely digital natives (Prensky, 2001), individuals who have been born or brought up during the age of digital technology and have been using computers and the internet from an early age. We find it interesting to note that the teacher educators' confidence level in this study was inconsistent with their levels of experience. Ninety-one percent (91%) indicated they were very experienced and 79% indicated they had experience teaching multiple classes online. Consequently, we were surprised to find that their confidence level relative to technology was

not higher. About two-thirds of the teacher educators stated that they were worried about technology issues on some level and only 11% were very confident.

It is also important to note that in terms of teacher educators' perceptions of their ability to provide technical support to the teacher students, they were much more critical of their skills and abilities than were the teacher students, who rated teacher educators' abilities to provide technical support more positively. An important consideration for OLTE is how to raise teacher educators' overall confidence levels relative to their ability to use the technologies and to provide technical support. This point is especially salient because teacher students often see the teacher educator as a technology expert, especially in courses and programs where there is no designated technical support staff. It is important to remember that the development of technical skills is not static. The qualitative data from teacher educators relative to skill development suggest that informal mentoring by peer teacher educators and other online teachers plays a huge role in the development of online teaching skills.



Teacher educators and teacher students placed a high priority on flexibility and the importance of flexibility in mediating the educational choices they were pursuing.

It is also clear from the participant data in this study that the role for teacher educators relative to technology in OLTE courses is developing and changing as teacher educators in many courses often assume the roles of course instructor, course designer, and technology expert. Workload data for the participants in this study also indicate that perceptions of workload vary a great deal between teacher students and teacher educators, with teacher educators indicating that the workload is much heavier than it is in a f2f course. This finding is not surprising, given that teacher educators not only function as course instructors, but also course designers and technology experts. Designing an online course for the first time is a labor-intensive venture, even if a teacher educator has taught the course in a f2f format previously.

The participants in this study who had chosen to participate in OLTE as either teacher educators or teacher students placed a high priority on flexibility and the importance of flexibility in mediating the educational choices they were pursuing. Teacher students stated that they were working in addition to taking courses and had chosen OLTE courses because the courses provided them with the flexibility they needed. The most frequently experienced course configuration for teacher students and teacher educators for OLTE was a totally online asynchronous course. Among the different OLTE course configurations an asynchronous online course offers teacher students the most flexibility. However, this configuration is also likely to be the one that could offer teacher students the least amount of interaction with other teacher students and with the teacher educator. In fact, 6% of the teacher students indicated that they had taken OLTE courses with "no instructor" present. They had simply worked though the materials on their own.

It is also interesting to note that teacher students seem to recognize the limits of flexibility in terms of their own learning. In the most flexible asynchronous course, all modules/components would be available and students would work through them at their own pace, meaning that there would be one final deadline at the end of the course for all assignments. Teacher students recognized that although this type of asynchronous course design with only one final deadline provided the most flexibility, they preferred specific due dates for assignments and exams throughout the course—a feature of asynchronous learning that they found useful in managing their time. Additionally, they did not want any of the course materials locked until a specific date but wanted access to all course materials throughout the course. Teacher educators acknowledged that some materials should be sequenced and delivered in a step-by-step fashion, making it difficult to give students access to all materials.

7.2 Research Question 2: What courses are offered?

a. What types of programs are being offered?

b. How are OLTE courses and programs marketed?

c. Are OLTE courses accredited by either governmental or non-governmental agencies?

d. What are the different configurations for OLTE courses?

e. What are participants' perceptions of OLTE courses?

Over half of the courses in which participants in this study were involved were associated with certificates or certification in some way, and 40% of the teacher students were in courses in colleges or universities. Consequently, it is reasonable to conclude that this association has led to the use of academic time descriptors, such as quarter, semester, or term for marketing OLTE courses. About one quarter of the OLTE courses being offered were stand-alone courses and not associated with academic programs. As a result, hours and weeks are the most common and recognizable time descriptors used for OLTE courses and programs not associated with academic units.

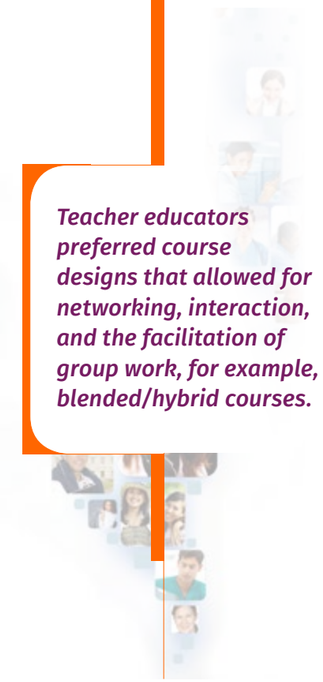
Sixty-four percent (64%) of the teacher educators and 40% of the teacher students were involved in courses that were accredited with governmental or non-government agencies, such as WASC and CAEP. However, 27% of the teacher educators and 47% of the teacher students stated that they did not know if their courses were accredited or not. Given these data it seems reasonable to conclude the reasons other than whether a program was accredited or not prompted participants to take OLTE courses. Such reasons could include a desire to improve teaching skills or learning more about the ELT profession. We found it interesting that 40% of teacher educators believed that teacher students took OLTE courses because they wanted to teach English in another country and travel overseas; however, only 11% of the teacher students chose overseas travel as a reason.

In this study, we identified five different course configurations for OLTE—blended/hybrid, enhanced, flipped, totally online with no synchronous component, and totally online with a synchronous component. The top ranked choice for teacher educators is the blended/hybrid course, which is a combination of f2f classes and online components. Blended/hybrid courses allow teachers to experiment with online components while providing opportunities for f2f instruction that is familiar and allows for interaction and group work, values that were ranked first and second as reasons for OLTE course preferences. In contrast, teacher students ranked the totally online course with no synchronous component as their first choice. This type of course configuration is the most flexible course design and would be consistent with the main reason teacher students gave (i.e., flexibility) for taking OLTE courses.

The second most popular course configuration for both teacher students and teacher educators was the enhanced course. Our interpretation of this result is that an enhanced course is the most familiar and a reliable format for both teacher educators and teacher students; therefore familiarity and reliability may have been factors in determining participants' preferences. Teacher educators ranked a totally online course with a synchronous component as their third choice for OLTE courses, a configuration for a course design that also includes interaction and opportunities to communicate with peers. Teacher students also chose the totally online course with a synchronous component as their third choice. The online course with a synchronous component is also a course design that allows for a considerable amount of flexibility.

The most common OLTE course design is the totally online course with no synchronous component. It is the type of OLTE course with which teacher educators and teacher students have the most experience. It is also the preferred choice for teacher students. When we consider that teacher students are looking for flexibility in the courses they take, it is easy to understand their preference, as online courses with no synchronous component give teacher students the most flexibility. Teacher educators also indicated that they had the most experience with totally online courses with no synchronous component, yet they preferred course designs that allowed for networking, interaction, and the facilitation of group work, for example, blended/hybrid courses. Teacher educators ranked totally online courses with no synchronous component the lowest, even though they have more experience with this type of course, providing one more piece of information concerning the importance that teacher educators place on the importance of interaction and networking in language teacher development.

Teacher educators preferred course designs that allowed for networking, interaction, and the facilitation of group work, for example, blended/hybrid courses.



7.3 Research Question 3: What types of applications and technologies are used in the delivery of OLTE courses and programs?

a. What LMSs are used?

b. What features of LMSs are perceived as most useful for the delivery of OLTE courses?

c. What online assessments are used?

d. What are participants' perceptions of online assessments for promoting assessment for learning?

The LMSs that are most frequently used in the delivery of OLTE courses and programs are Blackboard, Canvas, locally designed LMSs, Moodle, and WebCT; however, participants also identified other applications that were being used and that were preferred. Locally designed LMSs were the most flexible and were ranked first by teacher educators and second by teacher students, indicating that context is a factor in motivating the use of specific features of LMSs and that course designers use a broad range of features to meet learning needs. This notion is supported by the fact that all features of LMSs that were identified were selected as important for at least some of the participants.

Teacher educators seemed to focus on features of the LMS that related to learning and success in an OLTE course—opportunities for interaction and group work, effective messaging and communication, and the ability to upload assignments and enter texts for assignments. Teacher students selected features of LMSs that allowed them to monitor their performance in class, such as tracking grades and progress, and performing successfully in courses, uploading files and assignments, and having access to an effective messaging and communication system. Both groups ranked flexibility as the fourth most important feature of an LMS. The selection of this feature is not surprising given that the main reason teacher students gave for taking OLTE courses is that they are considered more flexible than other types of course designs.

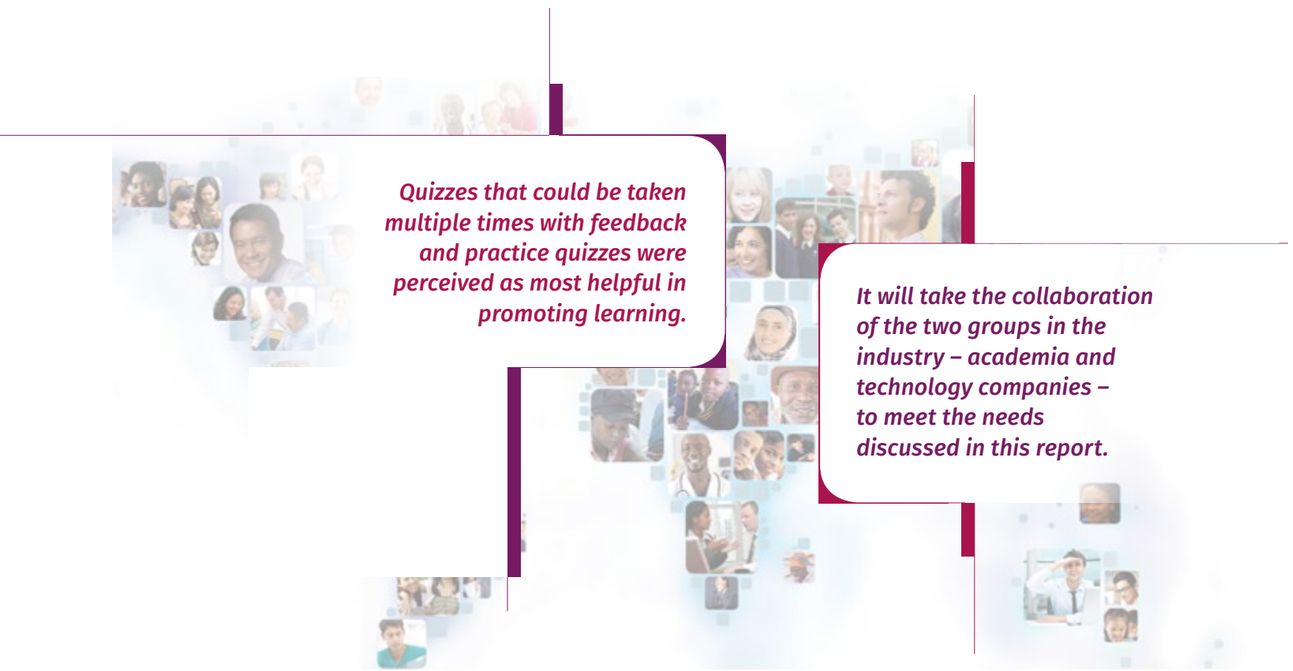
The OLTE course with a flipped course design is ranked low (i.e., either "4" or "5") by both groups of participants.

Participants also identified other LMSs they used, as well as specific applications (see Table 13) that were used in addition to the LMS they might be using. The most important features of these applications were (1) reliability, (2) flexibility, (3) capability for audio and video, (4) clarity of sound, (5) transparency and ease of use, (6) screen sharing, and (7) a range of ways in which students can interact. Teacher educators and teacher students noted that they had been frustrated in using applications that were unreliable, especially in terms of clarity of the audio and video feed and screen sharing. In totally online courses with synchronous components, applications must be reliable or the entire online class will be ineffective. There is nothing so frustrating as to have the technology fail, particularly when students are joining the class from many different time zones and from many different contexts around the world.

Differences between the two groups for preferences related to features of LMSs might be characterized in the following ways in terms of rankings. Teacher students placed the highest priority on "tracking course progress and grades," thereby placing a high value on understanding how well they were performing in OLTE courses. They also ranked features highly that might affect their performances in the OLTE courses, such as "easy upload of files and text entry for assignments," and an "effective messaging and communication system." On the other hand, teacher educators placed a high priority on features of LMSs that promoted interaction and communication, such as "facilitation of group work" and "opportunities for interaction." An "effective messaging and communication system" was also considered important relative to its role in creating opportunities for interaction and communication. These preferences seem to be consistent with sociocultural views of learning (e.g., Vygotsky, 1978; Lantolf & Thorne, 2006) and the importance of developing communities of practice. In these views of learning, teacher development is seen as occurring during peer group interactions and within social contexts, including virtual ones. These data do not indicate that teacher students share these views, as flexibility is seen as a strong preference throughout the data.

It is not surprising that teacher students rank online courses with no synchronous component the highest. This ranking would be consistent with teacher students' desire for OLTE courses to be flexible. Online courses with no synchronous component allow for the most flexibility. Additionally, it is not surprising that teacher educators would rank courses with no synchronous component as fifth, the lowest ranking. This ranking would be consistent with the importance teacher educators give to the role of interaction and group work in teacher development.

Participants also used a wide range of assessments within the LMS (see Table 14). Assessment for learning, or learning oriented assessment, was the focus of most online assessments. Consequently, quizzes that could be taken multiple times with feedback and practice quizzes were perceived as most helpful in promoting learning. Online assessments, especially "intelligent" online assessments that offer feedback, make it possible for students to get more feedback on their work without creating more work for the instructor once the assessments online have been created.



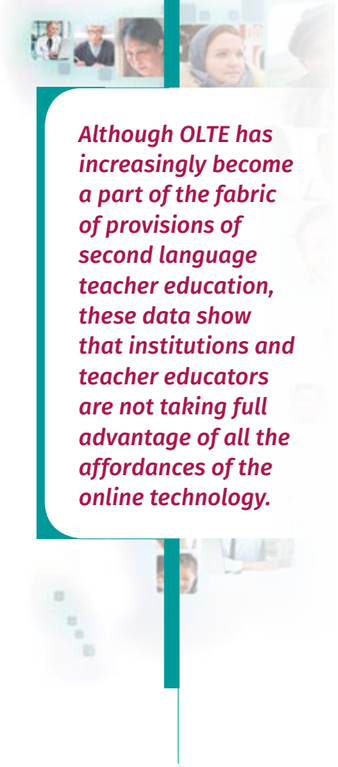
Quizzes that could be taken multiple times with feedback and practice quizzes were perceived as most helpful in promoting learning.

It will take the collaboration of the two groups in the industry – academia and technology companies – to meet the needs discussed in this report.

8. Implications

These data support the claim that OLTE is best seen as having its roots in DL, with its goal of providing quality education for those who are unable to attend a brick-and-mortar institution. OLTE provides affordances over previous forms of DL such as print, audio, or video.

Although OLTE has increasingly become a part of the fabric of provisions of second language teacher education, these data show that institutions and teacher educators are not taking full advantage of all the affordances of the online technology. OLTE is still maturing and has not yet reached the normalization Bax (2011) discussed. In part, this situation is a result of the generation gap between teacher educators and teacher students and also the lack of flexibility of some LMSs.



Although OLTE has increasingly become a part of the fabric of provisions of second language teacher education, these data show that institutions and teacher educators are not taking full advantage of all the affordances of the online technology.

The primary stakeholders in OLTE include:

- institutions providing OLTE,
- teacher educators teaching OLTE programs or courses,
- people wanting to take an OLTE program or course, and
- employers and others sponsoring teacher students to take an OLTE program or course.

Technology companies are another sort of stakeholder in OLTE contexts. Given the findings of this research project, software developers (such as the designers of LMSs) should be aware of what features online teacher educators and online teacher students find most valuable. But it will take the collaboration of the two groups in the industry – academia and technology companies – to meet the needs discussed in this report.

Each of these primary stakeholder groups needs to carefully examine their reasons for offering or taking online education and consider how they might best resolve the tensions between the capabilities and limitations of the technology and the needs and expertise of participants. These tensions cluster around four issues: flexibility, technical expertise, configurations of technology, and quality. After each implication are recommendations for OLTE providers to consider.

8.1 Flexibility

While teacher educators chose a variety of different ways to engage teacher students in participation, discussion, and group work, teacher students were more interested in the flexibility and autonomy afforded by learning online.

The data show that the any-time, any-place affordance of OLTE does not necessarily mean that participants want the rich CoPs the literature has claimed as being essential for online learning (see, for example, Liyanage, 2013). While teacher educators chose a variety of different ways to engage teacher students in participation, discussion, and group work, teacher students were more interested in the flexibility and autonomy afforded by learning online. The teacher students in this survey took a very pragmatic approach to their learning, wanting to use only those technologies that they perceived would advance their learning goals.

A compounding factor for OLTE is that one role teacher educators assume is as a model of best practice and if that best practice for language teaching includes CoPs, how can they model that best practice without synchronous components and group project work?

Therefore, institutions and teacher educators embarking on OLTE need to balance the needs and wants of their teacher students with their own pedagogical beliefs and practices.

8.2 Technical Expertise

Teaching online requires different roles for both teacher educators and teacher students.

Teaching online requires different roles for both teacher educators and teacher students. The data show that online teacher educators assume the roles of course instructor, course designer, and technology expert–a rather more complex situation than Corbel's (2007) mediation role. Additionally, the data show a disparity between the technical expertise of the teacher educators and the teacher students, the latter being much younger and therefore likely to be digital natives (Prensky, 2001). Their digital experience may make them more expert than their instructors, except with the specific LMS or other pedagogical applications the teacher educators choose. This disparity may also mean that teacher students are not adequately educated in how to use instructional technology, even after taking an OLTE course or program (see, for example, Chiero & Beare, 2010).

Therefore, institutions and teacher educators embarking on OLTE need to determine the extent to which the role of the teacher educator needs to include technology expertise or whether technical expertise will devolve entirely to technical support personnel. If it does formally include technology expert, institutions need to consider how to ensure the quality of this expertise and how to compensate teacher educators for this additional role.

8.3 Configuration of Technology

The data show that the participants in this study had experience with and chose largely conservative technologies in terms of their affordances. Their experiences were mostly with the configuration of courses offered totally online with no synchronous component and with exams for assessment. Teacher educators, however, ranked hybrid/blended first, and enhanced second. For totally online modes, they preferred teaching totally online with a synchronous component. Both groups valued quizzes that allowed for multiple attempts and provided immediate feedback, peer assessments, and practice quizzes that included answers and explanations. Both groups valued flexibility, transparency, messaging systems, and synchronous features within LMSs. They did have experience with social media for instructional purposes, in contrast to the teacher educators in Murray's 2013 study, who used it only for recruitment and student consultations. These preferences reflect the teacher educators' belief in student-student and student-instructor interaction as essential for learning, while teacher students enroll in OLTE for its flexibility in time and place.

Therefore, institutions and teacher educators embarking on OLTE need to examine new technological applications carefully before automatically adopting them because they are trendy or support their own beliefs about teaching and learning. As OLTE matures, these choices will become more transparent as further research is conducted and teacher educators share their experiences with one another. Given the mismatch between teacher educators and teacher students, it is vital for OLTE providers to provide clear information for prospective teacher students so they can make decisions about what programs

meet their needs and preferences. This information should include technologies used, pedagogical approaches, and assessments. Given the different expectations and preferences of the participants, it would help their decision-making if there were samples of the technologies and pedagogical approaches, perhaps through a PowerPoint presentation or a YouTube video.

8.4 Quality

Quality was not addressed directly very much in this study except through questions regarding accreditation. Yet, many of the participants in our study did not seem to be particularly interested in or aware of whether their institutions were accredited. Because administrators and others have questioned whether online education provides a high quality education equivalent to that in f2f provision (Allen & Seaman, 2013), it would seem prudent for institutions to become accredited and ensure their teacher educators and teacher students understand the link between quality and accreditation.

The tensions about flexibility, technical expertise, and configurations of technology that are discussed above inevitably lead to questioning how to define, measure, and ensure quality in OLTE. These variables affect the elements of quality that the OLC online scorecard covers: institutional support, technology support, course development/ instructional design, course structure, teaching and learning, social and student engagement, faculty support, student support, and evaluations and assessment (OLC, n.d.).

Neither teacher educators nor teacher students believed OLTE was chosen because it was easier.

We did, however, ask questions about participants' preferences, which may be an indirect measure of quality related to the OLC's quality measure of teacher and student engagement. Neither teacher educators nor teacher students believed OLTE was chosen because it was easier; they were chosen largely for their flexibility for those unable to attend on-campus courses or programs. Teacher educators ranked blended/hybrid modes as their first choice, while teacher students ranked totally online with no synchronous component as their first choice. The teacher educators' choice may reflect their preferences for group work and developing CoPs, while the teacher students' choice seems to reflect their need for flexibility (discussed above). A further indirect measure of quality was the experience and qualifications of the OLTE teacher educators. Teacher educators were experienced teacher educators and considered themselves qualified to teach OLTE because they had taught and/or designed OLTE, and/or had formal technical training. Teacher students reported that their teacher educators were experienced and qualified. Most were instructors; only a few were tutors or teaching assistants; and only a few teacher students worked through the program materials on their own. Teacher students provide evidence of these indirect indicators of quality in the qualitative data.

OLC includes institutional support as a measure of quality. Although we did not directly ask questions about institutional support, an issue that arose was the perception of workload. Almost half of the teacher educators perceived OLTE workload as being much heavier than that in f2f teaching. This finding has implications for administrators in terms of adequate compensation for workloads.

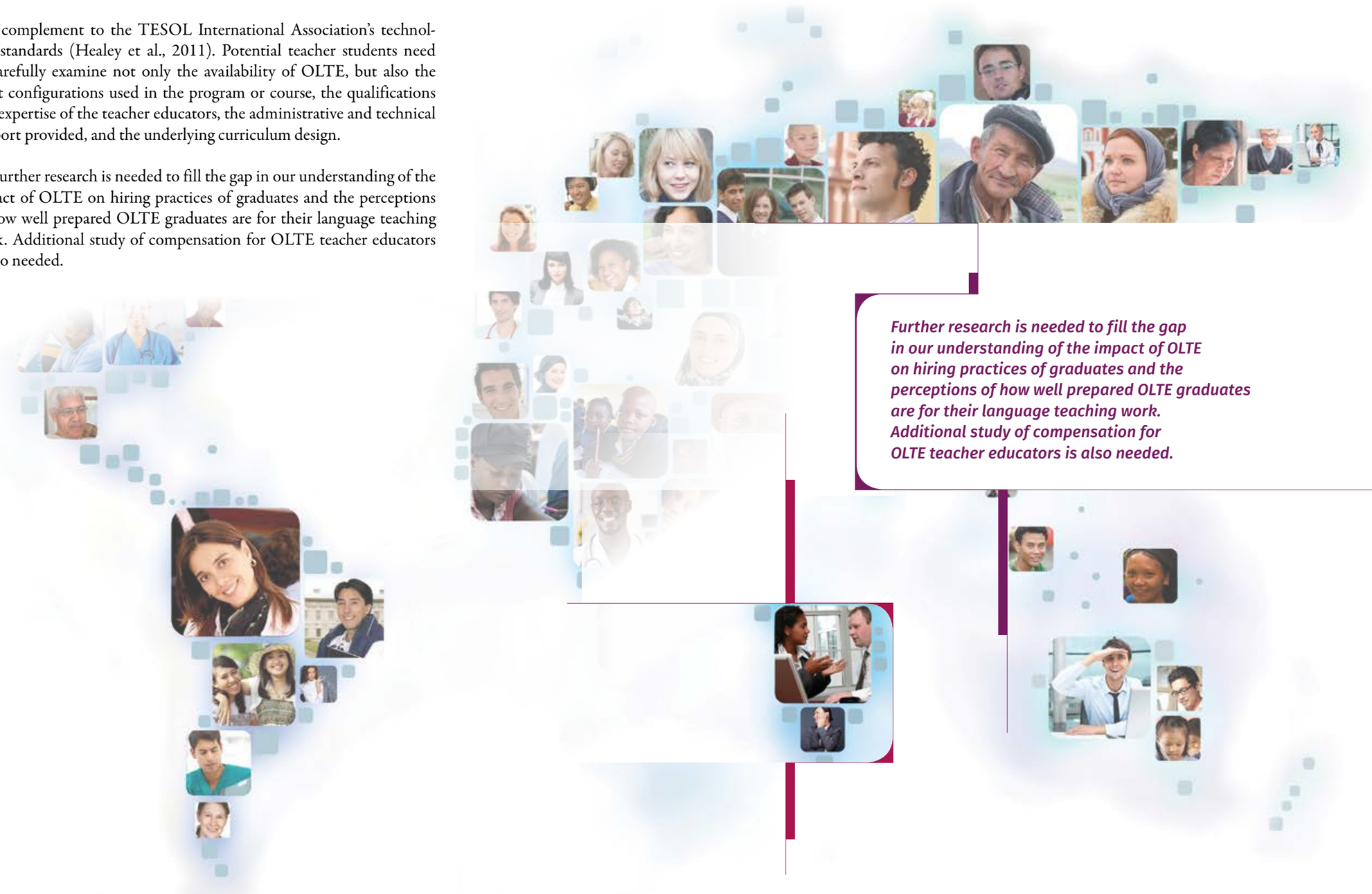
Almost half of the teacher educators perceived OLTE workload as being much heavier than that in f2f teaching.

An additional measure of quality, or at least the perception of quality, is the impact of OLTE on the hiring of graduates of such programs or courses. Our study did not specifically target administrators and others who are responsible for hiring trained TESOL teachers. However, research on attitudes towards online education by administrators (who are often responsible for hiring decisions) indicates that they have serious doubts as to the efficacy of online education (Huss, 2007; Allen & Seaman, 2011). By implication, a considerable proportion of those hiring OLTE graduates probably have similar views. Although we recognize this possibility as an important impact on OLTE, our data cannot provide definitive answers. Any conclusions are further complicated by the finding from a large-scale study that employment supervisors and graduates from K-8 teacher education programs considered online program completers as well or adequately prepared and better prepared than their on-campus peers (Chiero & Beare, 2010).

Therefore, institutions and teacher educators who embark on OLTE need to judge their decisions against OLC's scorecard, so that OLTE can meet its full potential of providing quality education for those who choose not to attend brick-and-mortar institutions and for those who teach in OLTE. Professional associations in TESOL should consider advocating for quality accreditation principles for OLTE,

as a complement to the TESOL International Association's technology standards (Healey et al., 2011). Potential teacher students need to carefully examine not only the availability of OLTE, but also the exact configurations used in the program or course, the qualifications and expertise of the teacher educators, the administrative and technical support provided, and the underlying curriculum design.

Further research is needed to fill the gap in our understanding of the impact of OLTE on hiring practices of graduates and the perceptions of how well prepared OLTE graduates are for their language teaching work. Additional study of compensation for OLTE teacher educators is also needed.



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9. References

Abeysekera, L., & Dawson, P. (2015). Motivation and cognitive load in the flipped classroom: Definition, rationale and a call for research. *Higher Education Research & Development, 34*(1), 1-14.

Allen, I. E., & Seaman, J. (2013). Changing course: Ten years of tracking online education in the United States. Retrieved from **http://www.onlinelearningsurvey.com/reports/changingcourse.pdf**

Anderson, T., & Dron, J. (2011). Three generations of distance education pedagogy. *The International Review of Research in Open and Distance Education, 12*(3). Retrieved from **http://www.irrodl.org/index.php/irrodl/rt/printerFriendly/890/1663**

Andrews, T., Leonard, M., Colgrove, C., & Kalinowski, S. (2011). Active leaarning not associated with student learning in a random sample of college biology courses. *Life Sciences Education, 10*(4), 394-405.

Anstey, M., & Bull, G. (2011). Helping teachers to explore multimodal texts. *Curriculum and Leadership Journal, 8*(16). Retrieved from **http://www.curriculum.edu.au/leader/helping_teachers_to_explore_multimodal_texts,31522.html?issueID=12141**

Avalos, G. (2015, June 16). Survey: Digital gap persists. San José Mercury News, pp. B5-6.

Bailey, K. M. (2013). *Online seminar in language teacher education at Monterey Institute of International Studies*. Retrieved from **http://www.tirfonline.org/wp-content/uploads/2013/02/TIRF_OLTE_CaseReport9_Bailey.pdf**

Bailey, K. M., & Curtis, A. (2015). *Learning about language assessment: Dilemmas, decisions and directions* (2nd ed.). Boston, MA: National Geographic Learning.

Bax, S. (2003). CALL - past, present, and future. *System*, *31*(1), 13-28.

Bax, S. (2011). Normalisation revisited: The effective use of technology inn language education. *International Journal of Computer-assisted Language Learning and Teaching, 1*(2), 1-15. Retrieved from **http://www.academia.edu/3754724/Normalisation_Revisited_The_Effective_Use_of_Teachnology_in_Language_Education**

BDPA Detroit Chapter. (n.d.). MOOCs: Top 10 sites for free education with elite universities Retrieved from **http://www.bdpa-detroit.org/portal/index.php/comittees/high-school-computer-competition-hscc/29-education/57-moocs-top-sites-for-free-education-with-elite-universities.html**

Black, P., & Wiliam, D. (1998). Inside the black box: Raising standards through classroom assessment. *Phi Delta Kappan, 80*(2), 139-148.

Bonk, C., & Zhang, K. (2006). Introducing the R2D2 model: Online learning for the diverse learners of this world. *Distance Education, 27*(2), 249-264. doi.210.1080/1587910600789670.

Borg, S. (2003). Teacher cognition in language teaching: A review of research on what language teachers think, know, believe, and do. *Language Teaching, 36*(2), 81-109.

Borg, S. (2006). *Teacher cognition and language education: Research and practice*. London, UK: Continuum.

Carey, K. (2012). In the future with MOOCs. *Chronicle of Higher Education, 59*(2), A136.

Chen, N. S., Hsieh, S. W., & Kinshuk. (2008). Effects of short-term memory and content representation type on mobile language learning. *Language Learning & Technology, 12*(3), 93-113.

Chiero, R., & Beare, P. (2010). An evaluation of online versus campus-based teacher preparation Programs. *MERLOT Journal of Online Learning and Teaching*, *6*(4). Retrieved from http://jolt.merlot.org/vol6no4/chiero_1210.pdf

Ciancio, J., & Diaz-Rico, L. (2013). *The master of arts in education and teaching English to speakers of other languages option at California State University San Bernadino*. Retrieved from http://www.tirfonline.org/wp-content/uploads/2013/02/TIRF_OLTE_CaseReport3_CiancioDiaz-Rico.pdf

Collis, B., & Jung, I. (2003). Uses of information and communication technologies in teacher education. In B. Robinson & C. Latchem (Eds.), *Teacher education through open and distance learning* (pp. 171-192). London, UK: RoutledgeFalmer.

Copland, F. (2013). *Distance learning at Aston University*. Retrieved from http://www.tirfonline.org/wp-content/uploads/2013/02/TIRF_OLTE_CaseReport2_Copland.pdf

Corbel, C. (2007). Teachers' roles in the global hypermedia environment. In J. Cummins & C. Davison (Eds.), *International handbook of English language teaching* (pp. 1113-1124). New York, NY: Springer.

DEAC. (2016). DEAC History, from http://www.deac.org/Discover-DEAC/DEAC-History.aspx

Donaldson, J. (2013). *Online professional development at TESOL International Association*. Retrieved from http://www.tirfonline.org/wp-content/uploads/2013/02/TIRF_OLTE_CaseReport12_Donaldson.pdf

Dudeney, G., & Hockly, N. (2012). ICT in ELT: How did we get here and where are we going? *ELT Journal, 66*(4), 533-542.

England, L. (Ed.). (2012). *Online teacher education: TESOL perspectives*. New York, NY: Routledge.

England, L. (2013). *Online TESOL program at Shenandoah University*. Retrieved from http://www.tirfonline.org/wp-content/uploads/2013/02/TIRF_OLTE_CaseReport11_England.pdf

Filback, R. A., & Chun, C. W. (2013). *Master of arts in TESOL at the University of Southern California*. Retrieved from http://www.tirfonline.org/wp-content/uploads/2013/02/TIRF_OLTE_CaseReport17_FilbackChun.pdf

Freeman, D., & Richards, J. C. (Eds.). (1996). *Teacher learning in language teaching*. Cambridge, UK: Cambridge University Press.

Friedman, L. W., & Friedman, H. H. (2008). High impact areas of the new media technologies: A review. *Management Online Review*. Retrieved from http://www.academia.edu/877904/High_impact_areas_of_the_new_media_technologies_A_review

Gabriel, M. A. (2004). Learning together: Exploring interactions online. *Journal of Distance Education, 19*(1), 54-72.

Gakonga, J. (2012). *Collaboration or bust? An inquiry into the use of differing online models of delivery for a pre-srvice grammar course for English teachers.* Masters thesis, University of Warwick, Warwick, UK. Retrieved from https://englishagenda.britishcouncil.org/sites/ec/files/Jo%20Gakonga%20GLT_0.pdf

Gomez, G. (2013). *Teacher-training for new hires at Institute Guatemalteco Americano*. Retrieved from http://www.tirfonline.org/wp-content/uploads/2013/02/TIRF_OLTE_CaseReport6_Gomez.pdf

Gray, D. E., Ryan, M., & Coulon, A. (2012). The training of teachers and trainers: Innovative practices, skills and competencies in the use of elearning. *European Journal of Open, Distance and E-Learning, 2*, 1-2. Retrieved from http://www.eurodl.org/?article=159

Hall, D. R., & Knox, J. (2009). Issues in the education of TESOL teachers by distance education. *Distance Education, 30*(1), 63-85.

Hall, D. R., & Knox, J. (2013). *Macquarie University postgraduate programs in Applied Llinguistics*. Retrieved from http://www.tirfonline.org/wp-content/uploads/2013/02/TIRF_OLTE_CaseReport7_HallKnox.pdf

Hamdan, N., McKnight, P., McKnight, K., & Arfstrom, K. M. (2013). A review of flipped learning. Retrieved from http://www.flippedlearning.org/

Hattie, J. A. (1992). Towards a model of schooling: A synthesis of meta-analyses. *Australian Journal of Education, 36*, 5-13.

Healey, D., Hanson-Smith, E., Hubbard, P., Ioannou-Georgiou, S., Kessler, G., & Ware, P. (2011). *TESOL technology standards: Description, implementation, integration*. Alexandria, VA: Teachers of English to Speakers of other Languages, Inc.

Heitmen, C. (2013). *Developing EFL literacy through project-based learning*. Retrieved from http://www.tirfonline.org/wp-content/uploads/2013/02/TIRF_OLTE_CaseReport16_Heitman.pdf

Hockly, N. (2013). Designer learning: The teacher as designer of mobile-based classroom learning experiences. Retrieved from http://www.tirfonline.org/english-in-theworkforce/mobile-assisted-language-learning/

Hubbard, P. (2008). CALL and the future of language teacher education. *CALICO Journal, 25*(2), 175-188.

Hughes, A. (2013). *Masters in teaching English to young learners at the University of York*. Retrieved from http://www.tirfonline.org/wp-content/uploads/2013/02/TIRF_OLTE_CaseReport18_Hughes.pdf

Huss, J. A. (2007). Administrator attitudes toward online teacher preparation programs: Are principals logging on—or logging off? Retrieved from http://files.eric.ed.gov/fulltext/EJ987301.pdf

Internet World Stats. (2015). Internet usage statistics: The Internet big picture. Retrieved from http://www.internetworldstats.com/stats.htm

Jones, N., & Saville, N. (Eds.). (2016). *Learning oriented assessment: A systemic approach. Studies in Language Testing* (Vol. 45). Cambridge, UK: Cambridge University Press.

Kim, D., Rueckert, D., Kim, D-J., & Seo, S. (2013). Students' perceptions and experiences of mobile learning. *Language Learning & Technology, 17*(3), 52-73.

Lai, C., Ni, R., & Zhao, Y. (2013). Digital games and language learning. In M. Thomas, H. Reinders, & M. Warschauer (Eds.), *Contemporary computer-assisted language learning* (pp. 183-200). London, UK: Bloomsbury.

Lantolf, J., & Thorne, S. (2006). *Sociocultural theory and the genesis of second language development*. Oxford, UK: Oxford University Press.

Lee, L. (2008). Focus-on-form through collaborative scaffolding in expert-to-novice online interaction. *Language Learning & Technology, 12*(3), 53-72.

Lewis, J., & Jhally, S. (1998). The struggle over media literacy. *Journal of Communication, 48*(1), 109-120.

Liyanage, I. (2013). *Postgraduate certificate and masters in TESOL/Applied Linguistics at Griffith University*. Retrieved from http://www.tirfonline.org/wp-content/uploads/2013/02/TIRF_OLTE_CaseReport5_Liyanage.pdf

Marzano, R. J. (2010). *Classroom assessment and grading that work*. Alexandria, VA: ASCD.

Meloni, J. (2010). Tools for synchronous and asynchronous classroom discussion [online blog]. *The Chronicle of Higher Education*. Retrieved from http://chronicle.com/blogs/profhacker/tools-for-synchronousasynchronous-classroom-discussion/22902

Mills, S. J., Yanes, M. J., & Casebeer, C. M. (2009). Perceptions of distance learning among faculty of a college of education. *Journal of Online Learning and Teaching, 5*(1), 10-28. Retrieved from http://jolt.merlot.org/vol5no1/mills_0309.htm

Moe, R. (2015). The brief and expansive history (and future) of the MOOC: Why two divergent models share the same name. *Current Issues in Emerging eLearning, 2*(1), Article 2. Retrieved from http://scholarworks.umb.edu/ciee/vol2/iss1/2/

Moore, J. C. (2005). The Sloan Consortium quality framework and the five pillars. Retrieved from http://sloanconsortium.org/

Motteram, G. (2013). Developing and extending our understanding of language learning and technology. In G. Motteram (Ed.), *Innovations in learning technologies for English language teaching* (pp. 175-192). London, UK: British Council. Retrieved from http://englishagenda.britishcouncil.org/books-resource-packs/innovations-learning-technologies-english-language-teaching

Munby, H., Russell, T., & Martin, A. K. (2001). Teachers' knowledge and how it develops. In V. Richardson (Ed.), *Handbook of research on teaching* (4th ed., pp. 877-904). Washington, DC: American Educational Research Association.

Murray, D. E. (2013). *A case for online language teacher education*. Retrieved from http://www.tirfonline.org/wp-content/uploads/2013/05/TIRF_OLTE_Two-PageSpread_May2013.pdf

Murray, D. E., & Christison, M. A. (2017). Going online: Affordances and limitations for teachers and teacher educators. In L. Wong & K. Hyland (Eds.), *Faces of English education: Students, teachers and pedagogy*. (pp. 215-230). London, UK: Routledge Taylor & Francis.

Murray, D. E., & McPherson, P. (2006). Scaffolding instruction for reading the Web. *Language Teaching Research, 10*(2), 131-156.

Nielsen Group. (2010). Social networksblogs now account for one in every four and a half minutes online. Retrieved from http://www.nielsen.com/us/en/insights/news/2010/social-media-accounts-for-22-percent-of-time-online.html

Nunan, D. (2013). *Anaheim University case study report*. Retrieved from http://www.tirfonline.org/wp-content/uploads/2013/02/TIRF_OLTE_CaseReport1_Nunan.pdf

OECD. (2005). *E-learning in tertiary education: Where do we stand?* Paris, France: OECD.

OECD. (January, 2008). *Cross-border higher education and development*. Paris, France: OECD.

OLC. (n.d.). OLC quality scorecard: Criteria for excellence in the administraiton of online programs. Retrieved from http://onlinelearningconsortium.org/consult/quality-scorecard/

Parker, N. K. (2004). The quality dilemma in online education. In T. Anderson & F. Elloumi (Eds.), *Theory and practice of online learning* (pp. 385-421). Athabasca, AB, Canada: Athabasca University.

Pegrum, M. (2014). *Mobile learning: Languages, literacies & cultures*. Basingstoke & London, UK: Palgrave Macmillan.

Philosophy Department at San José State University. (2013). An open letter to professor Michael Sandel from the Philosophy Department at San José State University. *The Chronicle of Higher Education. 2 May*. Retrieved from http://chronicle.com/article/The-Document-an-Open-Letter/138937

Phipps, S., & Borg, S. (2007). Exploring the relationship between teachers' beliefs and their classroom practice. *The Teacher Trainer, 21*(3), 17-19.

Prensky, M. (2001). Digital natives, digital immigrants. *On the Horizon, 9*(5), 1-6. Retrieved from http://dx.doi.org/10.1108/10748120110424816

Prescott, D. L. (2010). Online English language teacher training courses: Quality and innovation. *EA Journal, 26*(1), 4-40.

Prinsloo, M., & Walton, M. (2008). Situated responses to the digital literacies of electronic communiction in marginal school settings. In N. Pecora, E. Osei-Hwere, & U. Carlsson (Eds.), *Yearbook 2008: Media, Vol. 2* (pp. 101-118). Stockholm, Sweden: International Clearinghoise on Children, Youth and Media. Retrieved from http://www.education.uct.ac.za/edu/staff/academic/mprinsloo#sthash.e9md0zY0.dpuf

Reinders, H., & White, C. (2011). Learner autonomy and new learning environments. *Language Learning & Technology, 15*(3), 1-3.

Richards, J., & Lockhart, C. (1994). *Reflective teaching in second language classrooms*. Cambridge, UK: Cambridge University Press.

Richardson, W. (2006). *Blogs, wikis and podcasts*. London, UK: Sage.

Robinson, B., & Latchem, C. (Eds.). (2003). *Teacher education through open and distance learning*. London, UK: Routledge.

Sadler, D. R. (1989). Formative assessment and the design of instructional systems. *Instructional Science, 18*(2), 119-144.

Siemens, G. (2005). Connectivism: A learning theory for the digital age. *International Journal of Instructional Technology and Distance Learning, 2*(1), 3-10.

Sims, R., Dobbs, G., & Hand, T. (2002). Enhancing quality in online learning: Scaffolding, planning and design through proactive evaluation. *Distance Education, 23*(2), 135-148.

Skyrme, G. (2013). *Postgraduate diploma in second language teaching at Massey University*. Retrieved from **http://www.tirfonline.org/wp-content/uploads/2013/02/TIRF_OLTE_CaseReport8_Skyrme.pdf**

The Sloan Consortium. (2005). Growing by degrees: Online education in the United States, 2005. Retrieved from **http://sloanconsortium.org/sites/default/files/growing_by_degrees_1.pdf**

Thomas, M., Reinders, H., & Warschauer, M. (Eds.). (2013). *Contemporary computer assisted language learning*. London, UK: Bloomsbury.

Thornton, P., & Houser, C. (2003). Using mobile web and video phones in English language teaching: Projects with Japanese college students. In B. Morrison, C. Green, & G. Motteram (Eds.), *Directions in CALL: Experience, experiments and evaluation* (pp. 207-224). Hong Kong, China: English Language Center, Hong Kong Polytechnic University.

Turkle, S. (2012). *Alone together: Why we expect more from technology and less from each other*. New York, NY: Basic Books.

Vygotsky, L. (1978). *Mind in society: The development of higher psychological processes.* M. Cole, V. John-Steiner, S. Scribner, & E. Souberman (Eds.). Cambridge, MA: Harvard University Press.

Warschauer, M. (2001). The death of cyberspace and the rebirth of CALL. In P. Brett (Ed.), *CALL in the 21st century* (CD-Rom). Whitstable, Kent, UK: IATEFL.

Wenger, E. (1998). *Communities of practice: Learning, meaning, and identity*. New York, NY: Cambridge University Press.

Williams, R. (2005). *Television: Technology and cultural form*. London, UK: Routledge.

Wood, D., Bruner, J. S., & Ross, G. (1976). The role of tutoring in problem solving. *Journal of Child Psychology and Psychiatry, 17*, 89-100.

Woodworth, J. L., Raymond, M. E., Chirbas, K., Gonzalez, M., Negassi, Y., Snow, W., & Van Donge, C. (2015). *Online charter school study*. Stanford, CA.: Center for Research on Education Outcomes.

The International Research Foundation
for English Language Education

About TIRF

Formed in June 1998, The International Research Foundation for English Language Education (TIRF) is committed to developing knowledge about English language learning and teaching in various settings through a coherent program of research, dissemination, and networking. TIRF's Board of Trustees, which serves on a voluntary basis, is drawn from academia, publishing, business, and government. TIRF raises funds entirely from charitable donations. To date, TIRF has awarded monies to fund 121 research projects involving 148 researchers from around the world.

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Online Language Teacher Education:
Participants' Experiences and Perspectives
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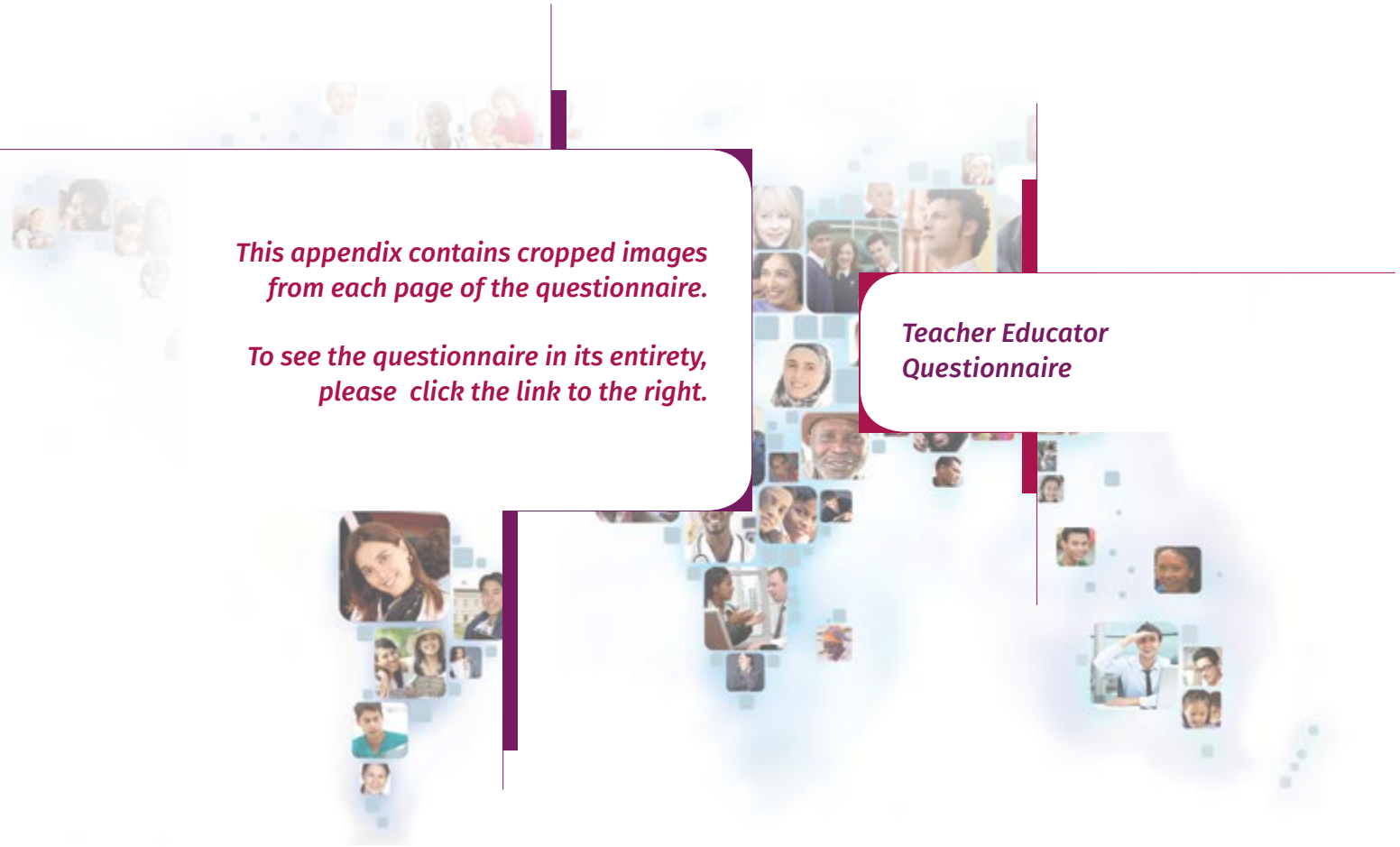
Appendix A:
Teacher Educator Questionnaire

This appendix contains cropped images from each page of the questionnaire.

To see the questionnaire in its entirety, please click the link to the right.

Teacher Educator Questionnaire



Consent Cover Letter

The purpose of this research study is to investigate online language teacher education practices as well as to learn about the experiences and perceptions of the students and teachers in online language teacher education programs. We are doing this study because we hope to learn more about the types of courses that have been taken and taught, how they courses are configured, how they use online technologies, how they are marketed, and whether they are accredited.

We would like to ask you to complete an online survey. There are no foreseeable risks to participating in this research. There are no direct benefits to you personally for participating in the research; however, the results of the research have the potential to improve online language teacher education.

Your privacy will be protected. Only the research investigators will have access to raw data. Your answers will not be identifiable with you personally; all data will be aggregated. Data will be kept on a password-protected site that can only be accessed by the principal investigator.

Next

If you have any questions complaints or if you feel you have been harmed by this research please contact Dr. MaryAnn Christison, Department of Linguistics, University of Utah, (ma.christison@utah.edu) or phone 801-581-8047 or Dr. Denise E. Murray, Department of Linguistics, Macquarie University (denise.murray@mq.edu.au).

At the University of Utah, you can contact the Institutional Review Board (IRB) if you have questions regarding your rights as a research participant. Also, contact the IRB if you have questions, complaints or concerns that you do not feel you can discuss with the investigators. The University of Utah IRB may be reached by phone at (801) 581-3655 or by e-mail at irb@hsc.utah.edu.

The ethical aspects of this study have also been approved by the Macquarie University Human Subjects Ethics Committee. If you have any complaints or reservations about any ethical aspect of your participation in this research, you may contact the Committee through the Director, Research Ethics (telephone [02] 9850 7854, email ethics@mq.edu.au). Any complaint you make will be treated in confidence and investigated, and you will be informed of the outcome.

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Next

It should take between 15-30 minutes to complete the questionnaire, depending on how much information you wish to give us. Participation in this study is voluntary. You can choose not to take part. You can choose not to finish the survey. You can omit any question you prefer not to answer.

By continuing to the online survey, you are giving your consent to participate.

We thank you so much for your time and thank you in advance if you decide to participate in this research.

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ONLINE LANGUAGE TEACHER EDUCATION: INSTRUCTORS' EXPERIENCES AND PERCEPTIONS

Thank you for agreeing to participate in this survey. The survey is for instructors of online language teacher education (OLTE) courses. You can take the survey all at once or answer a few questions and come back to the survey later as long as you are using the same computer/mobile device and browser and do it within one week. You will be returned to the survey where you left off. You can also revisit questions and change your answers by using the "back" and "next" page buttons in the right-hand corner of the screen. There is a progress bar at the bottom of each question so that you can see how much more remains in the survey.

RESEARCH PROCEDURES AND DEFINITION OF KEY TERMS

This survey asks for basic information about you as an instructor and about the OLTE courses you have taught. It also asks you for your opinions and preferences about OLTE courses.

We use the term *course* to refer to a single class. We use the term *program* to refer to a set courses that collectively form a curriculum leading to a certificate or degree.

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RESULTS

Should you wish to receive a summary of the findings at the conclusion of the study, please email one of the investigators for for information: MaryAnn Christison ma.christison@utah.edu or Denise Murray denise.murray@mq.edu.au

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1. What was the language of instruction for the online language teacher education (OLTE) course(s) you taught? Check all that apply.

English was the language of instruction.

I taught in a language other than English. Please tell us which language(s).

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2. What is your age?

I am 50 or older

I am in my 40s.

I am in my 30s.

I am in my 20s.

I am 18 or 19 years old.

I am under 18 years old.

3. Please check all that apply.

I am a mother tongue speaker of English, and I have taught OLTE courses in English.

I am not a mother tongue speaker of English, and I have taught OLTE courses in English.

I am a mother tongue speaker of English, and I have taught OLTE courses in a language other than English. Please tell us which language.

I am not a mother tongue speaker of English, and I have taught OLTE courses in a language other than English. Please tell us in which language you have taught?

4. How many of the following types of OLTE courses have you taught in the past five years? Check all that apply.

enhanced (face-to-face [f2f] classes supported by some course activity online).
If so, how many?

blended/hybrid (f2f and online activity with the number of f2f meeting times reduced).
If so, how many?

flipped (key content delivered online outside of f2f classroom; f2f is devoted to interactive problem-solving).
If so, how many?

totally online with a synchronous component (students meet online at the same time).
If so, how many?

totally online with no synchronous component (students do not meet online at the same time) If so, how many?

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5. OLTE courses are marketed in different ways. In terms of a time commitment, how were the different OLTE courses that you taught advertised or marketed? Check all that apply.

By the number of hours required to complete the course (e.g., a 15 hour or a 120 hour course). If so, how many hours? If you have taught more than one course that was marketed in this way, what was the range of the number of hours?

By number of days required to complete the course (e.g., a 10 day course). If so, how many days? If you have taught more than one course that was marketed in this way, what was the range of the number of days?

By the number of weeks required to complete the course (e.g., a six-week course). If so, how many weeks? If you have taught more than one course that was marketed in this way, what was the range of the number of weeks?

By the number of months required to complete the course (e.g., a three-month course). If so, how many months? If you have taught more than one course that was marketed in this way, what was the range of the number of months?

By the quarters, semesters, or terms required to complete the course (e.g., a semester length course). If so, how many quarters or semesters? If you have taught more than one course that was marketed in this way, what was the range of the number of quarters or semesters?

By the number of years required to complete a series of courses in a program (e.g., a two-year masters degree). If you have taught more than one course that was marketed in this way, what was the range of the total length of the course?

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6. Which of the following apply to the courses you have taught? Check all that apply.

They were stand alone courses or workshops and not part of a program.

They were part of a certificate or certification program.

They were part of a college or university undergraduate degree program.

They were part of a masters program.

They were part of a doctoral program.

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7. Is the OLTE course(s) you taught or the program in which you taught accredited by a governmental or non-governmental organization? If yes, please tell us which organization provided the accreditation?

- Yes
- No
- I don't know.

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8. What are the primary reasons that students take the OLTE courses you teach? Check all that apply.

- They are required by the school/institution.
- They want to travel overseas, teach English, and earn some money.
- They want careers as English as second/foreign language teaching professionals.
- They want to upgrade their teaching credentials/certification to be able to teach English learners
- It is purely for professional development. They want to improve their teaching skills and knowledge of the profession.
- It was part of their degree program.
- They are currently employed and their employer required or recommended the course.
- Other. Please write in the space provided.

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9. Why do you think students take online courses rather than totally face-to-face (f2f) courses? Check all that apply.

- They work and cannot attend f2f classes when they are scheduled.
- They have family commitments and cannot attend a totally f2f classes when they are scheduled.
- They think online courses will be easier.
- There were no f2f class being offered when they wanted or needed to take courses.
- A friend/colleague recommended my course.
- The online courses are cheaper than other courses on my campus.
- The online courses give students more flexibility in terms of time.
- They can study at their own pace.
- Other. Please write your reason in the space provided.

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10. How would you describe your qualifications as an instructor of OLTE courses? Please check all that apply.

- I am a qualified online instructor (i.e., I have taken courses or workshops about teaching online)
- I am an experienced instructor of online courses (i.e., I have taught several online courses).
- I am an experienced teacher educator.
- I am an experienced teacher of OLTE courses (i.e., I have taught several OLTE courses).
- I am a teaching assistant.
- I am a tutor.
- Other. Please write in the blank provided.

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11. What qualifications do you have for teaching OLTE courses? Check all that apply.

- I have taken workshops or courses about teaching online.
- I have taken workshops or courses about OLTE.
- I have experience teaching online.
- I have experience teaching OLTE courses.
- I have taught several OLTE courses.
- I have designed and developed OLTE courses.
- Other. Please explain.

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12. How confident did you feel about your ability to work with the online technology before you taught your first OLTE course?

- I was worried and not confident.
- I was somewhat confident, and I thought I could figure it out.
- I was confident.
- I was very confident.
- Comments

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13 Please rate the overall effectiveness of the technical support you provide your students.

- I am not helpful.
- I am helpful depending on the question.
- I am helpful with most questions.
- I am very helpful.
- I do not provide technical support to my students.

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14. Please rate the effectiveness of the technical support you have received from a technical support person.

- Not helpful
- Somewhat helpful depending on the question
- Reasonable
- Helpful
- Very helpful
- I did not receive support from technical support staff.
- Comments.

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15. To which of the following did the students in your OLTE courses have access? Check all that apply.

- Brick and mortar library
- Online library
- Open source teaching resources
- Online tutorials about using the technology

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16. How would you characterize your workload in the OLTE course (i.e., the amount of time you spend preparing for your OLTE course and responding to students) compared to a face-to-face (f2f) course?

- It is very light compared to f2f teaching.
- It's a little lighter than f2f teaching.
- It is about the same as f2f teaching.
- It a little more work than f2f teaching.
- It is a great deal more work than f2f teaching.

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17. Drag and drop the types of OLTE courses in the "Items" column to the appropriate column in the chart. For the courses you have taught, arrange them according to your preference with the course type you prefer at the top. Do not rank order the course types that you have not taught.

Items	Course types I have taught.	Course types I have not taught.
enhanced (f2f classes supported by some course activity online)		
blended/hybrid (f2f and online activity with the number of f2f meetings reduced)		
flipped (key content delivered online outside of the f2f classroom; f2f classes are devoted to interactive problem solving)		
totally online with a synchronous component		
totally online with no synchronous component.		

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18. What are the reasons for your preferences? Check all that apply.

- More f2f interaction with my students
- More opportunities for my students to have f2f interaction with peers
- Flexibility with scheduling assignments
- More opportunities for students to work at their own pace
- More use of online technology
- Preference for online teaching
- More opportunities to solve problems and use critical thinking skills.
- More interesting.
- Less overall work
- More opportunities for students to work alone
- I can teach from anywhere in the world.
- Other. Please specify.

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19. Which of the following learning management systems (LMS) have you used?

- Blackboard
- Canvas
- WebCT
- Moodle
- Locally-designed learning management system (LMS)
- Other (Please specify)

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20. What would you most like a learning management system (LMS) to do? Please check your top four.

- Be transparent.
- Give me opportunities to interact with my students.
- Be flexible.
- Provide an effective messaging and communication system.
- Provide tools for asynchronous discussions.
- Allow for group work.
- Provide tools for synchronous discussions.
- Offer multiple possibilities for online assessments.
- Allow me to track student progress and grades.
- Give me space to store personal files.
- Allow for easy upload of files and direct text entry for assignments.
- Provide technological support with online tutorials.
- Allow students to track their own progress and grades.
- Provide opportunities to use assessments for learning.
- Other. Please specify.

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21. To what extent do the learning management systems (LMS) you have used meet your teaching needs? Tell us why.

Categories		Tell Us Why					
Blackboard	○ ○ ○ ○ ○	transparency of the system	opportunities for interaction	flexibility	discussions	messaging system	synchronous tools
Canvas	○ ○ ○ ○ ○	transparency of the system	opportunities for interaction	flexibility	discussions	messaging system	synchronous tools
WebCT	○ ○ ○ ○ ○	transparency of the system	opportunities for interaction	flexibility	discussions	messaging system	synchronous tools
Moodle	○ ○ ○ ○ ○	transparency of the system	opportunities for interaction	flexibility	discussions	messaging system	synchronous tools
Locally-designed LMS	○ ○ ○ ○ ○	transparency of the system	opportunities for interaction	flexibility	discussions	messaging system	synchronous tools
Other	○ ○ ○ ○ ○	transparency of the system	opportunities for interaction	flexibility	discussions	messaging system	synchronous tools

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22. If you were to teach a course that was completely online, would you prefer a synchronous component to the course or a course that was completely asynchronous? Please briefly state why if you can.

asynchronous

synchronous

Back Next

23. If you were to teach a totally online course, which of the following would you prefer?

Open learning modules that students can complete at any time and at their own pace.

Modules that open sequentially and have deadlines for assignments.

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24. What tools have you used for online synchronous communication? Check all that apply.

GoToMeeting

Skype

Text Chats within the learning management system

Video conference within the learning management system.

AdobeConnect

Elluminate

Other (Please specify.)

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25. For the synchronous tools that you have used in your OLTE courses, tell us how and why they met your teaching needs relative to the following:
Transparency: How easy the tool was to use.
Flexibility: The tool could be used in different ways, including different numbers of users and different presenters.
Multimedia: The tool allows for video, audio, and text messaging.
Reliability: The tool was reliable and the quality was good.

Categories		Tell Us Why			
GoToMeeting	○ ○ ○ ○ ○	Transparency	Flexibility	Multimedia	Reliability
Skype	○ ○ ○ ○ ○	Transparency	Flexibility	Multimedia	Reliability
Text chats within the learning management system	○ ○ ○ ○ ○	Transparency	Flexibility	Multimedia	Reliability
Video conferencing within the learning management system	○ ○ ○ ○ ○	Transparency	Flexibility	Multimedia	Reliability
AdobeConnect	○ ○ ○ ○ ○	Transparency	Flexibility	Multimedia	Why
Elluminate	○ ○ ○ ○ ○	Transparency	Flexibility	Multimedia	Why
Other	○ ○ ○ ○ ○	Transparency	Flexibility	Multimedia	Reliability

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26. What would you like most from a synchronous tool?

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27. What types of online assessments have you used? Check all that apply.

- Practice quizzes
- Quizzes
- Quizzes with multiple attempts possible
- Multimedia projects
- Portfolios
- Exams (with online text entry)
- Timed exams (with online text entry)
- Exams (with offline uploads possible)
- Peer assessment
- Group projects
- Graded discussions
- Online presentations
- Other. Please specify.

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28. Please rate the online assessments that you have used in your OLTE courses. For the online assessments you like, please tell us why if you can.

	I like this type of assessment.	I am neutral about this assessment.	I don't like this assessment.	I have not used this assessment.
Practice quizzes	○	○	○	○
Quizzes	○	○	○	○
Quizzes with multiple attempts possible	○	○	○	○
Multimedia projects	○	○	○	○
Portfolios	○	○	○	○
Exams (with online text entry)	○	○	○	○
Timed exams (with online text entry)	○	○	○	○
Exams (with offline uploads possible)	○	○	○	○
Peer assessment	○	○	○	○
Group projects	○	○	○	○
Graded discussions	○	○	○	○
Online presentations	○	○	○	○
Other. Please specify.	○	○	○	○

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29. Please rank order these types of instruction. Choose "1" if you believe it offers the highest quality of instruction and "6" if it is the lowest. If you would like to tell us why, please write your responses in the text boxes.

	1	2	3	4	5	6
f2f instruction	○	○	○	○	○	○
enhanced (f2f supported by online activity)	○	○	○	○	○	○
blended/hybrid (f2f and online activity with f2f meetings reduced)	○	○	○	○	○	○
flipped (key content delivered online; f2f meetings devoted to problem-solving)	○	○	○	○	○	○
totally online with a synchronous component	○	○	○	○	○	○
totally online with no synchronous component	○	○	○	○	○	○

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30. In what ways did you expect your students' practices and beliefs about ELT to change as a result of their taking the OLTE course(s)? Check all that apply.

- I thought they would develop a greater knowledge of the profession.
- I thought they would develop a better understanding of how teaching expertise develops.
- I thought they would increase in their teaching skills.
- I thought they would increase in their understanding of language learning.
- I thought they would gain an understanding and appreciation of the language learners in their classes.
- I hought they would develop expertise on the specific content of the course I taught.
- I thought they would develop stronger research skills.
- I thought they would develop greater confidence.
- I thought they would mprove in their abilities to use academic English.
- I thought they would improve in their overall English proficiency.
- I thought they would improve their abilities to use online resources for language teaching and learning.
- Other. Please specify.

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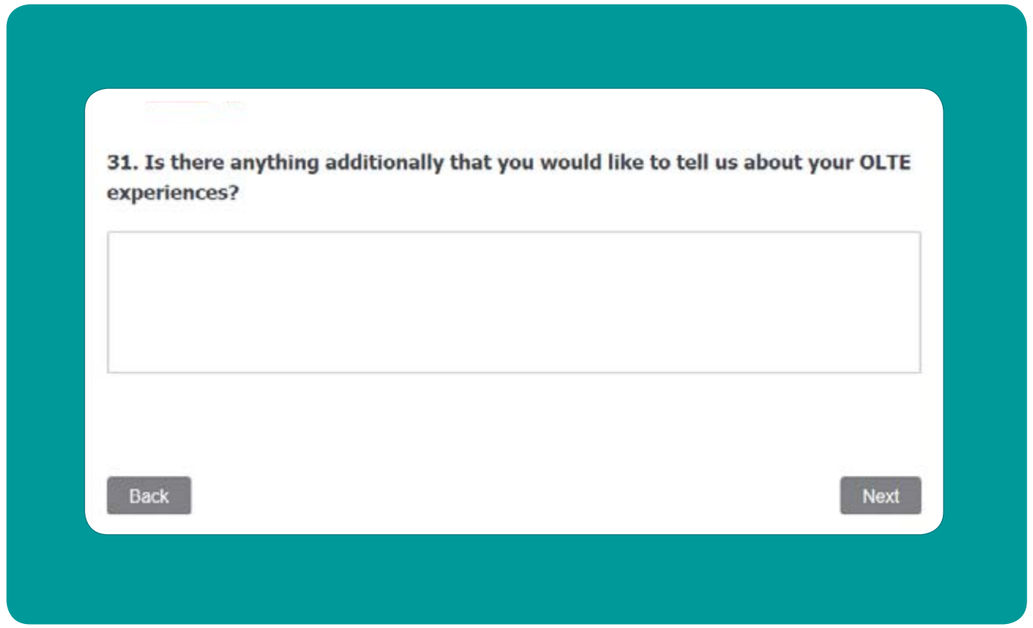
31. Is there anything additionally that you would like to tell us about your OLTE experiences?
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Thank you so very much for taking the survey on OLTE. We appreciate your time and expertise.
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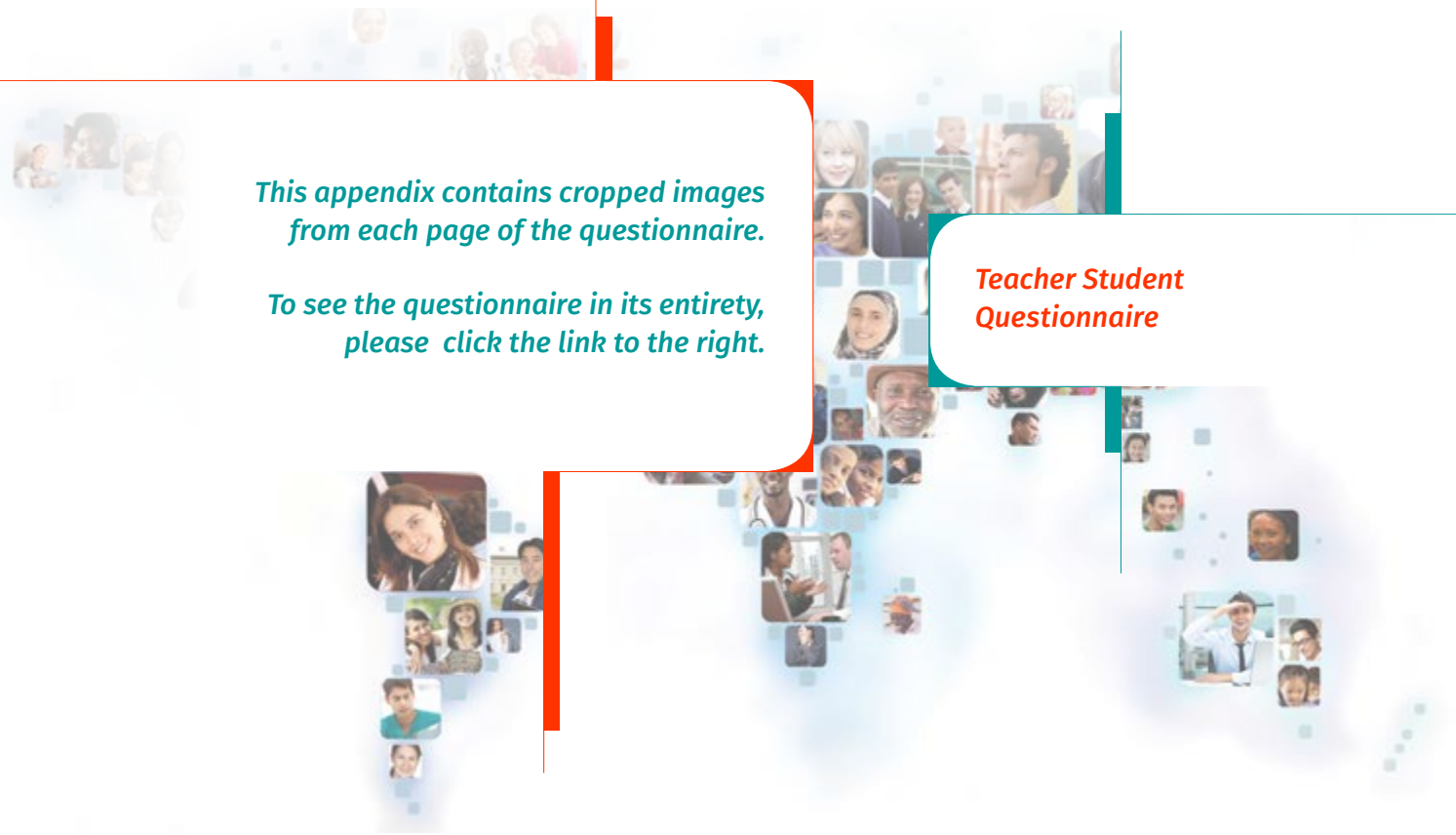
We thank you for your time spent taking this survey.
Your response has been recorded.

Appendix B:
Teacher Student Questionnaire

This appendix contains cropped images from each page of the questionnaire.

To see the questionnaire in its entirety, please click the link to the right.

Teacher Student Questionnaire



ONLINE LANGUAGE TEACHER EDUCATION: STUDENTS' EXPERIENCES AND PERCEPTIONS

Consent Cover Letter

The purpose of this research study is to investigate online language teacher education practices as well as to learn about the experiences and perceptions of the students and teachers in online language teacher education programs. We are doing this study because we hope to learn more about the types of courses that have been taken and taught, how they courses are configured, how they use online technologies, how they are marketed, and whether they are accredited.

We would like to ask you to complete an online survey. There are no foreseeable risks to participating in this research. There are no direct benefits to you personally for participating in the research; however, the results of the research have the potential to improve online language teacher education. Participants must be 18 years of age or older.

Your privacy will be protected. Only the research investigators will have access to raw data. Your answers will not be identifiable with you personally; all data will be aggregated. Data will be kept on a password-protected site that can only be accessed by the principal investigator.

Next

Consent Cover Letter

The purpose of this research study is to investigate online language teacher education practices as well as to learn about the experiences and perceptions of the students and teachers in online language teacher education programs. We are doing this study because we hope to learn more about the types of courses that have been taken and taught, how they courses are configured, how they use online technologies, how they are marketed, and whether they are accredited.

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Your privacy will be protected. Only the research investigators will have access to raw data. Your answers will not be identifiable with you personally; all data will be aggregated. Data will be kept on a password-protected site that can only be accessed by the principal investigator.

Next

If you have any questions complaints or if you feel you have been harmed by this research please contact Dr. MaryAnn Christison, Department of Linguistics, University of Utah, (ma.christison@utah.edu) or phone 801-581-8047 or Dr. Denise E. Murray, Department of Linguistics, Macquarie University (denise.murray@mq.edu.au).

At the University of Utah, you can contact the Institutional Review Board (IRB) if you have questions regarding your rights as a research participant. Also, contact the IRB if you have questions, complaints or concerns that you do not feel you can discuss with the investigators. The University of Utah IRB may be reached by phone at (801) 581-3655 or by e-mail at irb@hsc.utah.edu.

The ethical aspects of this study have also been approved by the Macquarie University Human Subjects Ethics Committee. If you have any complaints or reservations about any ethical aspect of your participation in this research, you may contact the Committee through the Director, Research Ethics (telephone [02] 9850 7854, email ethics@mq.edu.au). Any complaint you make will be treated in confidence and investigated, and you will be informed of the outcome.

Back Next

RESEARCH PROCEDURES AND DEFINITION OF KEY TERMS

This survey asks for basic information about you as an instructor and about the OLTE courses you have taught. It also asks you for your opinions and preferences about OLTE courses.

We use the term *course* to refer to a single class. We use the term *program* to refer to a set courses that collectively form a curriculum leading to a certificate or degree.

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RESULTS
Should you wish to receive a summary of the findings at the conclusion of the study, please email one of the investigators for for information: MaryAnn Christison ma.christison@utah.edu or Denise Murray denise.murray@mq.edu.au

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It should take between 15-30 minutes to complete the questionnaire, depending on how much information you wish to give us. Participation in this study is voluntary. You can choose not to take part. You can choose not to finish the survey. You can omit any question you prefer not to answer.

By continuing to the online survey, you are giving your consent to participate.

We thank you so much for your time and thank you in advance if you decide to participate in this research.

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ONLINE LANGUAGE TEACHER EDUCATION: INSTRUCTORS' EXPERIENCES AND PERCEPTIONS

Thank you for agreeing to participate in this survey. The survey is for instructors of online language teacher education (OLTE) courses. You can take the survey all at once or answer a few questions and come back to the survey later as long as you are using the same computer/mobile device and browser and do it within one week. You will be returned to the survey where you left off. You can also revisit questions and change your answers by using the "back" and "next" page buttons in the right-hand corner of the screen. There is a progress bar at the bottom of each question so that you can see how much more remains in the survey.

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If you have any questions complaints or if you feel you have been harmed by this research please contact Dr. MaryAnn Christison, Department of Linguistics, University of Utah, (ma.christison@utah.edu) or phone 801-581-8047 or Dr. Denise E. Murray, Department of Linguistics, Macquarie University (denise.murray@mq.edu.au).

At the University of Utah, you can contact the Institutional Review Board (IRB) if you have questions regarding your rights as a research participant. Also, contact the IRB if you have questions, complaints or concerns that you do not feel you can discuss with the investigators. The University of Utah IRB may be reached by phone at (801) 581-3655 or by e-mail at irb@hsc.utah.edu.

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It takes between 15-30 minutes to complete the questionnaire, depending on how much information you wish to give us. Participation in this study is voluntary. You can choose not to take part. You can choose not to finish the survey. You can omit any question you prefer not to answer.

By continuing to the online survey, you are giving your consent to participate.

We thank you so much for your time and thank you in advance if you decide to participate in this research.

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ONLINE LANGUAGE TEACHER EDUCATION: STUDENTS' EXPERIENCES AND PERCEPTIONS

This survey is for students in online language teacher education (OLTE) courses. You can take the survey all at once, or you can answer a few questions and come back to the survey later as long as you are using the same computer/mobile device and browser and do it within one week. You will be returned to the survey where you left off. You can also revisit questions and change your answers by using the "back" and "next" page buttons in the right-hand corner of the screen. There is a progress bar at the bottom of each question so that you can see how much more remains in the survey.

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RESEARCH PROCEDURES AND DEFINITIONS OF KEY TERMS

The survey asks for basic information about the OLTE courses you took, characteristics of the teaching staff, non-teaching support staff, technology use, and course activity. It also asks you for your opinions about OLTE courses and your preferences about online instruction.

We use the term *course* to refer to a single class. We use the term *program* to refer to a set courses that collectively form a curriculum leading to a certificate or degree.

We are interested in your experiences as a student in online language teacher education courses during the past five years.

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RESULTS

Should you wish to receive a summary of the findings at the conclusion of the study, please email one of the investigators for more information: MaryAnn Christison **ma.christison@utah.edu** or Denise Murray **denise.murray@mq.edu.au**

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1. What was the language of instruction for the online language teacher education (OLTE) course(s) you took? Check all that apply.

English was the language of instruction.

The language of instruction was other than English. Please tell us which language.

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2. What is your age?

- I am 50 or older.
- I am in my 40s.
- I am in my 30s.
- I am in my 20s.
- I am 18 or 19 years of age.
- I am under 18 years of age.

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3. Please check all that apply.

- I am a mother tongue speaker of English, and I have taken an OLTE course in English.
- I am not a mother tongue speaker of English, and I have taken an OLTE course in English.
- I am a mother tongue speaker of English, and I have taken an OLTE course in a language other than English. Please tell us which language.
- I am not a mother tongue speaker of English, and I have taken an OLTE course in a language other than English. Please tell us which language.

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4. How many of the following types of OLTE courses have you taken in the past five years? Check all that apply.

enhanced (face-to-face [f2f] classes supported by some course activity online).
If so, how many?

blended/hybrid (f2f and online activity with the number of f2f meeting times reduced).
If so, how many?

flipped (key content delivered online outside of f2f classroom; f2f is devoted to interactive problem-solving).
If so, how many?

totally online with a synchronous component (students meet online at the same time).
If so, how many?

totally online with no synchronous component (students do not meet online at the same time) If so, how many?

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5. OLTE courses are marketed in different ways. How were the OLTE courses that you have taken in the past five years advertised or marketed? Check all that apply.

By the number of hours required to complete the course (e.g., a 15-hour or a 120-hour course). If so, how many hours? If you have taken more than one course that was marketed in this way, what was the range of the number of hours?

By number of days required to complete the course (e.g., a 10-day course). If so, how many days? If you have taken more than one course that was marketed in this way, what was the range of the number of days?

By the number of weeks required to complete the course (e.g., a six-week course). If so, how many weeks? If you have taken more than one course that was marketed in this way, what was the range of the number of weeks?

By the number of months required to complete the course (e.g., a three-month course). If so, how many months? If you have taken more than one course that was marketed in this way, what was the range of the number of months?

By the quarters, semesters, or terms required to complete the course (e.g., a semester length course). If so, how many quarters or semesters? If you have taken more than one course that was marketed in this way, what was the range of the number of quarters or semesters?

By the number of years required to complete a series of courses in a program (e.g., a two-year masters degree). If you have taken more than one course that was marketed in this way, what was the range of the number of years?

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6. Which of the following apply to the courses you have taken in the past five years? Check all that apply.

- They were stand alone courses or workshops.
- They were part of a certificate or certification program.
- They were part of a college or university undergraduate degree program.
- They were part of a masters program.
- They were part of a doctoral program.

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7. Is the OLTE course or program you took accredited by a governmental or non-governmental organization? If yes, please tell us which organization provided the accreditation?

- Yes
- No
- I don't know.

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8. What are the primary reasons that you have taken OLTE courses? Check all that apply.

- They were required by my school/institution.
- I wanted to travel overseas, teach English, and earn some money.
- I want a career as an English as a second/foreign language teaching professional.
- I want to upgrade my teaching credentials/certification to be able to teach English learners
- It was for professional development. I wanted to improve my teaching and knowledge of the profession.
- They were part of my certificate or degree program.
- They were recommended or required by my employer.
- Other. Please write in the space provided.

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9. Why did you choose an OLTE course rather than a totally face-to-face (f2f) one? Check all that apply.

- I work and cannot attend f2f classes when they are scheduled.
- I have family commitments and cannot attend a totally f2f classes when they are scheduled.
- I thought it would be easier.
- There was no f2f class being offered when I wanted to take it.
- It was recommended by a friend/colleague.
- It was cheaper than the course on my own campus.
- I like the flexibility of an online course in terms of time.
- I could study at my own pace.
- Other. Please write your reason in the space provided.

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10. Who taught the course(s)? Please check all that apply.

- Qualified faculty/teacher/instructor
- Tutor
- Teaching assistant
- Other. Please write in the blank provided.

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11. How confident did you feel about your ability to work with the online technology before you took your first OLTE course ?

- I was worried and not confident.
- I was somewhat confident, and I thought I could figure it out.
- I was confident.
- I was very confident.
- Comments

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12. Please rate the overall effectiveness of the technical support you have received from your instructor(s).

- Not helpful
- Somewhat helpful depending on the question
- Reasonable
- Helpful
- Very helpful
- I did not receive technical support from my instructor.

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13. Please rate the overall effectiveness of the technical support you received from technical support persons.

- Not helpful
- Somewhat helpful depending on the question
- Reasonable
- Helpful
- Very helpful
- I did not receive support from technical support staff.

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14. While you were taking the online course, to which of the following did you have access? Check all that apply.

- Brick and mortar library
- Online library
- Open source teaching resources
- Online tutorials about using the technology

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15. How would you characterize the workload (i.e., the number and type of assignments) for the OLTE course compared to a face-to-face (f2f) course?

- It was very light compared to f2f courses.
- It was a little lighter than f2f courses.
- It was about the same as f2f courses.
- It was a little heavier than f2f courses.
- It was much heavier than f2f courses.

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16. Drag and drop the types of OLTE courses in the "Items" column to the appropriate column in the chart. For the courses you have taken or are taking, arrange them according to your preference with your top preference at the top. Do not rank the course types you have not taken.

Items	Course types I have taken	Course types I have not taken.
enhanced (f2f classes supported by some course activity online)		
blended/hybrid (f2f and online activity with the number of f2f meetings reduced)		
flipped (key content delivered online outside of the f2f classroom; f2f classes are devoted to interactive problem solving)		
totally online with a synchronous component		
totally online with no synchronous component.		

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17. What are the reasons for your preferences? Check all that apply.

- I have more f2f interaction with the instructor.
- I have more f2f interaction with peers.
- There is more flexibility with scheduling.
- I have more opportunities to work at my own pace.
- I have more opportunities to use the online technology.
- I have a preference for online learning.
- I have more opportunities to solve problems and develop critical thinking skills.
- The type of OLTE course is more interesting.
- OLTE courses are less overall work than f2f courses.
- I have more opportunities to work alone.
- I can access the OLTE course materials and complete assignments from anywhere.
- Other (please specify).

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18. Which of the following learning management systems (LMS) have you used in your OLTE courses? Check all that apply.

- Blackboard
- Canvas
- WebCT
- Moodle
- Locally-designed learning management system (LMS)
- Other (Please specify)

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19. What would you like a learning management system (LMS) to do? Please check your top four.

- Be transparent.
- Give me opportunities for interaction with peers and my instructor(s).
- Be flexible.
- Provide an effective messaging and communication system.
- Provide tools for asynchronous discussions.
- Allow for group work.
- Provide tools for synchronous discussions.
- Allow me to track my own progress and grades.
- Give me space to store personal files.
- Allow for easy upload of files and direct text entry for assignments.
- Provide technological support with online tutorials.
- Provide opportunities to use assessments for learning.
- Other. Please specify.

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20. To what extent do these learning management systems (LMS) meet your learning needs? Tell us why.

Categories		Tell Us Why					
Blackboard	○○○○○	transparency of the system	opportunities for interaction	flexibility	discussions	messaging system	synchronous tools
Canvas	○○○○○	transparency of the system	opportunities for interaction	flexibility	discussions	messaging system	synchronous tools
WebCT	○○○○○	transparency of the system	opportunities for interaction	flexibility	discussions	messaging system	synchronous tools
Moodle	○○○○○	transparency of the system	opportunities for interaction	flexibility	discussions	messaging system	synchronous tools
A locally-designed LMS	○○○○○	transparency of the system	opportunities for interaction	flexibility	discussions	messaging system	synchronous tools
Other	○○○○○	transparency of the system	opportunities for interaction	flexibility	discussions	messaging system	synchronous tools

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21. To what extent do the learning management systems (LMS) you have used meet your teaching needs? Tell us why.

Categories		Tell Us Why					
Blackboard	○○○○○	transparency of the system	opportunities for interaction	flexibility	discussions	messaging system	synchronous tools
Canvas	○○○○○	transparency of the system	opportunities for interaction	flexibility	discussions	messaging system	synchronous tools
WebCT	○○○○○	transparency of the system	opportunities for interaction	flexibility	discussions	messaging system	synchronous tools
Moodle	○○○○○	transparency of the system	opportunities for interaction	flexibility	discussions	messaging system	synchronous tools
Locally-designed LMS	○○○○○	transparency of the system	opportunities for interaction	flexibility	discussions	messaging system	synchronous tools
Other	○○○○○	transparency of the system	opportunities for interaction	flexibility	discussions	messaging system	synchronous tools

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22. If you were to teach a course that was completely online, would you prefer a synchronous component to the course or a course that was completely asynchronous? Please briefly state why if you can.

asynchronous

synchronous

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23. If you were to teach a totally online course, which of the following would you prefer?

Open learning modules that students can complete at any time and at their own pace.

Modules that open sequentially and have deadlines for assignments.

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24. What tools have you used for online synchronous communication? Check all that apply.

- GoToMeeting
- Skype
- Text Chats within the learning management system
- Video conference within the learning management system.
- AdobeConnect
- Elluminate
- Other (Please specify.)

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25. For the synchronous tools that you have used in your OLTE courses, tell us how and why they met your teaching needs relative to the following:
Transparency: How easy the tool was to use.
Flexibility: The tool could be used in different ways, including different numbers of users and different presenters.
Multimedia: The tool allows for video, audio, and text messaging.
Reliability: The tool was reliable and the quality was good.

Categories	Tell Us Why			
GoToMeeting	Transparency	Flexibility	Multimedia	Reliability
Skype	Transparency	Flexibility	Multimedia	Reliability
Text chats within the learning management system	Transparency	Flexibility	Multimedia	Reliability
Video conferencing within the learning management system	Transparency	Flexibility	Multimedia	Reliability
AdobeConnect	Transparency	Flexibility	Multimedia	Why
Elluminate	Transparency	Flexibility	Multimedia	Why
Other	Transparency	Flexibility	Multimedia	Reliability

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26. What would you like most from a synchronous tool?

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27. What types of online assessments have you used? Check all that apply.

- Practice quizzes
- Quizzes
- Quizzes with multiple attempts possible
- Multimedia projects
- Portfolios
- Exams (with online text entry)
- Timed exams (with online text entry)
- Exams (with offline uploads possible)
- Peer assessment
- Group projects
- Graded discussions
- Online presentations
- Other. Please specify.

Back Next

28. Please rate the online assessments that you have used in your OLTE courses. For the online assessments you like, please tell us why if you can.

	I like this type of assessment.	I am neutral about this assessment.	I don't like this assessment.	I have not used this assessment.
Practice quizzes	○	○	○	○
Quizzes	○	○	○	○
Quizzes with multiple attempts possible	○	○	○	○
Multimedia projects	○	○	○	○
Portfolios	○	○	○	○
Exams (with online text entry)	○	○	○	○
Timed exams (with online text entry)	○	○	○	○
Exams (with offline uploads possible)	○	○	○	○
Peer assessment	○	○	○	○
Group projects	○	○	○	○
Graded discussions	○	○	○	○
Online presentations	○	○	○	○
Other. Please specify.	○	○	○	○

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29. Please rank order these types of instruction. Choose "1" if you believe it offers the highest quality of instruction and "6" if it is the lowest. If you would like to tell us why, please write your responses in the text boxes.

	1	2	3	4	5	6
f2f instruction	○	○	○	○	○	○
enhanced (f2f supported by online activity)	○	○	○	○	○	○
blended/hybrid (f2f and online activity with f2f meetings reduced)	○	○	○	○	○	○
flipped (key content delivered online; f2f meetings devoted to problem-solving)	○	○	○	○	○	○
totally online with a synchronous component	○	○	○	○	○	○
totally online with no synchronous component	○	○	○	○	○	○

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30. In what ways did you expect your students' practices and beliefs about ELT to change as a result of their taking the OLTE course(s)? Check all that apply.

- I thought they would develop a greater knowledge of the profession.
- I thought they would develop a better understanding of how teaching expertise develops.
- I thought they would increase in their teaching skills.
- I thought they would increase in their understanding of language learning.
- I thought they would gain an understanding and appreciation of the language learners in their classes.
- I hought they would develop expertise on the specific content of the course I taught.
- I thought they would develop stronger research skills.
- I thought they would develop greater confidence.
- I thought they would mprove in their abilities to use academic English.
- I thought they would improve in their overall English proficiency.
- I thought they would improve their abilities to use online resources for language teaching and learning.
- Other. Please specify.

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31. Is there anything additionally that you would like to tell us about your OLTE experiences?

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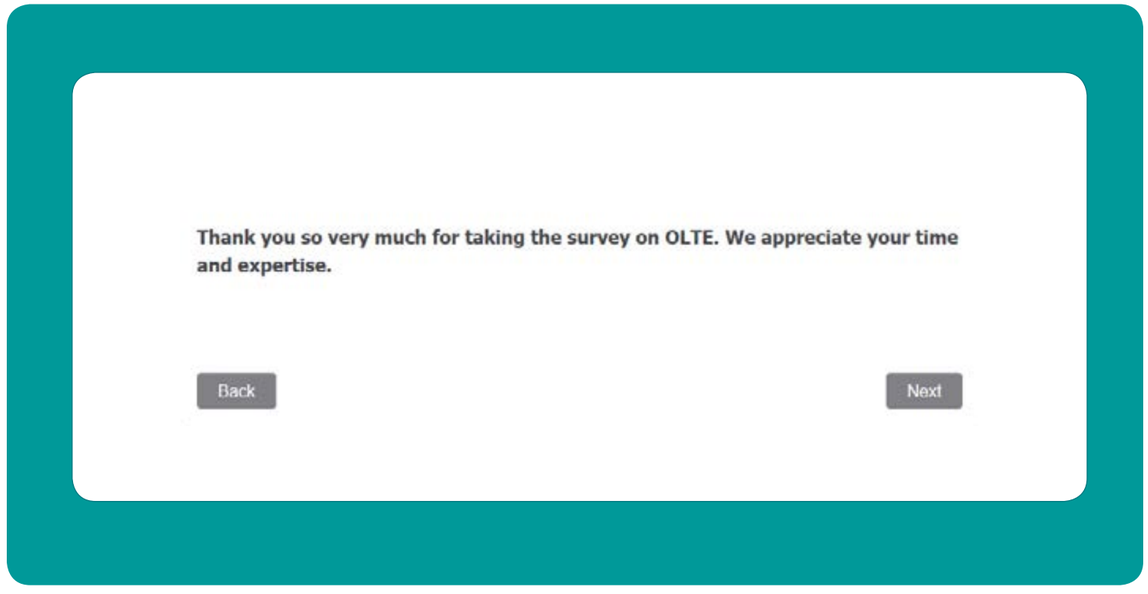
Thank you so very much for taking the survey on OLTE. We appreciate your time and expertise.
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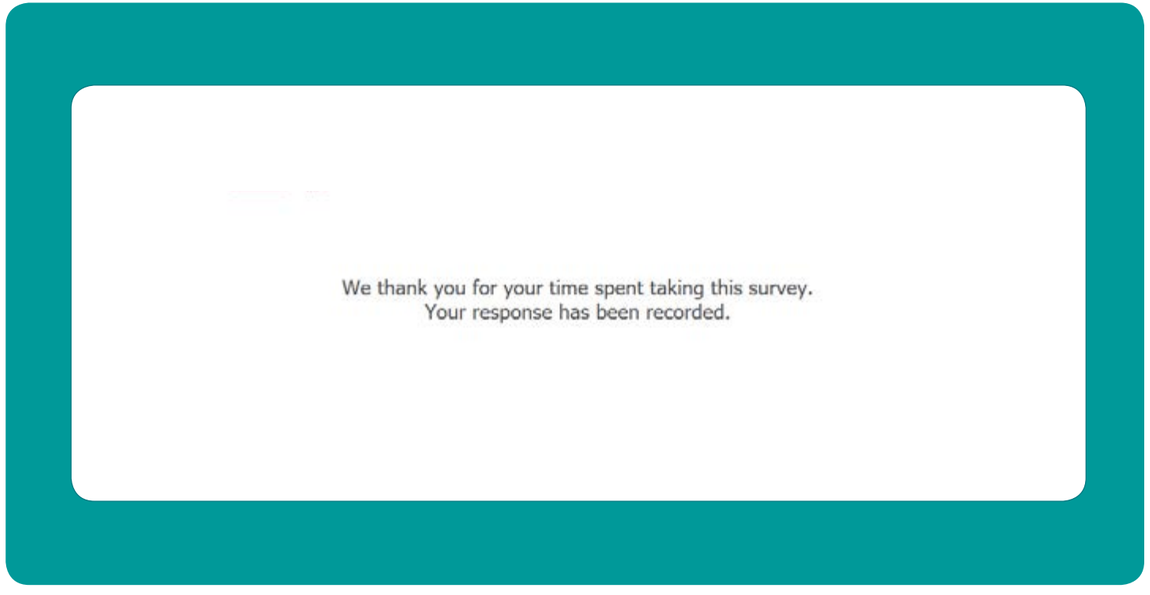
We thank you for your time spent taking this survey.
Your response has been recorded.

Appendix C: Institutions Contacted

Non-University Institutions Contacted

- ACE Canada
- Alaya International
- American TESOL Institute, Florida
- Anglo Centres TEFL
- Atlanta Public Schools
- Bell Schools
- EBC
- Edenz Colleges
- ELL-U (National Adult English Language Learning Professional Development Network)
- ELS Centre, Malaysia
- ELTeach (Cengage)
- English Language Centres
- Global TESOL College
- Great Minds
- Gu Online Language Teacher Education, China
- Harvest Christian International School
- Hellenic American Education Center
- IGA
- International House
- International Teacher Training Organization
- International Training Network
- ISIS TEFL
- Language International
- Language Training Institute, Australia
- LinguaEdge
- London Teacher Training College
- Omnicom School of Languages
- On-TESOL Coventry House
- Open Doors International Language Schools
- Oxford TEFL
- Oxford University Press
- Pearson International
- School of Teaching ESL, Seattle Pacific University
- The Consultants-e
- The English Training Centre
- The Language Centre
- Star-TEFL
- St. George International
- Study Abroad Canada
- Language Institute TAFE SA, Cert IV
- Teacher Education Institute
- Teachers in Latin America
- Teaching English in Italy
- Teach Travel Asia
- TEFL Institute
- TEFL International
- TEFL online (Bridge Linguatec TEFL)
- TEFL Training College
- TESL Ontario
- TESOL International
- TESOL Training Scotland
- tli School of English, Edinburgh
- TESPA (Taiwan ESP Association)
- Training Link Online
- U.S. Department of State
- VIA Training Centre

Colleges/Universities Contacted

- Acadia University
- Alliant International University
- American College of Education
- Anaheim University
- Andrews University
- Anglia Ruskin University
- Arizona State University
- Aston University
- Athabasca University/ Tele-University of Quebec
- Auburn University, Montgomery
- Azusa Pacific University
- Biola University
- Bond University
- Bows College
- Brandman University
- Brigham Young University, Idaho
- California State University San Bernadino
- California University of Pennsylvania
- Canisius College
- Chiang Mai University
- College of the Rockies
- Colorado State University Global Campus
- Cornerstone University
- Curtin University
- Darlana University
- Deakin University
- Dominican University
- Drexel University
- Dublin City University
- Eastern University
- Edith Cowan University
- Emporia State University

- Georgetown Centre for Language Education and Development
- Georgia Southern University
- Grand Canyon University
- Greenville College
- Griffith University
- Hamline University, St. Paul
- Hellenic Open University
- Higher Colleges of Technology
- Indiana State University
- Indiana University
- Iowa State University
- Jones International University
- Kennesaw State University
- Lesley University
- Lincoln Christian University, Illinois
- Macquarie University
- Marshall University Appalachians Abroad Teach in China
- Massey University
- Mercy College
- Middlebury Institute of International Studies at Monterey
- Mount Royal University
- Murray State University
- Nanyang Technological University
- National Institute of Education, Singapore
- National Louis University
- National University of Ireland
- New School University
- Newman University
- Newcastle University, U..K
- North Central University Arizona
- North West University, Seattle
- Notting Hills College/Pebbles University
- Ohio University
- Oivet Nazarene University
- Open University of Israel
- Open University, U.K.
- Oxford Brookes University
- Quinnipiac University
- Purdue University
- Salem State University
- San Francisco State University
- Seattle University
- Sheffield Hallam University
- Shenandoah University
- SIT
- St. Cloud State University
- St. Michael's College
- Stanford University
- The Pennsylvania State University
- Trinity Western University
- Universidad Albert Hurtado, Chile
- Universidad de Jaen, Spain
- University of Auckland
- University of Birmingham
- University of Calgary
- University of Central Florida
- University of Cincinnati
- University of Connecticut
- University of Florida
- University of Illinois, Urbana
- University of Kansas
- University of Leicester
- University of London, Institute of Education
- University of Manchester
- University of Maryland Baltimore County
- University of Missouri
- University of Melbourne
- University of Newcastle, Australia
- University of New England, Australia
- University of North Carolina Wilmington
- University of North Dakota
- University of Northern Colorado
- University of Nottingham
- University of Queensland
- University of Oregon
- University of Reading
- University of San Francisco
- University of Saskatchewan
- University of South Florida
- University of Southern California
- University of Southern Queensland
- University of Stirling
- University of Sunderland
- University of Tasmania
- University of Texas
- University of Toronto
- University of Utah
- University of Virginia
- University of Wollongong
- University of York
- Vancouver Community College
- Victoria University
- Washington State University, Pullman
- Western Washington University
- Wits Language School, Wits University
- University of Wisconsin (WIDA)
- Webster University
- Westcliff University