In-service and Pre-service Teachers’ Perceptions of Transformation and Observed Classroom Teaching Practices to Become Linguistically and Culturally Responsive Content Teachers: Quality Teachers for English Learners

SARAH A. COPPERSMITH
Lindenwood University

KIM H. SONG
University of Missouri-St. Louis

SUJIN KIM
George Mason University

Abstract

Research reveals that teachers require immediate supports and training to become linguistically and culturally responsive content educators to meet the learning needs of the increasing number of immigrant and refugee students from diverse cultures. The Quality Teachers for English Learners (QTEL) project at a Midwestern university offered Teaching English to Speakers of Other Languages (TESOL) courses and professional development (PD) sessions for a cohort of 35 in-service and pre-service teachers (3 administrators) in 2016 in a linguistically and culturally relevant content teacher framework (LCRCT). To examine if and how learning occurred, a transformative learning framework supported the analysis of mixed data addressing the research questions which examined the transformative learning themes of participant-identified disorienting events, perspective transformation, and classroom practice of LCRCT in coursework, professional development, and classroom teaching cases. Data sources were PD surveys, interviews, classroom observations, written and videotaped lessons, and online course data from VoiceThread comments and discussion board posts and reflections. Results revealed participants identifying disorienting events, identifying the need for further training, reflecting on self and prior assumptions in a community of practice, and acquiring instructional strategies and tools in the process of becoming an effective LCRCT practitioner.

Keywords: Linguistically and culturally responsive education, TESOL teacher training, transformative learning framework, English Learners (ELs).

Introduction

The increasing number of diverse populations represented in U.S. schools, including migrant, refugee, and immigrant children, present a necessity for teachers to learn new ways to deliver quality instruction to meet all learners’ needs. Immigrant children are those who are foreign born or born in the U.S. who live with at least one foreign-born parent (“Key Facts,” n.d.); refugees are those that flee for safety (from conflict, violence, persecution) and migrants may move for reasons such as work, education, etc. (“Refugees,” 2018). Thus, teachers need immediate additional supports through effective training, and it is crucial that teacher educators take swift action (Lucas, Villegas, & Freedson-Gonzalez, 2008) to provide essential education to better prepare teachers to effectively teach English Learners (ELs).
However, in light of recent global political tensions, an acute obligation exists to improve teacher education to prepare linguistically and culturally responsive teachers to serve English learners, though research is lacking on which directions to proceed for the most effective teacher training. As one effort to address such lack and to support teacher education, this research describes findings from a study of transformative learning with a cohort of pre-service and in-service teachers in the Quality Teachers for English Learners (QTEL) program, a National Professional Development grant project at Midwestern university in 2016.

The reasons for taking immediate action to support all teachers in serving ELs are many, from the need for teachers to examine their own attitudes and beliefs (Bartolomé, 2004), to the fact that many educators believe that only EL specialists are responsible for taking care of ELs academically. Also included are outdated views that requirements for training teachers to teach ELs are complex and place too many demands on already burdened teacher preparation programs (Lucas et al., 2008). Ignoring the call for swift changes in teacher preparation is problematic, as Janzen (2008) notes, “the dropout rate for Latino/Latina youth, who comprise the majority of ELs, was 22.4%. This rate is more than twice the national average” (p. 1010). United States policies since the Civil Rights era have addressed the needs of English learners (Bos et al., 2012), yet the majority of teachers have not received adequate professional development to help their ELs (Lucas et al., 2008). Bunch (2010) confirms that most teacher preparation programs do not require training for EL-specific teaching and the results are evident. To illustrate, Durgunoğlu and Hughes (2010) found that pre-service teachers felt unprepared to reach ELs, and they often disregarded them in the classroom. Findings from their research (2010) showed the pre-service teachers’ sense of self-efficacy was related to this trend of ignoring ELs, as the pre-service educators did not have confidence or a sense of how to help ELs participate in classroom learning. In addition, the regular classroom teachers also had no interaction with ELs, nor did they assist or support the student teachers in helping ELs learn (Durgunoğlu & Hughes, 2010). Solid preparation for pre-service teachers is imperative, as it will improve teachers’ self-efficacy, with subsequent supports and services to help their future EL students achieve (Durgunoğlu & Hughes, 2010).

In addition to Durgunoğlu & Hughes’ (2010) findings, Bartolomé (2004) reports that, because society in general interprets diverse or minority students “through a deficit lens” (p. 99), teachers need opportunities to carefully examine and scrutinize their own beliefs and perspectives and make adjustments where necessary in order to help all children they serve. This examination should take place beyond simply learning strategies and procedures for how to teach, according to Bartolomé (2004). This study examines pre-service and in-service teachers’ perceptions of their learning, along with their classroom practices, while they were working to become linguistically and culturally responsive content educators for ELs. The terms transformative learning in the paper refer to Mezirow’s original framework (1978), with transformation referring to change, as explained below.

**Theoretical Framework**

**Transformative Learning and Professional Development**

While giving teachers tools and strategies is vital (Durgunoğlu & Hughes, 2010), it is important for teachers to have opportunities and learn ways to inspect their attitudes and beliefs for teaching ELs. We adopted the framework of transformative learning (Mezirow, 1991) to examine teachers’ beliefs and perspectives regarding how they serve students from diverse backgrounds. Transformative adult learning is a multifaceted process of perceiving and understanding, using memory, cognitive processes, and perceptions through experiences to examine extant personal interpretations of meanings to build new interpretations (Mezirow, 1991), and offers a way to interpret reasoning in those learning processes (King, 2009). In addition, reflecting, talking, and acting are important elements of that same process as detailed by Merriam, Caffarella, & Baumgartner (2007). In context of the rapid and increasing changes in student demographics and the need for teachers to critically assess their attitudes, values, knowledge, and skills, it has been unclear what transformations and perspective shifts are possible and need to take place for in-service and pre-service educators to realize the importance of adequate preparation for teaching.
ELs. As educators and researchers, we wondered about ways to productively train pre-service and in-service educators to effectively and immediately meet the needs of English learners in this time of increasing refugee, migrant, and immigrant enrollment. As teacher educators, we also desired to find ways to prepare teachers for transformation, by having them collaboratively gain knowledge and skills in a learning community designed to examine former perspectives and to develop linguistically and culturally responsive teaching for all of their diverse learners through professional development.

Cranton (1996), expounding on Mezirow’s transformative learning in adult professional development, affirms that educators can examine their own growth by reflecting interpretively on their current perspectives, and changing or transforming incomplete or faulty perspectives in the process. This process is strengthened through collaboration (Cranton, 1996; Merriam, Caffarella, & Baumgartner, 2007) where the adult learner, in a learning relationship with others, collectively reflects (Merriam, Caffarella, & Baumgartner, 2007) and evolves into an adult who can positively impact society. Cranton (1996) suggests that trainers and professional development providers forgo old patterns, such as the transmission model (transmitting knowledge from the teacher), and rather design opportunities for reflection. Seeing the potential for transformative learning in educator preparation, Forte and Blouin (2016) call for researchers to assimilate transformative learning into the process of preparing and training teachers, and this research heeds that call. The framework for transformative learning is further clarified below as we highlight how the framework supported and intertwined with the research goals, purpose, and context.

**Preparing Teachers to Serve**

Training, conferences, workshops, and courses are offered for educators as a way to understand how to support “increasingly diverse” populations, including ESL/EFL students (de la Fuente Iglesias, Ju, Larson, Mathieu, Strawbridge, 2018, p. 3); as “society and students become more diverse and globalized” (p. 1). These authors join the terms, “diversity and advocacy” to emphasize the supports needed in these efforts for professional training.

Karabenick and Clemens Noda (2004) argue that well-planned professional development programs can be a smart alternative to hiring additional staff to work with increasing numbers of ELs in local districts. They researched 729 teachers working with a large influx of immigrants and refugee children and found a need for in-depth professional development in order to increase teachers’ linguistic competency, confidence, and self-efficacy in their abilities in reaching ELs (Karabenick & Clemens Noda, 2004).

Tucker et al. (2005) found that, “high quality professional development that is ongoing and teacher-driven is necessary to improve the education of linguistically and culturally diverse students” (as cited in Tran, 2014, n.p.), though often overlooked are studies of professional development for teachers of linguistically diverse students (Knight & Wiseman, 2006). Further research on teacher preparation is needed in understanding how training and professional development may impact teacher effectiveness for ELs (Bos et al., 2012), particularly in how transformative learning processes allow teachers to understand their own reactions to EL students’ learning, work, stories, and inquiries (McClinton, 2005). We must move past sharing general models of professional development to research reports with specifics to effectively prepare teachers who serve culturally and linguistically diverse students (Knight & Wiseman, 2006). A positive example can be found in Karabenick and Clemens Noda’s (2004) research, which prompted one large local district to adapt strategies. The district’s strategies included a renewed focus on additional professional development for teachers, to designing more appropriate assessments for ELs, to building awareness of bilingual learning and parental involvement throughout the community. Knowledge from research of effective teacher training and professional development can swiftly be applied where most needed—in local school districts, agencies, and colleges of education—but there remains the question of what are the most important elements to be considered during these opportune times?
Professional Development for Linguistically and Culturally Responsive Teaching

The destination that we desired our teachers to reach was the acquisition and practice of linguistically and culturally responsive content (LCRCT) teaching. An LCRCT teaching framework affords teachers the knowledge and skills to be able to understand and incorporate students’ language and cultural diversity in conjunction with successfully teaching academic content.

In 2017, Song (second author) developed a two-dimensional LCRCT model—C for Content, based on the Nguyen and Commins’ (2014) two-dimensional LCRT model, after extensive research on linguistically and culturally responsive teaching as well as content teaching for ELs (Aguirre, Zavala, & Katanyoutanant, 2012; Fillmore & Snow, 2002; González & Darling-Hammond, 1997; Halliday, 1978; Janzen, 2008; Kim, Song, & Coppersmith, 2018; Lucas et al., 2008; Schleppegrell, 2009).

The LCRCT framework is a type of analytic rubric (Brookhart, n.d.) that includes two dimensions which can be used to analyze, reflect on, or assess linguistically and culturally responsive content teaching. The first dimension consists of content competence, content discourse competence, and content pedagogical competence. The second dimension includes elements which illustrate how teachers can improve content-related competencies, framed as the essentials to 1) acquire and demonstrate knowledge in depth, 2) develop and apply procedural demands and reasoning skills, and 3) examine and develop socio-politically just teacher beliefs. Study participants engaged in activities in QTEL courses and PD to, “comprehend, discuss, demonstrate, reflect, and apply these interdependent dimensions of content and meta-content knowledge and practices to enhance their LCRCT content competencies” (Kim et al., 2018). Table 1 illustrates nine constructs of the interdependent two-dimensional LCRCT framework.

### Table 1

<table>
<thead>
<tr>
<th>Two-dimensional linguistically and culturally responsive content teaching constructs</th>
<th>Content Competence</th>
<th>Content Discourse Competence</th>
<th>Content Pedagogical Competence</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Acquire &amp; Demonstrate Knowledge in Depth</strong></td>
<td>Demonstrate knowledge of content language system and sociolinguistics (Richards, 2013)</td>
<td>Acquire knowledge of technical content and nontechnical everyday discourse including their L1s as resources (Aguirre et al., 2012; Schleppegrell, 2009)</td>
<td>Acquire a wide range of reflective strategies and techniques to scaffold language support intentionally with EL-specific teaching tools (Richards, 2013)</td>
</tr>
<tr>
<td><strong>Develop &amp; Apply Conceptual &amp; Procedural Demands</strong></td>
<td>Apply content knowledge to the actual teaching with reasoning, inferring, and collaborating (Janzen, 2008)</td>
<td>Attribute the process of developing part-to-whole relationship using more explicit and reflective discourse (Turner &amp; Drake, 2016)</td>
<td>Utilize cyclic guided coaching with EL-engaged, inquisitive, and dialogic (Kim et al., 2018)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Utilize technology-mediated communal space to be collaboratively reflective (Kim et al., 2018)</td>
</tr>
</tbody>
</table>
Table 1 Continued

<table>
<thead>
<tr>
<th>Examine and Develop Cross-cultural &amp; Socio-political Beliefs</th>
<th>Develop a situated context for academic learning (Gee, 2016)</th>
<th>Reject discrimination against different language use (Austin, 2009; Liggett, 2014)</th>
<th>Examine Power and Authority &amp; ELs’ cross-cultural variances (Aguirre, et al., 2012)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Explore ELs’ and their family’s funds of knowledge (Moll, 2015)</td>
<td>Incorporate immigrant family’s home languages and their repertoires to school events (Noguerón-Liu, Hall, &amp; Smagorinsky, 2017)</td>
<td>Create linguistically safe and inclusive classroom environments (Flores &amp; Garcia, 2013)</td>
</tr>
</tbody>
</table>

Transformative Learning through Teacher Preparation and Professional Development

Seeing the possibilities afforded with Karabenick and Clemens Noda’s (2004) report of successful programs and research on preparing teachers to serve ELs, and the need for in-depth research in educator preparation, (Bos et al. 2012; Knight & Wiseman, 2006), the importance of transformative learning for adults (Forte & Blouin, 2016), and EL teachers (McClinton, 2005) this study is offered to meet the gaps in that research. Included is a focus on transformative learning and outcomes of teacher training and professional development to prepare pre-service and in-service teachers through the Quality Teachers for English Learners (QTEL) program developed by a Midwestern university NPD grant team. QTEL was a five-year (2011-2016) National Development Grant (NPD) program sponsored by the Office of English Language Acquisition (OELA). The first goal for this grant program was to form a dynamic QTEL academic learning community through cohort-based activities featuring TESOL (Teaching English to Speakers of Other Languages) courses to prepare in-service and pre-service teachers to obtain state TESOL teaching certification through taking the six TESOL courses. A second aim was to ensure that course design and professional development (PD) included objectives, assignments, and placements to effectively develop linguistically and culturally responsive content teaching (LCRCT) knowledge and skills for participants teaching English Learners.

In addition to TESOL courses such as Principles of Second/Foreign Language Acquisition, General Linguistics/Foundation of TESOL, Cross-cultural Communication and Assessment, Methods and Practicum in TESOL, QTEL offered professional development (PD) workshops annually for the cohort. PD topics included sessions such as Designing Learning Environments for Multicultural and Multilingual Populations; Beginning a Journey to become Linguistically and Culturally Responsive; Developing Pedagogical Language Knowledge in the Content Areas; Inquiry-based Math Content and Pedagogy; Linguistically and Culturally Responsive Teaching Dimensions in a Mindful Way with Hands-on Activities; and the Socio-Historical Context of Language Learning in U.S. Schools, among other topics. These PD sessions were designed with a strong emphasis on the inclusion of the essentials of pedagogy incorporating linguistic or language goals (Lucas et al., 2008). These essentials comprise an understanding of, “conversational and academic language proficiency,” the importance of “access to comprehensible input” and opportunities for, “meaningful output”; “social interactions” using conversational and academic English; the fact that, “ELLs with strong native language skills are more likely to succeed” given a safe, anxiety-free environment to learn, and the importance of attention to both, “linguistic form and function” (Lucas et al., 2008, p. 363). The QTEL program addressed each of these essentials in the yearlong TESOL coursework and professional development, utilizing best practices for preparing educators to serve in linguistically and culturally responsive ways.

The QTEL trainers and teachers examined how transformative learning occurred in the program by reviewing overarching goals for two of the QTEL courses where pre-service undergraduate and in-
service graduate teachers established a combined learning community. The two courses, titled Methods and Materials in TESOL, and Practicum in TESOL, included a critical learning process for students to integrate knowledge of second language acquisition research in instructional methodologies; utilize theories of linguistics, learn and design assessment modules with WIDA, (n.d.) second language acquisition, cross-cultural communication, and instructional technology into their material development to meet the needs of diverse language learners. As a cohort, the in-service and pre-service teacher educators designed and implemented instruction collaboratively in teams as they learned skills and increased their pedagogical knowledge of best practices for inquiry-based linguistically and culturally responsive content teaching (LCRCT) while serving in local elementary and middle schools. Collaborations took place in class, in the school setting, and online. The design of the course allowed participants to view and critique each other’s work via videotaped classroom segments using the Kaltura video (online) platform, and to comment and give support via VoiceThread (VT) remarks. The web-based VT application allowed participants to asynchronously communicate in a variety of ways, such as orally via recordings, and in writing, posting images and sharing PowerPoint presentations and teaching case videos.

Throughout the 2016 QTEL professional development sessions and teacher training courses, data were mined from the sources to paint a picture of participants’ perceptions of their own transformative learning as related to Mezirow’s ten phases, or precursors (Forte & Blouin, 2016) of transformation (Mezirow, 1991; Cranton, 2006; Forte & Blouin, 2016) as related to teaching ELs (McClinton, 2005). Below are listed the ten phases with relevant experiences of teachers and data sets collected to examine each category:

Table 2
Phases of Transformation with Related Participant Experiences

<table>
<thead>
<tr>
<th>Phase</th>
<th>Related Teacher Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Experiencing a disorienting dilemma</td>
<td>relates to method class activities, practicum experiences</td>
</tr>
<tr>
<td>2) Undergoing self-examination</td>
<td>sharing reflections online and in-class</td>
</tr>
<tr>
<td>3) Conducting a critical assessment of internalized assumptions and feeling a sense of alienation from traditional social expectations</td>
<td>comparing new learning to school system expectations</td>
</tr>
<tr>
<td>4) Relating discontent to the similar experiences of others—recognizing that the problem is shared</td>
<td>in-class critiques and asynchronous virtual discussions with team members</td>
</tr>
<tr>
<td>5) Exploring options for new ways of acting</td>
<td>exploring and applying the sheltered instruction observation protocol (SIOP) (Echevarria, Vogt &amp; Short, 2013) to classroom teaching with ELs</td>
</tr>
<tr>
<td>6) Building competence and self-confidence in new roles</td>
<td>trying out LCRCT strategies in the classroom</td>
</tr>
<tr>
<td>7) Planning a course of action</td>
<td>developing instructional plans and assessments</td>
</tr>
<tr>
<td>9) Trying out new roles and assessing them</td>
<td>observing, commenting, and receiving comments on VT and Kaltura teaching videos</td>
</tr>
<tr>
<td>10) Reintegrating into society with the new perspective</td>
<td>trying out new practices after reflecting and observing teachers’ practice</td>
</tr>
</tbody>
</table>

From these examples, and through the data, elements from participants’ perspectives were culled of their learning process, situated in their own meaning perspectives and meaning schemes, including
their, “frames of reference” for current belief systems, “perspective transformations,” and the “reflections” that lead to transformative learning per Kitchenham (2006, p. 206). In addition, “reframing of narrative assumptions” was examined, analyzing any objective reframing of, “action assumptions”, and critical, “self-reflection on assumptions” (Kitchenham, 2006, p. 208). It is essential to note that these are the only types of reflections that lead to transformative learning; it is the reframing that leads to transformation, not just the reflecting (Kitchenham, 2006).

The QTEL methods courses were blended, online and face-to-face, yet linking the phases of transformative learning to online learning is rarely found in the research and is, “not at all addressed in ESL professional development programs for K-12 teachers” (Forte & Blouin, 2016, p. 784), thus the need for this study. While there were many opportunities to garner data on transformative learning throughout the QTEL project, in 2016 the research focus was narrowed to specify participants’ views on their perspective shifts and perceptions of their own learning in concert with their defined disorienting events when they experienced change while part of the program, as it is in the process of reflecting on prior meanings and old (or invalid) perceptions that transformation happens (Mezirow, 1991). According to Mezirow (1991), the most significant transformations on learning are transformations of, “meaning perspectives” (p. 38) which are transformed through reflections on former ideas. Learning often is an outcome of a disorienting dilemma (Mezirow, 2000) and can be understood in the figure below, representing processes explained by Mezirow (1991, p. 5). Figure 1 (first author sketch of Mezirow’s concepts) illustrates the process of transformation of perception through reflection.

![Figure 1. Transformation of Perspective by Reflection](image)

**Research Questions**

According to Mezirow's theory (1991) transformative learning takes place through experiences, critical reflection, and reflective discourse. These elements were in abundance during the QTEL PD and were the framework for course sessions through group collaboration and instructional planning, field experiences, and peer-to-peer video reflections and discourse on teaching. In order to narrow the focus of data gathering and analysis, we attended to a focus on participants’ transformations via lesson planning and execution, work with students in the classroom, their learning via commenting and receiving comments from peers on VoiceThread through teaching videos uploaded via Kaltura Media, their perceptions of disorienting events in their own learning (via an open-ended course assessment questionnaire), interviews and final projects (assessments of their work). Particularly, we asked the following research questions:
Q1. What were participant-identified disorienting events in the QTEL program coursework and professional development sessions?
Q2. Were there levels of perspective transformation evident in QTEL program in-service and pre-service teacher participants by the end of their training?
Q3. How did QTEL participants’ pre-identified levels of transformation relate to classroom practice with English language students in the classroom?

Question one facilitated identifying potential barriers to training teachers to meet the needs of ELs through detecting challenges to participants’ learning in the program; question two helped establish the potential extent of participants’ success in transformative learning in the program, and question three led to a non-subjective way to observe participants using their purported new and transformed practices in actual classrooms with ELs.

**Methodology**

**Participants**

Purposeful sampling allowed the gathering of data by, “focusing in depth on a small number of participants” already in the program (Patton, 1990, p. 169). The purposeful sample included these participants from the Midwestern university college of education: 20 pre-service teachers and 15 in-service teachers. Among the pre-service teaching cohort, there were three Black women, one bi-racial woman, two White men, and 14 White women. The in-service teaching cohort consisted of eight Black women, one Black man, four White women, and two White men. The in-service teachers had six to 27 years of teaching experience, whereas 16 of the 20 pre-service teachers had only participated in the 3-credit hour internship/practicum course that occurs before a semester-long student teaching course, and four of 20 were juniors (not eligible to take the internship course).

**Data Collection**

The research team examined the core data to determine which data sets would yield the most information relating to the research questions and would show participants’ development over time. Data used for this study are included in Table 3.

<table>
<thead>
<tr>
<th>Type of core data analyzed</th>
<th>Data Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interviews with selected participants</td>
<td></td>
</tr>
<tr>
<td>Responses to class reflective question prompts (disorienting events)</td>
<td></td>
</tr>
<tr>
<td>Classroom teaching observations (videos and in-person)</td>
<td></td>
</tr>
<tr>
<td>VoiceThread comments by participants (and responses to peer comments)</td>
<td></td>
</tr>
<tr>
<td>Written lessons</td>
<td></td>
</tr>
<tr>
<td>Discussion board posts</td>
<td></td>
</tr>
<tr>
<td>Questions pulled from the in-service participants’ final paper</td>
<td></td>
</tr>
<tr>
<td>Pre-service final projects</td>
<td></td>
</tr>
<tr>
<td>Interview questions for the Director</td>
<td></td>
</tr>
<tr>
<td>Instructional Practices and Daily Assessment surveys</td>
<td></td>
</tr>
</tbody>
</table>
Kathleen King’s (2009) Learning Activities Survey was referenced while designing questions used at the end of the program for drawing out participants’ memories of disorienting events while in the training program. Due to having several other frequent surveys/daily assessments through this grant-funded project, and to better focus the research project and not overwhelm the participants, we modeled two carefully crafted questions after King’s survey regarding disorienting events to give to participants. King’s survey was designed to improve adult education by aiding researchers in garnering details about learners’ stages of perspective transformation (Cranton, 2006; Mezirow, 1991) and served the dual purposes of determining if adults had been transformed and what circumstances led to the transformation in perspective.

The two questions that all 35 participants were asked to answer at the end of the TESOL methods course were: 1) “In your QTEL journey, identify a time where you noticed something that you did not understand or that contradicted your previous notions/experiences regarding teaching ELs and diverse learners,” and 2) “Describe the disorienting event and your thoughts/feelings. Following on your response in #1, describe whether and how you learned anything from the disorienting experience. How did your view/s on a disorienting event you identified in #1 change?”

Alongside this in-class survey, six participants agreed to be interviewed, allowing triangulation, comparison and contrast of replies, which was also true of the discussion board and VT group comments pulled from the course website at nine semester mile posts. Capturing participant’s verbal and written responses over time added to reliability and recorded learners’ chronological growth through the year through mining the data for their reflections on perspectives and subjective and objective review of instructional practices. Comparing and contrasting in-service and pre-service responses, comments, written and taught lessons, along with online peer feedback, gave abundant entry points to examine the data in order to answer the research questions.

Data Analysis

Responses to reflective question prompts, the Instructional Practices and Daily Assessment surveys from professional development sessions, along with participant interviews, themes from online classroom observations and videotaped lessons, with VoiceThread comments, written lessons, discussion board posts, and data from participants’ final projects were analyzed. Data analysis included examining each line of data to identify concepts, and developing themes via coding, comparison, and theme development.

Borrowing from the grounded theory data analysis process, open coding (Strauss & Corbin, 1990) was used, where concepts in the data were identified through, “constant comparative analysis” (Glaser & Strauss, 1967, p. 105).Grounded theory data analysis processes were borrowed and used, through coding for, “concept labeling and categorizing,” (Cho & Lee, 2014). This analysis allowed comparison, labeling concepts, and grouping concepts into categories.

To illustrate, pre-service and in-service teacher assignments, work samples, (ideas, comments, teaching cases) and interviews were examined line by line and then compared and contrasted. Developing phrases, thoughts, and recurring leitmotifs were highlighted, and put into lists in a table with two columns, where the right column was used for coding and for writing memos and notes where applicable. Codes developed by combining overlapping, similar, and parallel ideas through constant comparison through all of the data.

Codes led to larger consistent themes which were then again compared from each data source, and properties of categories (Glaser & Strauss, 1967), were established. We re-examined the data during peer-review, inspecting the theme and code development individually, and discussed and confirmed final categories in relation to the research questions. While the data sources were diverse, the three research questions helped narrow the focus to determine evidence of transformation through the rich data sources which included the experiences, critical reflection, and reflective discourse required in order for learning to be transformative (Mezirow, 1991, 2000).
Findings

When studying transformative learning of pre-service teachers, “transformative themes” have been a useful analytic tool (Vatalaro, Szente, & Levin, 2015). The transformative themes which emerged from evidence in the data sets include: “Process of Becoming” a linguistically and culturally responsive content educator; “Perceptions of Self and Peers”; “Acquired Instructional Strategies and Tools,” and “Disorienting Events.” Characteristics of each theme related to participants in their QTEL journey to becoming LCRCT educators, are described below.

Process of Becoming an LCRCT Educator

The process of becoming a linguistically and culturally responsive educator for these participants included transformations (in perspectives and meaning schemes) comprised of reflections on assumptions, a new awareness of self, new roles, changes in perspectives, transformations of interpreting experiences, new or transformed meaning schemes, and goals and visions for future teaching. For example, in the first month of the program, an in-service participant noted in a survey:

There seem to be many ways to become a more culturally and linguistically responsive teacher, such as how I go about building relationships with students to promote community, how I manage student errors in language, and how I develop academic vocabulary knowledge in addition to content.

This early awareness for an already-practicing teacher reveals a new appreciation for strategies for becoming an LCRCT teacher, which illustrates Mezirow’s (1991) transformative learning precursor, “Exploring options for new ways of acting and acquiring knowledge and skills.” Additionally, this represents an example from the LCRCT framework of critically examining socio-culturally just teacher beliefs.

New awareness of language. Pre-service participants initially noted that they would like to be more intentional about “catering to multiple literacies and levels of knowledge” and then later “addressing WIDA standards and letting students explore the manipulatives without too much instruction” while “being more open to students’ ideas and different views of how to solve math problems.” A new awareness developed during the summer PD sessions, where participants started realizing the importance of “using instructional language that is accessible to EL students” and “making personal connections” with my students “that resonate with them through their identity and needs,” and getting to know “student backgrounds and families.” These strands reveal the “conducting a critical assessment of internalized assumptions” precursor in the transformative process (Cranton, 2006), as participants looked back and reviewed prior assumptions or viewpoints where ELs’ learning needs were largely invisible.

Self-awareness of need for new frameworks. Participants regularly noted the importance of using new pedagogies which allow students to first explore (in math for example), to activate prior knowledge, and make connections on their own with real world applications before the teacher directs the learning in order to, “give the students a stake in it.” Participants became more cognizant, aware, and mindful of students’ first language (L1) and its use in the classroom, as well as, “using the four modalities, speaking, reading, listening and writing to differentiate instruction.” The focus on linguistics courses and assessments for ELs opened new horizons to these teachers as they worked to understand frameworks for teaching their students, as teachers must understand the learning needs of diverse students and implement strategies relating to their students’ languages (Uribe-Flórez, Araujo, Franzak & Writer, 2014). Though as one in-service participant noted at the end of the program: “I cannot boast to know a great deal about second language acquisition, but I have been learning a great deal. I must say, it is complex to say the least. Certain items I take for granted such as sarcasm, figures of speech, puns, idioms, etc., are a whole different level of engagement for those acquiring a second language.” Another noted:
“My current teaching practice is lacking routine inclusiveness of English Learners,” illustrating the transformative learning precursor of undergoing self-examination for this educator (Mezirow, 2000).

Experiencing prior assumptions. Participants noted discrepant events in their learning around language use, as noted in the section on disequilibrium below. As one participant (administrator) acknowledged, there are challenges for the adult educator as learner:

I admit this has been a whirlwind of information this school year. I admit, a challenge for me has been the plethora of new vocabulary, and understanding how this vocabulary shapes the field and explains the processes and, “journey” many of our students undertake as they assimilate and/or learn another language, beyond their L1. One statement I made at that time was, “I need to have a better understanding of the needs of these learners to make more educated decisions to prepare these learners to have their needs met, and support the teachers who are just as committed to meeting these students’ needs.

Participants like this teacher looked back and reflected while writing the final paper for the course and this process of reflecting back on current or former meaning schemes (Mezirow, 1991) supports the beginning of transformation from a teacher who now knows the importance of understanding and attending to the needs of ELs. In another instance, one in-service teacher addressed the Habit of Mind of flexibility as he reflected on his learning over the year:

I found this habit of mind to be extremely useful within my classroom. I need to support my EL students and modify or change the instruction to fit the needs of my students. One example that comes to mind was when I presented a lesson on Canada. I was talking about the origins of people living in Canada and the difference between an immigrant and a refugee. I could have moved on with the lesson, though I had student who recently fled the Republic of Congo and Sudan in the mist of the Civil War. She wanted to explain to her class her experiences as a refugee. We took 15 minutes out of the lesson to allow for dialogue between the students in response to this student’s life experience in Africa as a refugee. My lesson and the textbook could not give the students the real-life experience of their classmate. And if I was not flexible, we would have missed on a story that touched the hearts of every middle school student in that class.

This teacher shared how the QTEL program helped her realize that her previous notion of self as: “knowledgeable about cultures of various people around the world” was just an assumption. In other words, the QTEL journey provided a cognitive and affective framework for this teacher to facilitate an in-class sharing of a poignant story by a refugee student. His recollection of this scenario is an example of a, “reorganization of meaning” through “reflective assessment”; identifying and judging (former and current) cognitive structures and movement through the cognitive structures (Mezirow, 1991, p. 5). His cognitive process during this QTEL program reflects the LCRCT element of developing metacognitive procedure skills as well (Kim, et al., 2018)

Perceptions of Self and Peers as LCRCT Teachers

The transformative theme, “Perceptions of Self and Others,” included awareness of self as a/n (adult) learner, in relation to peers, perceptions in the context of the learning environment, as evidenced through videos, via discussions, from classroom practices, supported via feedback from others and a give-and-take with peers. Perceptions of self were supported through affordances of the online peer-review process, when co-teaching and team collaboration. Participants noted the challenges of having their teaching videotaped and watched by peers, and that it was sometimes “embarrassing,” though members soon developed professional peer commenting skills using the VT platform, and made constructive comments to each other. Some pre-service
participants developed a professional voice in their comments to in-service class members’ videos, as exemplified by Kate:

The second observation I made (of the lesson) was having students go over their content and language targets, and then having them answer the question, “What should you be able to do at the end of the day?” All of the targets were measurable and achievable standards. I find it helps students focus when they know what they should be focusing on and what the big idea take-away is. I thought asking a student what they should be able to do by the end of the day was a great approach to checking for understanding. The third observation I had was the use of manipulatives. Manipulatives are very important when working in math, especially when it comes to ELs. The manipulatives give students a hands-on approach to reach comprehension, without having to use the English language to prove mastery. This opportunity gives ELs a chance to explain what they know of the topic, without having to use any words; which I find to be very important.

In this authoritative voice, Kate reveals her new confidence in teaching, (“I find it helps students…”) and self-assurance in commenting on an experienced in-service classmate, which relates to the, “building competence and self-confidence in new roles” element of transformative learning (Cranton, 2006). This example highlights QTEL’s LCRCT element of content competence, as well as discourse and pedagogical competence.

**Self and peer reflection via online video.** Participants noted learning how to more objectively remove themselves and evaluate others’ work via the online video and discussion board platforms. They also noted that they learned to more objectively receive or, “take up” others’ comments about their own teaching, through comments like: “I see how someone else would see my teaching in that lesson,” noting that now they can more readily accept others’ (and their students’) views of their teaching. In contrast, one in-service teacher was, “on pins and needles” worrying that her comments to pre-service teachers might offend them and make them not “want to teach anymore.”

Participants moved from worrying about seeing themselves on video to listening and respecting peer comments in the best interest of serving ELs, and began to function as a community of learners within a community of practice (Wenger, 1998) in a socio-constructivist teacher education setting (Dangel & Guyton, 2003). Elements of the community of practice developed when the participants, through, “mutual engagement,” were involved in a “joint enterprise”—a learning exercise—using a, “shared repertoire” (Wenger, 1998, p. 73) of academic vocabulary and prior course communications and shared meanings and understandings.

The Program Director’s interview captured a transformation as well, in that by the end of the program, the Director had changed from a transmission approach to teaching, to a team-based collaborative process of working with other instructors and developing a constructivist approach in the methods class during the last year of the program. Changes in perception of self included a prior separation of the concepts of, “teacher and learner,” into a new perception of a “community of learners.”

**Acquired LCRCT Instructional Strategies and Tools**

This theme was supported by evidence of classroom practices demonstrated throughout the coursework and shared in the online course, where participants were beginning to understand and use SIOP (Sheltered Instructional Observation Protocol) (Echevarria, Vogt & Short, 2013) protocol features in their written lessons, teaching cases in the classroom, and online assignments. These examples related to the precursor, “acquiring new knowledge and skills” for transformative learning (Cranton, 2006) and approaching the LCRCT criteria of content pedagogical competence.

**Combining content and language objectives.** Initially, course members began to utilize language and content objectives in their lesson planning and teaching. Peer comments in the VoiceThread
(VT) early in the semester included this comment (from a pre-service teacher to another pre-service teacher):

You also had all the elements because students were speaking and writing and listening and reading their poems; I also liked that for your LO and CO you gave students a chance to discuss and reiterate in student language.

Peers were beginning to learn how to give reflective comments related to the assignment goals and best practices for LCRCT in the classroom, and were aided by the instructor’s guidance in the VT and in the evening course sessions. Relating to the lesson described above, another pre-service peer noted after viewing the video:

I actually just taught this lesson two days ago, to a fourth-grade class. You did an awesome job using kinesthetic learning with clapping and hand-to-jaw motion strategy, however since counting syllables deals with vowel sounds I can see this would be a challenge for some ELs. It is a possibility an EL would not pronounce the words correctly; I would review the vowels a e i o u and sometimes y and explain to count a syllable means to count all the vowel sounds when you speak a word. Example, coffee o and two e’s, however I would be clear a word has x-amount of vowels… etc. This would benefit an EL.

In this instance, we see the engagement in discourse related to the participant’s own taught lesson, the partnerships growing with shared experiences (having taught the lesson also), and a renewed emphasis and awareness on ELs in the lesson. From the same lesson, we noted an in-service (administrator) teacher’s comment: “The only component I am not seeing is your WIDA standards; I cannot give you the full points because I do not see their presence.” Participants learned about WIDA English Language Development (ELD) standards (WIDA, n.d.) in the summer courses and PDs, so class members were accessing prior knowledge and relating it to the current assignment criteria in peer comments.

In another VT comment, a pre-service teacher observed an in-service teacher’s practice and related some ideas to language and content objectives as well as how they are utilized:

I also like how you have the content/language objectives up and in large print for all students to see. Having them read the objectives out loud helps students remember what they are learning and why they are learning. These are all very good practices that I want to implement in my classroom.

Do you see a difference in how students remember the objective when reading them aloud? Was there a time you didn't do that and noticed a change when you started? Does reading the objectives and actively participating in that part of the lesson promote engagement throughout the entire lesson?

The response from the in-service teacher gives further insight into how she related to the question and shared her own teaching experience:

In my experience, the active engagement does keep some students more engaged overall throughout class time, but that isn't true for all students. If we don't recite objectives at the beginning, like was the case my first year of teaching when I alone stated them, then students seem to fight against learning more, I think because, back then, they didn't really have a grasp on what was expected. Currently, my students don't always remember the objectives 20 minutes into class, say, but I remind them and revisit a couple times, or in our small group station, and that helps to maintain focus.
**Incorporating QTEL training.** Participants frequently cited their QTEL training in comments and gave evidence to how they were assimilating QTEL concepts, practices, and strategies. In one instance, a peer wondered about ACCESS test scores and Can-Do descriptors which could have been specific to students or specific to the lesson, as they noted, and the peer shared their thinking of ELs and their progress:

(Samone) I applaud you for including the Can-Do Descriptors toward the work the students will be doing; it’s good that you were able to reach back and apply some of the information that we learned from our previous courses this summer. Glad you help students apply this to situations and capture a better understanding of the E language or whatever their L2 is.

(Betsy) I agree with Samone’s comments and wondering since the last slide focused on the writing Access scores if that was consistent with this slide, or if the Can-Do descriptors were more specific to the students…I wasn’t sure if the listening and speaking were more specific to those students or if these Can-Do descriptors are more specific to the lesson.

In her reply, the in-service teacher assured that the descriptors were specific to each individual student, adjusted for everyone, and gave the proficiency level for each individual learner. This back-and-forth, give-and-take, through questioning, allowed “communicative learning” (Mezirow, 1991, p. 75), where participants adjusted their meaning schemes for ways of teaching diverse learners, and adapted a, “revised interpretation”, or a new and revised meaning scheme for teaching ELs, in order to guide future action (Mezirow, 1991, p. 12) for using EL’s ACCESS test scores to impact instructional goals.

**Blending training into the classroom.** The pre-service participants were sometimes bound by their classroom teacher’s goals for lessons, as well as the school’s and district’s curriculum. One VT example illustrates how students enveloped the classroom goals with QTEL methods class assignment goals, incorporating SIOP component 1, 2, 3, 4, 8 in their written lesson:

Peg: For SIOP Lesson Delivery: We chose ‘I do, we do, You Do’ method. I presented a graphic organizer; Jen filled in the organizer, then we did You Do which is exit slip—they went off on their own completed the slip (found main idea from their reading). SIOP 8 for exit slip (assessment): Title of your Book; Is this FICTION or NON-FICTION; what is the main idea of the book; We asked that students chose a book out of their book box so it would be leveled to their reading level. They completed this before they went on to choose any book they wanted for independent reading.

From the teaching video, it wasn’t clear whether the, “whole class instruction” was effective for every student, because only a few students answered the teachers’ question prompts. When they, “went off and did independent practice” where they were applying their skills—was this a more accurate view of students’ actual abilities? How did SIOP work with this section; Deb wonders: “The questions… over your lesson…do they go as planned; if you went back to re-teach what would you do differently; how you specifically scaffolded for the ELs in your class?” This question remained unanswered in the VT for that particular lesson, though the questioning process itself represents, “knowing in action undertaken jointly with others,” with opportunities for reflection (Wells, 2001, p. 181). This, “situated knowing,” involving action and reflection, is where sense-making can happen in a sociocultural context (Wells, 2001, p. 181), with change in learning as a result. As this peer reflected on her classmates’ written and taught lesson, the questions represented how she was solidifying concepts for LCRCT teaching, as she attended to how the ELs in the classroom were or were not individually served.

Participants also learned from one another about classroom management, student cooperative groupings, introducing and concluding lessons, assessments, scaffolding techniques, literacy resources, social studies ideas, math concept teaching with ELs, how to have, “classroom conversations” from a
book of the same name, and ways to use diverse media. Strategies included manipulatives for math, images, word walls, think-pair-share, bilingual dictionaries, using direct modeling and visuals, iPads, realia, and ways to relate to students’ home language and culture. The data revealed that participants had an improved understanding of ELs’ experiences and they also began using the techniques as a ‘bridge’ to ELs’ lives and learning, as they reported new awareness developing.

Disorienting Events as Beginning LCRCT Teachers
This transformative theme related to issues faced by participants during their QTEL journey which either led them to be transformed through examining their prior meaning schemes, or became a barrier to their learning. As one in-service teacher noted at the end of the program:

I hadn’t ever considered that our EL students were not only learning math and the cumbersome language and concepts that come with that, but that they were also learning English. I had just taken for granted that they would—even if I knew they had only been in the country a year or two, I never really took the time to process they were learning language and all how hard that was and then learning about how long it takes for them to really become proficient at a language or even moderately functioning in the language.

A perspective transformation shift is evident in her reflection: “I always felt like I taught it very well anyway and then I realized, “Whoa. I’m really not doing anywhere near what I need to be doing.” Reflective learning becomes transformative when assessments of assumptions reveal that they are “distorted, inauthentic or invalid”, which results in new or transformed meaning schemes (Mezirow, 1991, p. 6).

All participants related the challenges of learning WIDA, as demonstrated: “A majority of us sitting in this row were really confused about WIDA strands.” Others confirmed the challenges of WIDA, including the fact that they still did not understand how to assess ELs, and intimated that more time was needed to learn these important concepts. In addition to still questioning WIDA, in the interview and the reflective questioning on disequilibrium, students noted the lack of modeling of teaching ELs in their school practicum:

When it comes to our practicum and the EL incorporation, it’s nonexistent. We have not done any type of general assessment for ELs, any type of internal reading inventory, DRAs, any type of testing. We’ve not really seen their access scores. [There is a] disconnect [between what the college promotes and what is actually happening in the local school].

Another in-service teacher adds that in their school there is an ESOL specialist, though they mention the limits of her services and the great need for all ELs to be serviced, revealing a new awareness of the needs of English learners and a newly found consciousness of the demands for additional services and resources.

Disorienting events for the Project Director included an evolving realization that the demands of a five-year grant project required much assistance, which was lacking in the home institution. For example, while content-area faculty were well versed in their subject areas, they lacked the training and expertise in how to combine content-area instruction with best-practices in TESOL teaching and learning. Finding experienced faculty for linguistics, second-language acquisition and TESOL courses remains a challenge. This highlights the ever-present need for highly trained educators at all levels who understand how to integrate language, content, and pedagogical competencies for educators working with diverse students in today’s classrooms.
Discussion and Implications

The framework of transformative learning (Mezirow, 1991) was adopted in this study to examine teachers’ beliefs and perspectives regarding how they serve students from diverse backgrounds. The goal for the QTEL program to form an academic learning community to prepare in-service and pre-service teachers to receive TESOL certification and to develop linguistically and culturally responsive content teaching (LCRCT) knowledge and skills was explored in this research. The immediate importance of professional development and training for teachers of ELs was presented, as the prior lack of research in this area left leaders, teacher educators, and faculty underprepared for the unrelenting demands for training in the current global political climate. Transformative learning within the LCRCT framework was presented as an appropriate context for examining in-service and pre-service participants’ cognitive processes, disorienting events, perceptions, interpretations of meanings and new interpretations and learning in a teacher training and PD program to develop linguistically and culturally responsive content teachers for ELs.

Implications include new possibilities for professional development trainers, leaders, and teacher education programs, such as utilizing the LCRCT dimensional framework for teachers, ideas for in-class and online exercises and assessments for developing LCRCT educators, aligned with the ten phases of the transformative learning framework (Mezirow, 1991) for relating course activities to participants’ prior, current, and future practice. The LCRCT framework allows leaders and participants to examine content competence and content discourse/pedagogical competence alongside elements of developing metacognitive procedure skills and ways to critically examine socio-culturally just beliefs. The research illustrated how this can be done in online and in-class settings, using Kaltura videos of classroom teaching analyzed and assessed through the VoiceThread platform with a diverse audience of in-service and pre-service educators. Where needed, the ten-phase model of transformative learning can help leaders examine participants’ transformations by setting up assignments that allow them to scrutinize disorienting dilemmas, assess internalized assumptions and meaning perspectives, and explore options for new ways of acting. Reviewing participant comments relating to SIOP, WIDA, assessments, using language and content objectives for ELs and participants’ growth over time in this study allows other leaders, educators, and researchers to efficiently design and assess professional development and teacher training programs to understand how to more effectively meet the learning needs of 21st century diverse learners by adequately preparing their teachers.

Conclusion and Recommendations

This study illustrated that a framework of professional development and teacher training, developed with, and examined through transformative learning in a socio-constructivist, community of practice-based teacher education program, effectively leads to transformed educators. Evidence showed that supporting teacher participants’ experiences, critical reflection, and reflective discourse is required in order for learning to be truly transformative (Mezirow, 1978, 1991). Areas of strength were identified, and suggestions for future research and growth include using Mezirow’s transformative learning phases (Mezirow, 1991), supported by the QTEL LCRCT framework (Table 1) to now quickly train leaders, administrators, educators, and practitioners who serve today’s students. In this way, leaders and teacher educators can design instruction where teachers will be able to critically examine their socio-cultural beliefs through metacognitive procedural practices, and to develop critically needed content and discourse competencies in teaching English learners in diverse classrooms nationally and internationally in the near future.
References


Durgunoğlu, A. Y., & Hughes, T. (2010). How prepared are the U.S. preservice teachers to teach English


Schleppegrell, M. J. (2009). Language in academic subject areas and classroom instruction: What is academic language and how can we teach it? Retrieved from
https://www.mydigitalchalkboard.org/cognoti/content/file/resources/documents/98/98c3e7f4/98c3e7f49b44ea5ee60b45939df619b4593afc7/Schleppegr ell.pdf


Author’s Note: Sarah A. Coppersmith is a geography instructor with the School of Humanities; Department of History and Geography and principal contact for editorial correspondence at Lindenwood University. Kim H. Song is Associate Professor of Education Preparation and Leadership at University of Missouri-St. Louis, PI of SEE-TEL NPD Grant, Fellow of Cambio Center, and MODLAN Co-Founder. Sujin Kim is an Assistant Professor in the College of Education and Human Development at George Mason University.

Citation: Coppersmith, S., Song, K., Kim, S., (2019). In-service and pre-service teachers’ perceptions of transformation and observed classroom teaching practices to become linguistically and culturally responsive content teachers: Quality teachers for English learners. Journal of Transformative Learning, (6)2, 7-26.