Educating Linguistically Diverse Students: A Mixed Methods Study of Elementary Teachers’ Coursework, Attitudes, and Practice

Renée A. Greenfield
University of Hartford

Abstract:
This study followed a mixed-methods sequential explanatory design. Phase I involved the collection of quantitative data to examine inservice teachers’ (N=69) attitudes about language and linguistic diversity as well as their teacher education coursework. All participants were graduates from the same teacher education program. Phase II included interviews with a subsample (n=9) of Phase I participants. The interviews were used to explain teachers’ attitudes and practices with regard to linguistically diverse students and special education. Findings indicate that teachers’ professional practice vary based on teachers’ understanding of and attitudes about policy, assessment, and instructional practice. Findings suggest that teachers’ actual professional practice is inextricably linked to and contextualized in classroom, school, and district structures. Implications for teacher education are discussed.

Keywords: mixed methods, teacher education, language, teachers’ attitudes, teacher practice

APA-Style Citation:

Accepted: January 18th, 2016

While the demographics of elementary classrooms are changing rapidly, both linguistically and culturally, linguistically diverse students (LDS) continue to be poorly served in public schools (Harry & Klingner, 2007; Losen & Skiba, 2011). In fact, students with lower English proficiency skills are at the highest risk for failure in school (Klingner, Artiles, & Barletta, 2006; Lesaux, 2006), and are often disproportionally represented in special education (Artiles, Rueda, Salazar, & Higareda, 2005; Donovan & Cross, 2002). Compounding this rapid growth and failure in school is the fact that teacher education programs are only beginning to address how best to prepare teacher candidates to educate LDS (Darling-Hammond, 2004; U.S. Government Accountability Office, 2009).

To examine these phenomena, it is necessary to examine research on teacher preparation and teachers’ attitudes, to make sense of how LDS are educated, particularly during the elementary years. However, there are few studies on how specific teacher preparation
coursework impacts teachers’ perceptions about LDS (Dekutoski, 2011; Greenfield, 2013), or teachers’ practice (Lo, 2009). Before, during, and after engaging in coursework, teachers generate, reflect and sometimes shift their attitudes and perceptions about the students they teach. For LDS, their teachers’ attitudes about language, culture, and diversity – if affirming – can positively impact student engagement, motivation, and, in turn, academic outcomes (Garcia-Nevarez, Stafford, & Arias, 2005; Nieto, 2002; Lucas & Villegas, 2013; Rader-Brown & Howley, 2014). The purpose of this mixed methods study was to explore the influence of teacher education coursework and teachers’ attitudes on teachers’ practices for and about the LDS they educate.

Theoretical Framework

This study employed Sociocultural Theory (SCT) (Vygotsky, 1978) to examine the interactions between teachers and their social and cultural contexts, in particular the LDS that exist within teachers’ classrooms. Sociocultural theorists believe that human views are generated in concert with an individual’s engagement with the world around them (Gee, 2001; Heath, 1983). Teachers and students engage daily in social activities, in the form of teaching and learning.

Scholars in teacher education (Cochran-Smith, Davis, & Fries, 2003; Crawford & Bartolomé, 2010; Villegas & Lucas, 2013) argue that the preparation of preservice teachers must include a critical, sociocultural view of education. For example, teachers must be aware of the interactions between language, culture, ideology, and power, because schooling is inherently sociopolitical (Cochran-Smith, 2004). While teachers educate students within this context, they must be cognizant of these interactions and their impact on practice. If teachers are aware of the context, they are more likely to be responsive educators. This idea undergirds both multicultural (MC) teacher education (Cochran-Smith et al., 2003) and culturally responsive teaching (CRT) (Gay, 2002) frameworks. Both serve as essential for teacher preparation, but Lucas and Villegas’ (2010) framework for linguistically responsive teaching extends the focus to educating LDS.

Examining teachers’ practices, attitudes and coursework through a SCT lens focuses perspective on interactions in social and cultural contexts. This lens alone is not sufficient for studying LDS; this study combines the SCT perspective with the Framework for Linguistically Responsive Teaching (LRT) (Lucas & Villegas, 2010). The framework includes (p. 302): (a) sociolinguistic consciousness; (b) value for linguistic diversity; (c) inclination to advocate for English language learners (ELLs); (d) learning about ELLs’ language backgrounds, experiences, and proficiencies; (e) identifying the language demands of classroom discourse and tasks; (f) knowing and applying key principles of second language learning; and, (g) scaffolding instruction to promote ELLs’ learning. This collective framework allows for examination of teaching practices using SCT with particular focus on teachers’ sociocultural and pedagogical practices.

Teachers’ attitudes, coursework and practice have historically been linked with student achievement. This study is centered about these three domains to ultimately better understand how attitudes, coursework and practice impact academic outcomes for LDS. While determining specific variables that contribute to student achievement has proved somewhat elusive, some researchers (Feiman-Nemser & Remillard, 1996; Garmon, 2004; Pintrich & Schunk, 2002; Rosenthal & Jacobson, 1992) argue that teachers’ attitudes predict practices, which in turn, predict academic outcomes. The academic outcomes for LDS underpins this study – in order for LDS to achieve in schools, their teachers’ attitudes, coursework and practice must be examined.
Relevant Research

Low student achievement (Samson & Lesaux, 2015), increased high school dropout rates (NCES, 2007), and the disproportionality of LDS in special education (see Donovan & Cross, 2002) are all sobering outcomes for LDS in today’s schools. This may be in part due to the fact that many teachers are underprepared to educate LDS (Menken & Antunez, 2001; Samson & Lesaux, 2015), or a function of teachers’ attitudes about language and linguistic diversity, as well as, special education referral practices. While an exhaustive review of the literature about the relationship between teacher education coursework, teachers’ attitudes, and teachers’ practice do not exist, there are three distinct and growing bodies of research that examine these factors in relationship with LDS. A discussion about all three areas follows.

Teacher Education Coursework

Lucas and Villegas (2010) argue that most teacher preparation programs provide “inadequate attention to educating students of linguistically diverse backgrounds” (p. 297) and that without effective preparation, “classroom teachers are left to sink or swim, much as the [LDS] in their classes” (Lucas & Grinberg, 2008, p. 609). The most recent U.S. Government Accountability Office report (2009) states that less than 20 percent of traditional teacher preparation programs require at least one course about LDS and 28 percent require field placements with LDS. These statistics do not reflect recommendations from language scholars (Lucas & Villegas, 2010) who argue that teachers need to know more about language, regardless of the linguistic composition of their classrooms.

To date, some researchers have broadly recommended increased preparation for general education teachers (Gebhard et al., 2002), while others have suggested providing specific language and pedagogical knowledge for pre-service teachers (Coady, Harper, & de Jong, 2011). Others identified specific one-on-one experiences with LDS (Jurchan & Morano, 2010) as integral to programs and others highlight the need for increasing teacher education faculty’s knowledge of teaching LDS (Costa, McPhail, Smith, & Brisk, 2005). Specific research on preparing general education teachers for LDS is limited, but growing.

Teachers’ Attitudes

While there is conflicting research about the impact of teacher education and early teaching experiences on teachers’ attitudes (Zeichner, 1996), researchers agree that, regardless of when, where or how attitudes are generated, teachers’ attitudes have a direct effect on students' motivation, self-esteem, and educational outcomes (Cummins, 2000; Nieto, 2000). Scholars (Byrnes, Kiger, & Manning, 1997; Youngs & Youngs, 2001) believe that the following variables predict positive attitudes about LDS: (a) coursework in multicultural education or second language learning; (b) working directly with LDS; (c) personal experience abroad; (d) specific training to teach LDS; (e) completion of a graduate degree; and, (f) living in a geographic region where legislature supports LDS. Walker, Shafer and Iiams (2004) surveyed over 400 teachers whose attitudes toward LDS were largely neutral, but then spanned to strongly negative. In contrast, Karabenick and Noda (2004) surveyed over 700 teachers’ attitudes after a professional development experience and reported that 70 percent of general education teachers reported favorable attitudes toward LDS. The attitudes teachers have about language and students with linguistic diversity can vary, but researchers have identified two attitudes necessary to best educate LDS, including affirming views of bilingualism and language diversity (Karabenick & Noda, 2004; Nieto, 2000; Valdés, 2001) and knowledge of the sociopolitical aspects of language education and use (Caldas & Caron-Caldas, 2000).
Teachers’ Practices

Previous research on teachers’ practices shows that assessing and making special education eligibility decisions about LDS are inherently biased (Donovan & Cross, 2002). Prereferral strategies (instructional strategies recommended before referring to special education) are not consistently used (Klingner et al., 2006). Assessors tend to use formal, biased measures (Abedi, 2006; Macswan & Rolstad, 2006). Authentic assessments are used minimally (Klingner, Hoover & Baca, 2008) and eligibility is based on limited information (Wilkinson et al., 2006). Determining whether or not LDS have learning disabilities (LD), in particular, is multi-layered and difficult even for special educators (Klingner et al., 2008). However, it is general education teachers who typically refer students to special education. Therefore, a number of researchers have called for examination of teachers’ pre/referral and assessment practices (Harry & Klingner, 2007; McCardle et al., 2005).

Research Questions

Three research questions guided this study:

RQ1: What are the relationships between teachers’ practices, language attitudes, and teacher education coursework?

RQ2: How do teachers’ coursework and attitudes influence their practices?

RQ3: How do the qualitative results explain results from quantitative data?

Method

Design Rationale

In order to reasonably address these questions, a mixed method approach was used. While mixed research offers the ability to integrate quantitative and qualitative data (Creswell, 2014; Creswell & Plano Clark, 2011; Teddlie & Tashakkori, 2003), it also provides a space for researchers to move toward the “radical middle” (Onwuegbuzie, 2012, p. 194). This “radical middle,” proposed by Onwuegbuzie (2012) provides a “space in which a socially just and productive coexistence among all research traditions is promoted actively, and in which mixed research is consciously local, dynamic, interactive, situated, contingent, fluid, strategic, and generative” (p. 194). Onwuegbuzie purports that this “radical middle” serves as a place where privileging traditions is discouraged, and where mixed research is purposefully chosen to address complex, significant questions.

Questions for this study required a pragmatist approach, but more importantly, the explicit awareness that research about teaching and learning exist within a sociocultural context. Within educational research in particular, scholars Klingner and Boardman (2011) argue, “[experimental research] is not well-suited for addressing the complex issues found in today’s culturally, linguistically, and socio-economically diverse classrooms,” (p. 216). The complex issues Klingner and Boardman refer to exist within the sociocultural context of today’s schools. In order to examine these relationships – between and among teachers’ coursework, attitudes and practice – a mixed method design is not only pragmatic, but also the only design that values and allows for multiple vantage points to view this sociocultural context.

Research Design

This study employed a sequential explanatory research design (Creswell & Plano Clark, 2011; Creswell, 2014; Tashakkori & Teddlie, 1998) (see Table 1) and was comprised of a five-step process. First, quantitative data were collected. Second, quantitative data were analyzed and used for qualitative sample selection. Third, qualitative data were collected. Next, qualitative data were analyzed. Finally, the entire corpus of data was interpreted. The quantitative component of this study was comprised by the collection and analysis of survey data (Phase I).
Then, the interpretation of the survey data results guided the selection of participants for the qualitative portion of the study (Phase II). Here, a heterogeneous representative sample of participants (N=9) was identified from the larger surveyed group. A regression-based residual analysis allowed for the identification of participants to be interviewed. Because of its sequential explanatory design, the study began with a larger sample (N=69) to test variables and then used a few cases to explore qualitative questions (Creswell & Plano Clark, 2011). The design allowed for the interpretation of the entire analyses to explain the results.

Table 1  
Sequential Explanatory Mixed Method Design, Procedures & Outcomes (adapted from Ivankova & Stick, 2007)

<table>
<thead>
<tr>
<th>Phase</th>
<th>Quantitative Data Collection</th>
<th>Quantitative Data Analysis</th>
<th>Subsample Selection</th>
<th>Qualitative Data Collection</th>
<th>Qualitative Data Analysis</th>
<th>Integration and Interpretation of Results</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>LATS Survey</td>
<td>Use of SPSS</td>
<td>Regression Analysis</td>
<td>Semi-structured interviews</td>
<td>Use of Hyper RESEARCH</td>
<td>Integration and interpretation of both data</td>
</tr>
<tr>
<td></td>
<td>3YO-Social Justice Survey</td>
<td>Frequencies</td>
<td>Residual Analysis</td>
<td>Participants’ transcript review</td>
<td>Across-case theme development</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3YO-Desirable Practices</td>
<td>Principal Component</td>
<td>Developing interview questions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Survey</td>
<td>Exploratory Factor Analysis</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Teacher Education</td>
<td>Confirmatory Factor</td>
<td>Semi-structured interviews</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Coursework Histories</td>
<td>Analysis</td>
<td>Participants’ transcript review</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Regression Analysis</td>
<td>Semi-structured interviews</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Outliers</td>
<td>Semi-structured interviews</td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Participants’ transcript review</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Outcomes

- Descriptive Statistics
- Identifying Outliers
- Case Selection
- Interview Protocol
- Interview Transcripts
- Codes, themes, supporting evidence
- Combined Findings
- Discussion
- Implications

Participants and Recruitment

All participants in this study graduated from Chapman College (a pseudonym), a private university in the Northeast (see Table 2). First, I emailed 300 former undergraduate and graduate teacher education students inviting them to be part of the study and 75 agreed to participate. Participants completed the Language Attitude Teacher Scale (LATS) (Byrnes, Kiger, & Manning, 1997), but six of these responses were unusable. Then, I retrieved course histories and Three-Year-Out (3YO) survey data (obtained by the University) from the 69 remaining respondents. I then asked the same participants if they would agree to participate in Phase II of the study.

Ninety-four percent of participants were female and six percent male. Eighty-two percent of teachers were White, 4.3 percent Hispanic, 2.8 percent Black, 1.4 percent Asian, 1.4 percent

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1 Residual analysis is a technique used to understand how independent variables are related to a dependent variable. This analysis is commonly used to make predictions; it estimates the average value of the dependent variable when the independent variables remain fixed.
Table 2
**Participants’ Information**

<table>
<thead>
<tr>
<th>Description</th>
<th>N</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
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<td></td>
</tr>
<tr>
<td>Female</td>
<td>65</td>
<td>94</td>
</tr>
<tr>
<td>Male</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
</tr>
<tr>
<td>American Indian</td>
<td>1</td>
<td>1.4</td>
</tr>
<tr>
<td>Asian</td>
<td>1</td>
<td>1.4</td>
</tr>
<tr>
<td>Black</td>
<td>2</td>
<td>2.8</td>
</tr>
<tr>
<td>Hispanic</td>
<td>3</td>
<td>4.3</td>
</tr>
<tr>
<td>Unknown</td>
<td>5</td>
<td>7.2</td>
</tr>
<tr>
<td>White</td>
<td>57</td>
<td>82</td>
</tr>
<tr>
<td>School Type</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public</td>
<td>63</td>
<td>91.4</td>
</tr>
<tr>
<td>Private</td>
<td>4</td>
<td>5.8</td>
</tr>
<tr>
<td>Religious</td>
<td>2</td>
<td>2.8</td>
</tr>
<tr>
<td>School Setting</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urban</td>
<td>28</td>
<td>40.6</td>
</tr>
<tr>
<td>Suburban</td>
<td>38</td>
<td>55.1</td>
</tr>
<tr>
<td>Rural</td>
<td>3</td>
<td>4.3</td>
</tr>
</tbody>
</table>

Table 3
**Subsample Participants’ Information**

<table>
<thead>
<tr>
<th>Participants</th>
<th>School Context*</th>
<th>Chapman College Teacher Education Experience</th>
<th>Professional Role</th>
<th>Demographics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rachel</td>
<td>preK-8</td>
<td>X</td>
<td>X</td>
<td>preK, Two-Way</td>
</tr>
<tr>
<td>Rita</td>
<td>preK-12</td>
<td>X</td>
<td>X</td>
<td>6th, SEI self-contained</td>
</tr>
<tr>
<td>Josephine</td>
<td>preK-8</td>
<td>X</td>
<td>X</td>
<td>5th-6th, SEI self-contained</td>
</tr>
<tr>
<td>Megan</td>
<td>preK-5</td>
<td>X</td>
<td>X</td>
<td>5th F White</td>
</tr>
<tr>
<td>Ann</td>
<td>preK-5</td>
<td>X</td>
<td>X</td>
<td>1st F Hispanic</td>
</tr>
<tr>
<td>Lauren</td>
<td>preK-4</td>
<td>X</td>
<td>X</td>
<td>2nd F White</td>
</tr>
<tr>
<td>Troy</td>
<td>preK-8</td>
<td>X</td>
<td>X</td>
<td>6th M Asian</td>
</tr>
<tr>
<td>Leigh</td>
<td>preK-5</td>
<td>X</td>
<td>X</td>
<td>4th F White</td>
</tr>
<tr>
<td>Marie</td>
<td>preK-2</td>
<td>X</td>
<td>X</td>
<td>1st F White</td>
</tr>
</tbody>
</table>

Note. *All participants taught in public schools; ** U=urban, S=suburban, R=rural; *** I=Initial license, P=Professional license; ****Rachel taught in a two-way (Spanish/English) bilingual classroom, Rita and Josephine taught in SEI (Sheltered English Immersion) classroom
American Indian, and 7.2 percent did not provide their race. Ninety-one percent of the teachers taught in public schools, 5.8 percent in private schools, and 2.8 percent in schools with religious affiliations. Fifty-five percent of participants reported teaching in suburban school settings, 40.6 percent in urban schools, and 4.3 percent in rural settings. It is important to note that 15 teachers reported teaching more than one grade level.

Of the subsample of teachers (N=9) in Phase II of the study, four of the nine teachers taught in urban schools, four taught in suburban schools, and one taught in a rural district (see Table 3). Five of the nine teachers took language coursework and one teacher took special education coursework at Chapman College. Eight teachers received undergraduate degrees and five teachers earned graduate degrees. Undergraduates and graduates were grouped together for this study because both had access to language and special education coursework and shared the same elementary teacher education experience.

**Quantitative Data Collection and Analysis**

**Quantitative data collection.** This study used four quantitative sources. First, participants completed the LATS, a 13-item questionnaire where participants responded to statements using a five-point Likert scale, designed to measure attitudes toward language and linguistic diversity (see Appendix A). Then, I gathered data from the 3YO survey, using a five-point Likert scale, sent to graduates three years after graduation from Chapman College to gather data about teacher graduates’ practices and their perceptions about teaching for social justice. Drawn from the larger 3YO survey, eight questions were identified because they addressed current practices relevant to diverse learners (referred to as 3YO-Practices), and eight questions addressed teachers’ attitudes and perceptions about teaching for social justice (referred to as 3YO-SJ) (see Appendix B). The 3YO-Practices questions asked teachers to rate their engagement in such practices, identified by the University as indicators of best practice, and the 3YO-SJ questions asked teachers to rate their levels of reflectivity around diversity and diverse students as well as their teaching practices that support social justice and students with disabilities. Both subsets of the 3YO survey attempted to capture graduates perceptions of their current practices. Finally, I gathered teachers’ coursework histories and grouped participants based on: (1) degree (under/graduate); (2) elementary education, plus special education coursework (minor – UG, major – G); and, (3) elementary education, plus language coursework (minimum of 3 credits).

**Quantitative analysis.** Quantitative analyses were carried out using SPSS. Principal component analyses (PCA) determined that each survey measured a separate, unidimensional construct, so I examined the correlations between language attitudes and practices. Finally, to understand the relationships between the variables, the predictive value of the independent variables on teachers’ practice for social justice and teachers’ practices were explored. For the multiple regression models, I explored: (a) language attitude (LATS score); (b) type of degree (under/graduate); (c) teacher education language coursework (yes/no); and, (d) teacher education special education coursework (yes/no).

To select participants for RQ2, I randomly selected three participants whose residuals (observed minus the predicted score) were in line with the predictive model. Analyses indicated 16 participants whose residuals were +/- one standard deviation around the regression line. Of the 16 identified, nine agreed to participate in Phase II. For example, the participant (unidentified by a number) with a LATS score of almost + 3 SD and Desirable Practice score of almost - 4 SD was asked to participate, but declined. An attempt was made to identify at least one participant in each of the four quadrants. The final nine selected participants are identified in Figure 1.
Qualitative Data Collection and Analysis

Qualitative data collection. This study used a semi-structured interview protocol (see Appendix C), informed by the work of Brantlinger, Jimenez, Klingner, Pugach, and Richardson (2005) that focused on the use of qualitative research in special education. Ten practicing teachers piloted the protocol, providing detailed feedback to clarify and enhance the tool. This iterative process allowed me to revise the protocol, with the following foci: special education referral process, thoughts and action about LDS, and school context. Sample questions included (1) Describe the referral process for students with suspected learning disabilities in your school/district. (2) Does the process of referring students to special education differ based individual students? The interviews were based on consent and each interview was 60-90 minutes. Responses were transcribed and identified using an identification number.

Qualitative analysis. Data analyses were carried out using HyperRESEARCH, software used to manage and code data. This study employed traditional qualitative procedures, including coding methodology (Strauss & Corbin, 1990) and developing themes and domains (Creswell, 2014). First, open ending coding techniques were used to identify salient ideas, patterns, and concepts within the responses to interview questions. Second, the data and initial codes were reanalyzed using axial coding. Third, the codes were assigned to broader domains. Next, I looked for similarities in patterns and ideas across all nine cases. Data that appeared in four out of nine cases were retained. Then, when appropriate, I identified disconfirming evidence. Finally, domain analyses (Spradley, 1979) were used to identify semantic relationships in the data. Based on the domain analyses, I generated a taxonomy to build a visual representation of the relationships among and within the data.

Findings

Quantitative

Survey data. Data from self-report surveys (LATS, 3YO-SJ, and 3YO-Practice) and coursework histories answered RQ1. Table 4 displays the means, standard deviations, t-scores, and p values, disaggregated by group. Of the three surveys, the LATS was the only measure that reported group differences. There were differences found between participants who took language coursework ( \( \bar{x} = 24.94, \text{SD}=5.7 \) ) and those who did not ( \( \bar{x} = 28.92, \text{SD}=6.6 \) ). Participants who took some degree of language coursework had stronger positive attitudes toward language and linguistic diversity. While group sizes were different, the differences found between the two groups were significant (\( p=.033 \)).

Overall mean statistics indicated teachers’ strong engagement in social justice practices ( \( \bar{x} = 32.36, \text{SD}=3.57 \) ) and moderate engagement in desirable practices ( \( \bar{x} = 28.94, \text{SD}=2.8 \) ). There were no statistically significant differences found between the three group means for teachers’ reported use of practices for social justice, or desirable practices.

Regression analysis. I used multiple regression techniques to investigate the role of the independent variables (language attitudes, degree, teacher education language coursework, and teacher education special education coursework) in predicting both teachers’ desirable practices and practices for social justice.

Fitting the model – practice for social justice. Table 5 displays the model-fitting process for this exploratory model. Model 1 displays the effect of language attitude on practice for social justice, with 5.2 percent of the variation explained. However, once the teachers’ degree was added to the model, the effect of language attitude was significant, but the total model was insignificant; the variation explained increased to 6.6 percent. Models 3 and 4 tested the

\[2\] It is important to note that a LATS score of 13 is the most positive and 65 the most negative score.
contribution of language coursework and special education coursework, with no significant effects. There were no significant effects of any independent variables on teachers’ practices for social justice, so I examined the effects of the same variables on desirable practices.

Table 4  
*Language Attitudes, Practice for Social Justice, and Desirable Practices – Disaggregated by Group*

<table>
<thead>
<tr>
<th></th>
<th>Language Attitudes</th>
<th>Practice for Social Justice</th>
<th>Desirable Practices</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>M (SD)</td>
<td>t</td>
</tr>
<tr>
<td>Total</td>
<td>69</td>
<td>28.00 (6.6)</td>
<td></td>
</tr>
<tr>
<td>Type of Degree</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Undergraduate</td>
<td>36</td>
<td>29.39 (5.66)</td>
<td>-.252</td>
</tr>
<tr>
<td>Graduate</td>
<td>33</td>
<td>26.48 (7.28)</td>
<td></td>
</tr>
<tr>
<td>Teacher education course</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>coursework: elementary</td>
<td>52</td>
<td>28.1 (6.4)</td>
<td></td>
</tr>
<tr>
<td>and special education</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coursework ONLY</td>
<td>17</td>
<td>27.65 (7.4)</td>
<td></td>
</tr>
<tr>
<td>Teacher education course</td>
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<td></td>
<td></td>
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<tr>
<td>coursework: language</td>
<td>53</td>
<td>28.92 (6.6)</td>
<td></td>
</tr>
<tr>
<td>NO Language</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Coursework</td>
<td>16</td>
<td>24.94 (5.7)</td>
<td></td>
</tr>
</tbody>
</table>

*p < .05

Table 5  
*Regression Models Investigating the Role of Teacher Coursework and Language Attitudes on Teachers’ Practice for Social Justice*

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
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<tr>
<td></td>
<td>B</td>
<td>SE</td>
<td>B</td>
<td>SE</td>
</tr>
<tr>
<td>Intercept</td>
<td>35.83</td>
<td>1.85</td>
<td>36.65</td>
<td>2.03</td>
</tr>
<tr>
<td>Language Attitude</td>
<td>-.124</td>
<td>.064</td>
<td>-.138</td>
<td>.066</td>
</tr>
<tr>
<td>Degree</td>
<td>-.864</td>
<td>.866</td>
<td>-.900</td>
<td>3.99</td>
</tr>
<tr>
<td>Teacher Education: Language</td>
<td>-.267</td>
<td>1.09</td>
<td>.104</td>
<td>4.81</td>
</tr>
<tr>
<td></td>
<td></td>
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<tr>
<td>R squared</td>
<td>.052</td>
<td>.066</td>
<td>.067</td>
<td>.071</td>
</tr>
<tr>
<td>df</td>
<td>67</td>
<td>66</td>
<td>64</td>
<td>62</td>
</tr>
</tbody>
</table>

* p < .05; ~ p < .10

**Fitting the model – desirable practices.** Table 6 shows the second model-fitting process. Model 1 included a negative coefficient and indicated a significance effect (p=.021) of
language attitude (the lower the mean score, the more positive the attitudes) on desirable practices. This explained 7.8 percent of the variation. Once the type of degree was added to the model, the effect of language attitude on practices for social justice remained significant, but the total model was insignificant; the explained variance was 8.1 percent. Models 3 and 4 tested the individual contributions of coursework, but neither model had significant effects. When combined with any of the other predictors, the effects of language attitude were eliminated. Thus, Model 1 proved to be the best-fitting model tested. The fact that the language attitude predictor made a significant contribution to teachers’ reported use of desired practices was an important finding.

The regression solution for Model 1 was:

\[ \hat{Y}_{\text{desirable practice}} = 32.28 + (-0.119)X_{\text{language attitude}}. \]

This meant that if the language attitude predictor variable had a value of 0, there would be a predicted desirable practice score of 32.28. However, it is not possible to have a predictor score of 0, because the LATS outcome was on a scale from 13-65, with a higher score indicating a stronger engagement in desirable practice. These values indicated that with every 1-point increase in language attitude (as measured by the LATS) there was almost a 0.1199 point decrease in desirable practices (as measured by the 3YO-Practices). For example, if a participant scored a 30.0 on language attitude, their predicted score for desirable practice was: 35.85 = 32.28 + (0.119 x 30.0). According to this model, participants with strong positive language attitudes (scores 13-23.4) also had stronger engagement in desirable practices. Regression models confirmed that language attitudes were influential in predicting a portion of teachers’ reported use of desirable practices.

Table 6
Regression Models Investigating the Role of Teacher Coursework and Language Attitudes on Teachers’ Desirable Practices

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>32.28</td>
<td>32.58</td>
<td>31.42</td>
<td>32.5</td>
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<td>Language Attitude</td>
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<td>-.124</td>
<td>-.071</td>
<td>-.111</td>
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<td>Degree</td>
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<td>.687</td>
<td>3.14</td>
<td>2.85</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Language</td>
<td>-1.31</td>
<td>.829</td>
<td>-5.81</td>
<td>3.61</td>
</tr>
<tr>
<td>Special Education</td>
<td>-.456</td>
<td>.978</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R squared</td>
<td>.078</td>
<td>.081</td>
<td>.142</td>
<td>.168</td>
</tr>
<tr>
<td>df</td>
<td>66</td>
<td>65</td>
<td>63</td>
<td>61</td>
</tr>
</tbody>
</table>

* p<.05

Figure 1 shows the role of participants’ language attitudes on desirable practices. Based on the regression model, I used residual analysis to select participants for RQ3. I calculated participants’ residuals (observed minus predicted score) and identified 16 participants whose

---

3 Based on the participants’ raw scores, a standard score was calculated based on the distribution of the sample; this allowed for the standardization of the raw scores.
scores were +/- 1 SD around the regression line, three of whom had residuals in line with the model. Of the 16 identified, nine agreed to participate in Phase II. For example, the participant (unidentified by a number) with a LATS score of almost + 3 SD and Desirable Practice score of almost - 4 SD was asked to participate, but declined. An attempt was made to identify at least one participant in each of the four quadrants. The final nine selected participants are identified in using boxes with their corresponding identification number.

![Regression model: Role of Language Attitudes on Teachers' Desirable Practice](image)

*Figure 1. Regression model: Role of language attitudes on teachers’ desirable practice.*

**Qualitative**

Based on results from teacher interviews, Table 7 displays the qualitative results, including the three domains. The first domain – KNOW – included three themes: (a) language, (b) professional practice; and, (c) special education practice. The second domain – DO – included four themes: (a) general assessment practices; (b) instruction; (c) professional practice; and, (d) special education practice. The third domain – THINK – included four themes: (a) language; (b) perceptions; (c) professional practice; and, (d) special education practice.

**What teachers say they know.** Data included teachers’ reported knowledge about language, professional practice, and special education practice. Half of the teachers discussed policies about language instruction and teachers who articulated language policies were in schools with large numbers of LDS, or in classrooms educating LDS. Teachers reported uncertainty about language policy and procedures about language instruction or assessment. Six teachers – Ann, Josephine, Leigh, Marie, Lauren, and Troy – reported not knowing of any professional development (PD) opportunities about LDS and special education. Megan, who did have PD experiences, reported that teachers frequently discussed referring LDS to special education; “we would bring [the issues] up ourselves.... it came up a lot.” In general, she said they “always heard a lot of statistics about how the percentage is so much higher [for LDS to be
placed in special education]. We know.... but there wasn’t any – ‘this is what you should do’ type thing, so I guess it was sort of like observe and use your professional judgment.” At Rachel’s two-way bilingual school there were “in-house, very short workshops.” She continued, “We’re in need [of PD], I’d say.” All the teachers in the study were able to explain the special education referral process in their schools. In general, teachers reported knowing about their students’ language backgrounds and the special education referral process, but knew less about language policies and available PD.

Table 7
Qualitative Data Taxonomy

<table>
<thead>
<tr>
<th>Domain</th>
<th>Theme</th>
<th>Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>What teachers say they KNOW</td>
<td>Language</td>
<td>Policies about language instruction</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Assessment in native language</td>
</tr>
<tr>
<td></td>
<td>Professional practice</td>
<td>Professional development – LDS and special education</td>
</tr>
<tr>
<td></td>
<td>Special education practice</td>
<td>Special education referral process</td>
</tr>
<tr>
<td></td>
<td>Assessment</td>
<td>General assessment practices</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Assessing language skills</td>
</tr>
<tr>
<td></td>
<td>Instruction</td>
<td>Practices for all students</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Designing instruction for LDS</td>
</tr>
<tr>
<td></td>
<td>Professional practice</td>
<td>Advocating</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Collaborating</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Outsourcing to colleagues</td>
</tr>
<tr>
<td></td>
<td>Special education practice</td>
<td>Prereferral</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Referral of LDS to special education</td>
</tr>
<tr>
<td>What teachers think</td>
<td>Language learning</td>
<td>Native language instruction</td>
</tr>
<tr>
<td></td>
<td>Perceptions</td>
<td>Speech-language pathologist</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ESL teacher and caseload</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Families and parents</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Integration of LDS with peers</td>
</tr>
<tr>
<td></td>
<td>Professional practice</td>
<td>Collaboration</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Assessment</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Professional development</td>
</tr>
<tr>
<td></td>
<td>Special education practice</td>
<td>Prereferral</td>
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<tr>
<td></td>
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<td>Referrals special education</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Special education decisions for LDS</td>
</tr>
</tbody>
</table>

What teachers say they do. Teachers reported engaging in assessment, instruction, professional practices, and special education practices. All teachers reported using a variety of assessments: formal and informal, formative and summative. General assessments were more pervasive in teachers’ reported practice than assessment specific to language, yet teachers reported using this information to drive future instruction. For example, Troy reported “re-teaching from the information I get from the formal assessments.” Six of the nine teachers reported assessing students’ language skills through the assessment of students’ oral language and five of the nine reported assessing using the combination of oral language and written work. In contrast, Marie, explained, “I don’t really assess [students’] language skills that much. If I notice them having language difficulties often I’ll take notes and just write it down so that I can tell our speech and language teacher and ask her what she thinks of it.”
Three of the nine teachers discussed instructional practices used with all students, regardless of their native language (L1). When asked, “How do you design instruction to meet students’ linguistic needs?” teachers responded in a variety of ways, including Rachel who answered, “in a million ways.” Teachers described varied grouping strategies: using visuals, teacher modeling, tapping into students’ background knowledge, conferencing with students, creating situations for peer interaction, and implementing theme-based and/or activity-based instruction. While Rita and Megan integrated practices disseminated by their state, Troy, Marie, and Josephine provided specific, linguistically-based practices. In contrast, Ann, Lauren, Leigh, and Rachel reported designing instruction for LDS, but did not give specific examples for the particular population. It is important to note that Lauren, Marie, and Leigh reported having little contact with LDS, yet in their interviews recounted designing instruction for LDS. Further, Rita, Josephine, and Rachel, who primarily educate LDS, talked about their instruction implicitly; they discussed the education of all students, including their individual, linguistic needs.

Within professional practice, teachers reported advocacy and collaboration skills as well as the specific ways they outsourced students to their colleagues. All teachers reported advocating for students in general, and four teachers discussed advocating for students, or “fighting for” students to be deemed eligible for special education services. Two of the four teachers advocated for appropriate referrals to special education for LDS and the other two for monolingual students. Suburban teachers in the study, who rarely educated LDS, said they would outsource their struggling LDS, compared to the urban teachers who discussed ways they would reevaluate their instruction and/or collaborate with colleagues to meet the needs of the student.

Six of the nine teachers reported participating in the prereferral team process in their schools. Two teachers reported referring one or more LDS to special education. Two other teachers reported that LDS in their school contexts were given time, compared to their monolingual peers, before referral to special education. Responses varied, when teachers in the study were asked: Are (special education referral) determinations/decisions about linguistically diverse students any different than their monolingual peers? In most cases, teachers reported what they thought about this question, rather than what they do in their schools.

What teachers think. Interview data were replete with examples of what teachers think, organized in the following themes: language learning, perceptions, professional practice, and special education practice. Some teachers thought L1 instruction was essential to their school communities, while others reported that learning English is the ultimate goal of instruction, and still others offered conflicted responses. Josephine said, “I think it’s ridiculous that we don’t have native instruction here. In a community like [urban center] where there’s so many different languages it’s something that we should be really excited about and try and foster.” Like Megan, Troy and Marie argued that they were unsure how L1 instruction could be put into practice. Megan argued, “I guess in theory it seems like such a good idea to instruct them in both English and their native language, but it seems really impractical.” Lauren and Leigh discussed how they could “see both sides” and that L1 instruction “has pros and cons,” respectively. In the end, they did not take a specific stand about L1 instruction. Data showed that some teachers took a stand about L1 instruction, while others did not.

Data from the study revealed some teachers have distinctive perceptions about the speech-language pathologists (SLPs), ELL teachers, students’ families as well as the integration of LDS in their schools. Two teachers viewed SLPs as distinctly different professionals, meaning SLPs had discreet skills that could not be duplicated by other professionals. The majority of teachers mentioned having SLPs in their schools, but did not provide individual perceptions. In
contrast, seven of nine teachers specifically discussed their perceptions of their ELL teachers. Over half of the teachers revealed their perceptions of parents and families, with regard to the referral process and families’ languages. A few teachers said they thought parents slowed down the referral process, another perceived families to complete language forms inaccurately, and one teacher perceived families as adding value to LDS school experiences. The SEI teacher, Josephine, and self-contained ELL teacher, Rita, were the two teachers who provided their perceptions about the integration of LDS with their peers. In both cases, teachers reported that their LDS were isolated from their monolingual peers.

Teachers’ thoughts about their professional practice, including collaboration, assessment, PD, and training, were evident across the data. Teachers in the study that acted collaboratively in their environments were the same five teachers using response to intervention (RTI), a pre-referral, problem-solving structure in their schools (see Fuchs & Fuchs, 2006, for detailed explanation). These teachers reported feeling “safe,” and surrounded by “helpful, supportive, collegial” colleagues, while the other four teachers thought their school cultures did not foster collaborative environments. Teachers overwhelmingly reported that there was not enough PD to examine LDS and special education.

Teachers had varied thinking about the prereferral and referral process as well as special education eligibility decisions made for and about LDS. In general, all teachers described the referral process and commented on the factors contributing to the effectiveness of the process, including collegiality, the school’s political context, and the pace of the process. Teachers thought the process of determining eligibility to be different for LDS, due to differences in language development, English language skills, and acquisition time.

While the previous domains, what teachers say they know and do, reflect a fair amount of agreement among teachers, there is great variation in this domain. In addition to having great variation, it is important to note what is missing from the data in this domain. All teachers responded to direct questions about L1 instruction and the availability of PD about LDS and special education. However, the rest of data reported in this domain were derived indirectly throughout the interview. These qualitative data provided evidence to support the generated themes.

This study’s first research question examined the relationships between practices, attitudes and coursework. Data indicated that participants who took language coursework had more positive attitudes toward language and language diversity. Further, results from RQ2 showed that participants with positive language attitudes predicated a greater use of desirable practices. Following the sequential explanatory design, the next section will describe the findings from RQ3, findings from across all data sources.

**Combined Findings and Discussion**

The foci of this study included examining the relationships between teachers’ attitudes, teachers’ coursework, and teachers’ practices. This study examined data from graduates from one university, in order to determine whether their university coursework and/or attitudes impacted their current teaching practices (including practices that support educating LDS and students who receive special education). Ultimately, this study was intended to inform teacher education, special education, and teacher practice.

Examining the corpus of data allowed for a greater understanding of the relationships between teachers’ practices, attitudes, and coursework as well as the specific practices of a subsample. This section provides descriptive results from the subsample as well as data that describe what teachers say they KNOW, what teachers say they THINK, and what teachers say
they DO. Discussion of these data is across three contexts: language, special education, and professional practice.

**Subsample’s Descriptive Results**

After interviewing the subsample of participants, it was important to reexamine the subsamples’ school context and teacher education background (Table 3). Four of the nine teachers taught in urban schools, four taught in suburban schools, and one teacher taught in a rural district. Five of the nine teachers interviewed took language coursework and one teacher took special education coursework. Eight received undergraduate degrees and five teachers earned graduate degrees. The selected teachers were moderately representative of the larger sample.

Table 8 reports the subsamples’ individual scores on the quantitative measures, including standards scores used to contextualize the results. Since data from 3YO-SJ were not found to be significant with the larger sample, they were not used in the collective analyses. Instead, LATS and 3YO-Practices scores were examined in detail. On both the LATS and the 3YO-Practices, the subsample’s means were not statistically significantly different from the larger sample. To determine patterns within the data, the scores were examined individually. At this stage of the data analyses, patterns across and within LATS and 3YO-Practice standard scores were investigated and found to have little variability. Aside from the statistically significant positive relationship between participants’ LATS scores and 3YO-Practice scores, there were no other significant patterns identified.

<table>
<thead>
<tr>
<th>Participants</th>
<th>Language Attitude</th>
<th>Desirable Practice</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Raw Score</td>
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<tr>
<td>Megan (#31)</td>
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</tr>
<tr>
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<tr>
<td>Leigh (#20)</td>
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<td>0.15</td>
</tr>
<tr>
<td>Rachel (#50)</td>
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</tr>
<tr>
<td>Rita (#42)</td>
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</tr>
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</tr>
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<td>Lauren (#9)</td>
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<tr>
<td>Troy (#53)</td>
<td>34.00</td>
<td>0.91</td>
</tr>
<tr>
<td>Sample Mean</td>
<td>28.00 (6.60)</td>
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</table>

**Language**

Examination of LATS scores in conjunction with participants’ responses to interview questions about language, built more robust descriptions of teachers’ language attitudes and practices. Teachers with more negative attitudes towards language and language diversity responded similarly in their interview.

Teachers who did not take language coursework had more negative attitudes toward language. Interview data confirmed the quantitative findings that there was a statistically significant positive relationship between language attitudes and desirable practice. For example, Rachel displayed her strong positive language attitude, explaining, “[L1 instruction is] essential to complete really meaningful literacy development.” Then, when asked how she designed
instruction to meet students’ linguistic needs, she responded, “in a million ways.” Rachel reported using a variety of strategies, such as teacher modeling and conferencing with students. In contrast, Marie, who had a moderate positive language attitude, reported, “I don’t really assess [students’] language skills that much.” While she had strong engagement, her interview data inconsistently reported desirable practices.

Within their interviews, four participants discussed language policies, but their explanations and interpretations lacked depth. For example, the suburban teachers discussed district language-screening forms used to determine if language evaluations were appropriate. While results from the LATS provided insight into participants’ attitudes, it did not measure their knowledge about language. Aside from teachers in bilingual or SEI programs, interview data showed that participants’ knowledge and understanding about language policy were minimal. This suggests that their individual teacher education experience, particularly coursework in language, impact teacher’s knowledge about language and LDS.

The LATS item analysis revealed some interesting patterns about attitudes and practice. Lauren, Megan, Troy, and Marie’s LATS’ responses (moderate to neutral attitudes) were corroborated within the interview data. When asked their opinion of L1 instruction, Marie, Megan, and Troy said they were not sure how it could be implemented. While Megan agreed that L1 instruction was valuable, Troy and Marie rejected the idea, and Lauren did not take a stance. In contrast, Rita, Rachel, Josephine, and Ann (with strong positive language attitudes) agreed that L1 instruction was valuable in particular circumstances, highlighting the benefits for LDS. Teachers in school settings that supported language instruction, like Rachel and Josephine, discussed their instructional strategies implicitly, referring to desirable practices like making accommodations and using visuals. This may imply that discussions in this context do not require explicit conversation about strategies. For example, Rachel said, “I treat the entire class as if they were learning in a second language, and at the same time I teach regular kindergarten.”

Megan, who took language coursework, reported using specific language objectives when teaching her students, saying: “I try to have a language objective with every lesson what we do.” Teachers in other settings reported using similar instructional methods for all students, regardless of students’ linguistic diversity.

These data support the quantitative results that link positive language attitudes with practice, in particular the assessment of students’ language skills and use of specific instructional strategies. In other words, if teachers have more positive attitudes about language they are more willing to expand their instructional and assessment repertoire. Participants with deeper knowledge about language policy and more positive attitudes about language, typically students who took language coursework, were the same participants who taught in urban schools or within language contexts.

**Special Education**

All participants educated students who received special education services and the majority of teachers participated in the pre- or referral process. While only one member of the subsample (Troy) took coursework in special education, the others completed at least one introductory special education course during their time at Chapman College. Interview and survey data confirmed that participants reported having a general understanding of the referral process. This suggests that teachers know cursory information about the special education process. All teachers reported making accommodations and using differentiated instruction, and six reported participating in the pre-referral process. All teachers reported needing specific support to help them make informed instructional and referral decisions about and for LDS.
Two teachers actually referred a LDS for special education services. But, seven of the nine teachers reported that the referral process for LDS was different. If only two teachers had actually referred a LDS, then how would the other five teachers know if the process was the same or different for LDS? This may be a limitation of self-report data as well as a realistic portrayal of what teachers think they should do, what they know they should do, and what they actually do.

Six teachers reported that they did not know about or have access to PD about LDS and special education, two teachers had a one-time conversation about the topic, and one teacher created her own professional learning community to investigate issues around referring LDS to special education. Again, these data create concern. Teachers reported not having any PD to help them make special education eligibility decisions for LDS and the majority said they had little contact with their ESL teacher. Without language coursework or the support of a second language expert, coupled with a lack of PD, these teachers are not prepared to educate LDS, nor make appropriate decisions around special education.

Professional Practice

While the LATS measured attitudes, the 3YO-Practice survey asked about teachers’ desirable practices, and results were positively skewed. Teachers reported they engaged in decision-making, assessment, and reflection. Interview data also showed evidence about decision-making as well as collaboration and assessment practices.

Data from the 3YO-Practice survey reported that participants “often” or “sometimes” make decisions about teaching based on classroom evidence (Item 29) and make teaching decisions based on the results of pupil assessments (Item 32). In fact, eight of nine participants responded “often” to Item 29, which means that participants overwhelming reported using evidence to make decisions. However, these survey data conflict with interview data. During their interviews, some participants reported making decisions based on evidence (Item 32) and using differentiated instruction (Item 36), but offered few examples. Limited evidence was offered to support survey results of Item 35 (modifying lessons for students from diverse racial/ethnic/cultural/linguistic backgrounds); one participant discussed ways to modify lessons, but they were modifications to address learning differences, and one participant (Megan) reported making modifications, but when she described her actions, she was actually creating accommodations.

Regarding collaboration, Lauren, Megan, and Troy reported limited access to the ELL teacher in their schools. Lauren and Megan both reported low incidence of LDS in their building, which may have contributed to their perceptions that the ELL teacher was difficult to access. Marie reported outsourcing her LDS who struggled to the speech-language pathologist in her building, while Lauren outsourced struggling students to the Title One teacher. This provides evidence that teachers may outsource their students to other colleagues; in fact, most suburban teachers with little contact with LDS reported that they would likely outsource students who were struggling.

Findings in Context

Combined results from this study suggest teachers’ coursework and attitudes across two domains – language and special education – inform teachers’ professional practice (Figure 2). Relationships between teachers’ attitudes and coursework inform their knowledge of language, including policy, assessment, and instructional practices. These results support Lucas and Villegas’ (2010) Framework for Linguistically Responsive Teaching, which, among other factors, calls for teachers to have “sociolinguistic consciousness,” “value for linguistic diversity,”
know and apply “key principles of second language learning,” and scaffold “instruction to promote students’ learning” (p. 302). Similarly, teachers’ attitudes and coursework informed their knowledge of special education, including policy, assessment, instructional practices, and referral practices. Collectively, these findings suggest that both bodies of knowledge interact with each other and merge to inform and generate teachers’ professional practice, including collaboration, professional development, reflection, decision making, outsourcing, and problem solving. All of these relationships are nested within the school or district context.

**Figure 2. Overall findings.**

**Implications for Teacher Education**

This study showed that language coursework is predictive of teachers’ attitudes about language. Since participants were not surveyed prior to their language coursework, it is difficult to know if their attitudes about language were established prior. In addition, as language coursework is not required at Chapman College, those students who elected to take such coursework did so on their own accord. This, coupled with the exponential increase of LDS in schools (Aud et al., 2010), should be compelling enough for teacher preparation programs to rethink the coursework they offer to support teachers who educate LDS. As deJong and Harper (2005) remind us, being a good teacher is simply not enough. However, recent federal policy changes (e.g., NCLB) require teachers to be “highly qualified” to teach LDS, making these requirements essential within teacher preparation programs.

Teacher preparation includes more than just content and methods coursework. With regard to pre-service teachers’ reflection and reflective judgment, teacher educators must support candidates’ understanding of sociocultural theory and implications for practice. Teacher education programs must embrace Bartolomé’s concepts of “ideological clarity,” which asks teachers to evaluate their personal beliefs, attitudes and assumptions. In doing so, pre-service teachers examine their beliefs and compare them to the dominant socioeconomic and political ideals. Instead of our current culture of recognizing students by their deviances or differences (Crawford & Bartolomé, 2010), teacher educators can be better prepare pre-service teachers by guiding them through the complicated, but necessary process of examining their personal beliefs, views, and assumptions. Data from this study showed teachers at varying levels of attitudes and practices. This disparity provides further evidence that explicit work to examine pre-service teachers’ attitudes and practices are necessary.
Results from this study show that teachers with exposure to students with varied languages and linguistic abilities generally had more positive attitudes about language and linguistic diversity. Teachers’ personal attitudes, knowledge, and practices contribute to where they choose to teach. Based on this study, teachers who had more positive language attitudes and used more desirable practices taught in urban contexts with linguistic diversity

**Conclusion**

Situating this study within Onwuegbuzie’s (2012) “radical middle,” allowed for a systematic analysis of teachers’ attitudes, coursework and practice, understanding that both quantitative and qualitative data were necessary – this mixed approach valued the collection of multiple data sources, creating a more insightful view than if quantitative and qualitative measures were used exclusively (Greene, Benjamin, & Goodyear, 2001).

Findings from this study suggested school contexts and language attitudes matter. Teachers’ engagement in professional practices, like collaboration, reflection, and problem solving, were dictated by the district or school context. Teachers with more positive attitudes worked more frequently with LDS and had coursework in language. Teacher educators and schools need to be reminded that language coursework and attitudes impact practice, ultimately providing more positive outcomes for LDS.

References


Appendix A

Language Attitudes Teacher Survey (LATS) (Byrnes, Kiger, & Manning, 1997)

Directions:
Select one of the following responses: Strongly Disagree, Disagree, Uncertain, Agree, or Strongly Agree.

1. To be considered American, one should speak English.

2. I would support the government spending additional money to provide better programs for linguistic-minority students in public schools.

3. Parents of non- or limited-English-proficient students should be counseled to speak English with their children whenever possible.

4. It is important that people in the US learn a language in addition to English.

5. It is unreasonable to expect a regular classroom teacher to teach a child who does not speak English.

6. The rapid learning of English should be a priority for non-English-proficient or limited-English-proficient students even if it means they lose the ability to speak their native language.

7. Local and state governments should require that all government business (including voting) be conducted only in English.

8. Having a non- or limited-English-proficient student in the classroom is detrimental to the learning of the other students.

9. Regular-classroom teachers should be required to receive pre-service or in-service training to be prepared to meet the needs of linguistic minorities.

10. Most non- and limited-English-proficient children are not motivated to learn English.

11. At school, the learning of the English language by non- or limited-English-proficient children should take precedence over learning subject matter.

12. English should be the official language of the United States.

13. Non- and limited-English-proficient students often use unjustified claims of discrimination as an excuse, for not doing well in school.
Appendix B

*Three-Year-Out (3YO) Survey Questions*

**Desirable Practices**

*Directions:*
Thinking about your classroom and school experiences, use the scale A = Often, B = Sometimes, C = Rarely, D = Never, E = Not Applicable to rate the extent to which you have used the following practices in your teaching.

28. reflecting on and improving my teaching performance.
29. making decisions about teaching based on classroom evidence.
31. understanding educational plans and providing appropriate accommodations for students with special needs in my classroom.
32. making teaching decisions based on the results of pupil assessments.
34. understanding the concepts, principles, and reasoning methods of the subject areas I teach.
35. modifying lessons for students from diverse racial/ethnic/cultural/linguistic backgrounds.
36. using differentiated instruction to enhance student learning.
37. integrating issues of social justice into my curriculum.

**Social Justice Practices**

*Directions:*
Thinking about your teaching experiences over the past year, respond to the following statements about your teaching practices using the scale A = Strongly Agree, B = Agree, C = Uncertain, D = Disagree, E = Strongly Disagree.

39. An important part of being a teacher is examining my attitudes and beliefs about race, class, gender, disabilities, and sexual orientation.
40. Issues related to racism and inequality are openly discussed in my classroom.
41. For the most part, covering multicultural topics is *NOT* relevant to the subjects I teach.
42. I incorporate diverse cultures and experiences into my classroom lessons and discussions.
43. The most important goal for me in working with immigrant children and English language learners is to assimilate them into American society.
44. It’s reasonable for me to have lower classroom expectations for students who don’t speak English as their first language.
45. Part of my responsibility as a teacher is to challenge school arrangements that maintain societal inequities.
48. Although I appreciate diversity, it’s *NOT* my job as a teacher to change society.
Appendix C

Interview Protocol

Part I: Special Education

1. Describe the referral process for students with suspected learning disabilities in your school/district.
   Probe: How is it supposed to happen? What is the “official” process?
   Probe: Do you feel like the process is effective in identifying appropriate students to receive special education services? Why or why not?

2. Does your school/district have a pre-referral team (e.g. Child Study Team [CST], Teacher Advisement Team [TAT])? If so, how does it work?

3. Does the process of referring students to special education differ based on individual students?
   Probe: Are determinations/decisions about linguistically diverse students any different than their monolingual peers?

Part II: Linguistically Diverse Students

Description of context/knowledge of learners

4. Where do you teach? Tell me about your school community.
5. Describe the students in your classroom.
   Probe: Where are your students (and their families) from?
6. How many of your students receive special education services?
   Probe: What kind and who provides the service?
7. How many of your students receive instruction in their native language?
   Probe: What kind of instruction do they receive and who is/are the provider(s)?
   Probe: What’s your opinion about native language instruction.

Instruction

8. How do you design instruction to meet students’ academic needs?

Assessment

9. In what ways do you assess your students?
10. Do you (in/formally) assess your students’ language skills? If so, how?
11. What happens when you assess a linguistically diverse student and you confirm the student is NOT accessing the general curriculum?

Collaboration

12. Is your school environment one that fosters collaboration? If so, in what ways?

Professional Development

13. Describe the type(s) of professional development, if any, available to address concerns about referring linguistically diverse students for special education services.
Author Notes

Renée A. Greenfield, Ph.D.
University of Hartford
College of Education, Nursing & Health Professions
200 Bloomfield Avenue, W. Hartford, CT 06117
rgreenfie@hartford.edu

Dr. Renée Greenfield is an Assistant Professor of Special Education at the University of Hartford in Connecticut. Renée prepares pre-service teachers to learn about diverse students (with and without disabilities) and how to best support their learning. Her research centers around language development, learning disabilities, and preparing teachers to educate linguistically diverse students with and without disabilities. Renée was an elementary and high school special educator.