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# Becoming Linguistically and Culturally Responsive Educators: Teacher Candidates' Perspective Shifts in an Introductory Linguistics Course

Ali Yaylali<sup>a</sup>, Yousra Abourehab<sup>b</sup>, Juanita J. Sandoval<sup>b</sup>, and Mary Carol Combs<sup>b</sup>

<sup>a</sup>Eastern Kentucky University; <sup>b</sup>University of Arizona

## ABSTRACT

Many teacher education programs aim to address the acute need for culturally and linguistically responsive educators by fostering linguistic consciousness and awareness of language learner populations. This mixed-methods study explores how elementary education teacher candidates' perspectives shift through critical reflection and dialogue about English learners' education and equitable classroom practices. Using a transformative learning framework, our findings illustrate that collaborative learning tasks as well as peers' and multilingual graduate teaching assistants' experiences play a disorienting role in challenging monolingual and bilingual teacher candidates' beliefs about language acquisition, bilingualism, and English learners' education. We discuss implications for teacher language awareness and instructional practices in ESL endorsement courses.

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## Introduction

Public schools in the United States (U.S.) face a steady increase in English learners (ELs), with more than 5 million ELs among the nearly 50 million public school students (National Center for Education Statistics, 2023). Mainstream classroom teachers are expected to work with a linguistically and culturally diverse learner population, which requires not only strong subject matter knowledge in their disciplines, but also a stronger foundation in ELs' sociocultural backgrounds and linguistic development (Bartolomé, 2004; Lucas & Villegas, 2013; Villegas & Lucas, 2002). Because of the acute need for culturally and linguistically responsive teachers to provide equitable and supportive instruction, teacher education programs have an obligation to respond to the changing demographics of public schools and prepare effective teachers to provide equitable educational opportunities for ELs (Coppersmith et al., 2019).

As Bartolomé (2004) explained, school populations made up of socioeconomically less advantaged and linguistically diverse learner populations compel teachers to reconsider their linguistic ideologies and long-held dispositions to view such populations with a deficit perspective. Therefore, scholars have urged reflection and reflective teaching practices in teacher education programs as a method of preparing socioculturally and linguistically responsive teachers for today's classrooms (Johnson, 2006). Reflection in teaching and learning, a bridge to theory and practice (Mills et al., 2020), values teachers' ways of knowing and lived experiences in and out of classroom settings. At the same time, reflective teacher candidates are positioned as learners who recognize their assumptions and attitudes regarding EL populations as they critically investigate educational practices, instructional curricula, and language policies (Johnson, 2006). By considering mainstream language policies, culture, and

teacher power in the U.S. classrooms, teacher candidates need to be prepared as reflective leaders who ask critical questions about ELs' language development and learning experiences.

In the midst of changing demographic characteristics of the U.S. public schools, what is needed in quality K-12 teacher education is to build a strong knowledge base via classroom-based research focusing on instructional context and activities (Freeman, 2020). English as a Second Language (ESL) endorsement research may contribute to such a knowledge base by exploring how teacher candidates adjust beliefs about EL populations and linguistic needs in successful reflective practices. ESL endorsement programs in U.S. higher education institutions may provide undergraduate teacher candidates and in-service teachers with foundational knowledge of EL populations and successful teaching practices for certification/licensure or professional development purposes. Learners taking ESL endorsement courses may explore SLA theories, linguistics, the grammatical structure of English language, teaching methods, assessment, and language policies influencing EL education. While exploring the landscape of EL education for certification purposes, teacher candidates experience incidents or moments that prompt them to critically think about prior experiences, existing perspectives, and linguistically diverse populations' learning in mainstream classrooms. Such incidents may also include emotional content because teacher candidates who were once ELs may bring stories of learning in their families and schools. Peer relations play a role in such situations since dialogue, mutual understanding, and trust between teacher candidates may allow for relational learning experiences in a non-evaluative context (Taylor, 2007).

In an effort to address these critical needs in teacher preparation, this study examines how teaching practices in a semester-long ESL endorsement linguistics course contribute to teacher candidates' transforming their beliefs, attitudes, or dispositions about teaching linguistically and culturally diverse populations. Using the Transformative Learning (TL) Theory as a framework (Mezirow, 2000), the current study builds on the previous literature and aims to further ESL endorsement research with a transformative perspective by answering the following research questions: (1) What are the transformative learning experiences of monolingual and bilingual elementary education teacher candidates in an applied linguistics course? (2) Which learning activities did candidates report contributed to transformative learning?

To address the research questions, this mixed-methods study drew on classroom reflections at various points (beginning, mid-semester, and end-of-the semester), interviews, and survey data that provided insights into bilingual and monolingual teacher candidates' transformative learning processes and impactful learning activities in the course. While the qualitative data were analyzed using a bottom-up coding process without a preexisting scheme, the quantitative data were analyzed using an R code and chi-square statistics test. Three themes related to learning experiences are shared along with learning activities that contributed to transformed teacher perspectives (e.g., peer interactions, SLA myth-dispelling). The findings and implications corroborate the growing knowledge of ESL endorsement courses' transformative impact on teacher candidates and inform the instruction in ESL endorsement courses. Reflective learning activities play a transformative role in helping teacher candidates become more linguistically conscious educators.

## **Review of Relevant Literature**

### ***Theoretical Framework***

In Transformative Learning (TL) Theory, learning is defined as a meaning-making process in which learners "become critically aware of their own tacit assumptions and expectations, and those of others" as they interpret new experiences and take action (Mezirow, 2000, p. 5). Dialogue and critical reflection play a critical role in transformative learning because learners may encounter unanticipated actions or uncomfortable moments during their interactions with others (e.g., instructor, peers, mentors), also called disorienting dilemmas, which lead people to "assess taken-for-granted assumptions, values, beliefs, and lifestyle habits" that may be transformed radically (Gorski and Dalton, 2020; Kiely, 2005, p. 7; Mezirow, 2012). This theory of learning suggests ten non-linear phases of learning

that usually start with self-critiquing and may involve action based on learning. As learners investigate other possible perspectives via reflective learning activities, they might discover that some of their thoughts and perspectives are no longer reliable (e.g., thinking of certain populations as inferior). The transformative experience is thus believed to liberate learners from unreliable perspectives and formulate more justifiable perspectives (Mezirow, 2000).

### ***Teacher Candidates' Transformative Shifts***

Transformative learning framework in the ESL endorsement or Teachers of English to Speakers of Other Languages (TESOL) education contexts focuses on the development of current teachers' and teacher candidates' understanding of linguistically diverse learner populations. Learning activities impacting teachers' learning experiences have increasingly received attention in recent research since, as a theory, transformative learning may inform college teaching practices by identifying the best practices of teaching and learning. Daniel and Pray (2017) reported how two in-service teachers in an ESL endorsement course experienced perspective transformation by building a better understanding of Muslim students as well as other EL populations. Interactions with ELs created feelings of failure as well as opportunities to face cultural biases.

In a different study (Cho & Johnson, 2020), teacher candidates taking a TESOL course experienced perspective shifts in understanding emergent bilinguals in dual language schools. Teacher candidates conducting student teaching in dual language contexts worked with ELs whose language and culture were unfamiliar to them. Coppersmith et al. (2019) focused on preparing linguistically and culturally responsive teacher educators who understand diverse learners and identify their linguistic needs in content classrooms. Examining their own assumptions and teaching practices through a variety of professional development activities helped teachers make better connections to diverse learners' lives in actual teaching. Fischer and Lahmann (2020) also found that teacher candidates valued multilingualism more and showed more willingness to consider the linguistic demands of content classrooms to support ELs after taking a course about linguistically responsive teaching.

### ***Teacher Candidates' Professional Needs***

Scholars investigating teachers' background about language reported that both in-service and teacher candidates bring beliefs to teacher education programs that do not reflect actual language development processes and learner needs (Busch, 2010; Cho & Johnson, 2020; Coppersmith et al., 2019). For example, in an introductory second language acquisition (SLA) course for K-12 teacher certification, Busch (2010) found that teacher candidates' prior language learning experiences led them to believe a brief amount of instruction a day ensures fluency in a language. Cho and Johnson (2020) and Coppersmith et al. (2019) also noted a lack of teacher knowledge about diverse learner populations, first language literacies, and pedagogical routines among teacher candidates. Teachers' conceptions of linguistically and culturally diverse populations may be shaped by different factors including prior language learning experiences (Busch, 2010), language spoken by ELs, ethnic/racial differences, and socioeconomic conditions (Lucas & Villegas, 2013). A teacher preparation program that misses any of these issues will compromise teachers' development of what Lucas and Villegas (2013) have called a "sociolinguistic consciousness."

Teachers across these programs not only developed an understanding of the lived experiences of linguistically and culturally marginalized populations, but also adjusted their beliefs and teaching practices with support from their mentors, instructors, and peers. Perspective shifts occurred through a variety of learning contexts and activities ranging from classroom learning tasks (e.g., discussion boards) to off-campus learning events (e.g., classroom observations). While these scholars conducted valuable transformative learning research to create a robust research base, teacher education research has also shown inadequate teacher preparation and a lack of self-efficacy when it comes to supporting ELs in the content classrooms (Sugimoto et al., 2017; Villegas et al., 2018). Particularly, the need for further exploratory studies examining the contexts of teaching and learning in ESL endorsement programs persists, especially through varied methodological designs and data sources revealing

disorienting experiences and effective teaching pedagogies (Mahalingappa, 2023). Additionally, there is a dearth of research foregrounding the experiences of diverse teacher candidate populations learning in the same classroom contexts (Cho & Johnson, 2020) and their foundational understanding of SLA and language used in content areas. When teachers lack necessary foundations in language and literacy development in their content areas, multilingual learners may experience a discontinuity of linguistic and pedagogical support as they transition into content courses (Yaylali, 2022).

## Research Methodology

### Design

This study employed a mixed-method research design (Creswell & Creswell, 2017). Qualitative data were collected through student reflections and interviews while quantitative data were collected through a survey administered at the course's conclusion. The reflection data, collected by all authors in their own classrooms at various points during the semester, aimed to capture teacher candidates' developing perspectives on the course topics. The end-of-semester survey included items aligned with Mezirow's (2012) stages of questioning and shifting teacher perspectives. Following the Fall semester, the authors invited the candidates who consented to discuss their experiences to a brief interview in the early Spring. The interviews were conducted virtually for convenience.

The reflections collected at various points (i.e., initial, mid-semester, and end) and interviews were thematically coded in NVivo software following a detailed bottom-up coding procedure, leading to codes, patterns, themes, and assertions about the data (Saldaña, 2021). For interrater reliability, all the data were coded by at least two authors and any discrepancies regarding the codes were resolved after team discussions and 100 percent agreement on the codes. The survey data were analyzed using an R statistics code written by one of the authors. The coded data were iteratively interpreted to understand the candidates' experiences and identify recurring themes.

### Participants

The study took place at a research university in Arizona, the United States. All candidates were enrolled in a 3-credit undergraduate linguistics course typically offered to juniors or seniors in the elementary education program. This course focused on a variety of topics such as SLA, English grammar, dialects, and Black linguistic justice (Baker-Bell, 2020). From all three sections of this undergraduate course, a total of 45 teacher candidates agreed to participate in this study which was approved by the Institutional Review Board (IRB). From this participant pool, 37 teacher candidates reported having a transformative learning (TL) experience while 8 candidates reported that the course enhanced their existing perspectives and knowledge even if they did not report a transformed perspective. The TL experience was determined using a Learning Activities Survey (LAS, King, 2009) that asked teacher candidates to report on a Likert Scale (1–5) if the course changed their beliefs or assumptions on any topic and to provide an explanation of the change. While a score of 4 (agree) or 5 (strongly agree) on a Likert Scale was interpreted as strong belief of transformative learning experience, a score of 3 or less prompted the research team to evaluate the reflections to determine if a TL experience existed. These candidates also reported becoming “more educated” about bilingual education or gaining “lot of more insights” into the course topics, indicating varying degrees of learning. The researchers interpreted the candidates' comments as suggesting that some candidates might have already built a strong background prior to this course, possibly due to the teacher education program's inclusion of multiple courses with a focus on social justice and equity related to diverse learner populations.

From this participant pool, 37 teacher candidates reported having a transformative learning (TL) experience while 8 candidates reported their existing beliefs being supported or enhanced through the course. The TL experience was determined using a Learning Activities Survey (LAS, King, 2009) that

asked teacher candidates to report on a Likert Scale (1–5) if the course changed their beliefs or assumptions on any topic and to provide an explanation of the change. While a score of 4 (agree) or 5 (strongly agree) on a Likert Scale was interpreted as strong belief of transformative learning experience, a score of 3 or less prompted the research team to evaluate the reflections to determine if a TL experience existed.

Upon reviewing the survey responses, 8 out of 45 teacher candidates reported that the course enhanced their existing perspectives and knowledge even if they did not report a transformed perspective. These candidates reported becoming “more educated” about bilingual education or gaining “lot of more insights” into the course topics, indicating varying degrees of learning. We interpreted their comments as suggesting that while the authors provided insightful discussions and materials, some candidates might have built a strong background prior to this course, possibly due to the teacher education program’s inclusion of multiple courses with a focus on social justice and equity related to diverse learner populations.

Ninety-five percent of the candidates ( $N = 37$ ) were female, reflecting a consistent demographic trend in teacher education programs. Fifty-one percent of the candidates self-identified themselves as White, 33 percent as Hispanic, 8 percent as Indigenous, and 8 percent as either Black or Asian. All but three candidates spent 5–6 semesters on a college campus. All four researchers used the same course syllabus, assignments, and learning activities except for one or two activities.

### ***The Research Context***

Historically, Arizona’s language policies have propagated certain myths related to SLA and EL education, which may be summarized as:

- (1) that young children learn English better than older students; (2) that immersion in an all English setting would help students acquire the language more rapidly; and (3) that such an approach would teach them enough English in one year to be academically successful in the mainstream classroom. (Combs, 2012, p. 63)

State law regulating EL education was not based on SLA research, but rather on the belief that language services provided for ELs should not exceed one year and that ELs could acquire English rapidly in Structured English Immersion (SEI). The SEI model implemented in Arizona required learners to be taught in English-only with a focus on intensive vocabulary and grammar instruction. SEI implementation in schools resulted in academic struggles experienced by ELs to learn content area subjects (See Combs & Nicholas (2012) for a discussion of the effect of the model on Indigenous students).

As a response to the states’ policies, universities and community colleges created courses to instruct teacher candidates on the theories of first and SLA (e.g., Innatist, Social Interactionist, Behaviorist, and Cognitivist Theories) as well as pedagogies of teaching linguistically diverse populations (Combs, 2012). A recent shift in Arizona’s language policies provided some flexibility in the SEI model, adopting a research-based approach to understanding ELs’ academic language needs (Arizona Department of Education [ADE], 2019).<sup>1</sup> The new model not only acknowledged the complexities of language varieties ELs encounter in school subjects, but also emphasized EL and content area teachers’ shared responsibilities in EL education.

### ***Data Collection and Analysis***

All teacher candidates were given an initial reflection survey in the first week of a 16-week course that asked them to provide demographic information such as semesters spent on campus, gender, race/ethnicity as well as information about prior interactions with EL populations, EL pedagogical practices in schools, state/federal policies, and teachers’ and schools’ obligations toward ELs. The reflections in this survey were particularly helpful for authors to familiarize themselves with pre-service learners’ backgrounds, initial perspectives, and learning needs.



A mid-semester survey was administered that asked candidates to reflect on their learning and changes in their perspectives on the course topics and EL populations. The initial course survey facilitated the writing of the mid-semester reflections since students referred to their initial responses to discuss how their knowledge and perspectives might have started changing. The LAS survey, which contained both survey questions and open-ended reflection questions, was administered at the end of the semester (see [Appendix](#)). This survey and reflections helped identify whether teacher candidates had “a perspective transformation in relation to their educational experience; and if so, determining what learning activities have contributed to it” (King, 2009, p. 14).

Candidates consented to an invitation to participate in the study and a follow-up interview at the conclusion of the course. While the authors aimed to reach a larger number of participants for better representation of teacher candidate experiences, three interviewees responded to our interview requests. The team reached out to the teacher candidates to recruit more interviewees. However, the teacher candidates’ student teaching commitments and ongoing coursework likely impacted their availability. While the authors are aware of this particular limitation, they believe that the interviews assisted in better understanding transformative learning experiences reported in the reflections (RQ1) and pedagogical activities contributing to teacher candidates’ learning and perspective shifts (RQ2). For instance, the authors reviewed the teacher candidates’ reflection data prior to the interviews and requested them to elaborate on specific learning experiences and perspective shifts reported in those reflections.

In the LAS survey, the teacher candidates were requested to self-identify as bilingual or monolingual after learning more about different types of bilingualism and SLA processes in the course. Half of the candidates self-reported as bilingual ( $N = 19$ ) while the rest self-reported as monolinguals ( $N = 18$ ). Bilingual candidates grew up in households speaking a language other than English, such as Spanish, Black language,<sup>2</sup> an Indigenous or Asian language. The research team was curious whether the bilingual and the monolingual pre-service groups differed with regard to their transformative learning experiences. To identify a relationship between their language status and the LAS survey responses, a two-tailed chi-square statistical test was conducted.

The qualitative data (written reflections and interviews) were initially de-identified for complete anonymity and a unique code was created for each candidate. Saldaña’s coding procedure (2021) was determined as a suitable process, which the authors reviewed and discussed with examples prior to coding. The transformative learning theory and our research questions guided our analysis to seek instances of learning, critical reflections, and perspective shifts in the data even though the authors did not adopt a preexisting coding scheme. First, the qualitative data was analyzed for codes (e.g., discussions, language exploration, conversations with instructor, SLA myth, collaborative presentations). These codes were interpreted and category labels were created that represented the patterns of the codes (e.g., source of transformation). This bottom-up process was not based on any pre-made code book. However, the team discussed important aspects of the data related to the theoretical framework (e.g., transformative learning, perspectives, frames) and focused their attention on the relevant aspects of the data. For example, in tandem with the theoretical framework and purpose of the study, the team looked for statements that indicated perspective shifts and learning activities that learners specifically mentioned. From different categories determined based on codes (e.g., transformative learning, source of transformation, attitudes, disorienting dilemmas), three themes were identified (see Results section). For instance, the candidates initially considered bilingualism as perfection in two languages. The team followed this step-by-step procedure to analyze each data source (e.g., initial, mid-semester, final open-ended survey responses, interviews) separately and discussed their codes during their weekly meetings. Based on the themes, assertions related to the data were collaboratively determined.

## Findings

Teacher candidates’ learning reflections were grouped into three themes to highlight their perspective shifts and the impact of the course on their language awareness: (1) misconceptions about SLA, (2)

bilingualism as perfection, and (2) language ideologies and policies. First, candidates' transformative learning experiences are discussed by comparing their initial perspectives to the end-of-the-course perspectives. Next, the quantitative findings are introduced. Finally, we discuss prominent learning activities that contributed to transformative learning.

## **Research Question 1. Transformative Learning Experiences**

### ***Initial Perspectives and Prior Experiences***

Based on the qualitative data from the initial reflection survey, most candidates (59.4%) attending the linguistics classes had some experience with ELs, including acquaintances or friendships in school or their own experiences growing up as bilinguals. One candidate, for instance, stated, "Growing up, I formed friendships with English learners at school. My two best friends speak Cantonese and were learning English from a young age." The rest of the candidates who grew up in White communities expressed few interactions with ELs or indicated they had no EL friends.

The questions about EL education, schools' obligations, and language policies in the same reflection survey indicated that a majority of the candidates (91.8%) had no specific knowledge of local, state, or federal policies regulating EL education in public schools. Only a few candidates reported some knowledge of policies in Arizona or in the states where they grew up. As to the obligations of teachers and schools, most of the candidates (86.4%) frequently mentioned providing resources to learn English and treating ELs and their families with respect, which showed the incipient stage of their understanding of education for diverse learner populations. One candidate specifically stated, "Schools and districts should try to teach English, but allow for their first language to be spoken when needed." In a different question in this initial survey, the candidates were asked to explain how their experiences and background shaped their perspectives. The candidates shared three major sources for their perspectives on the ELs and teachers' or school's obligations: growing up in a family that spoke a language other than English, hearing from an English-learning friend, and personal respect for the ELs.

Overall, teacher candidates' understanding of schools' obligations, limited interactions with ELs, and limited awareness of educational policies suggested that they still needed to develop knowledge of language policies and EL education practices.

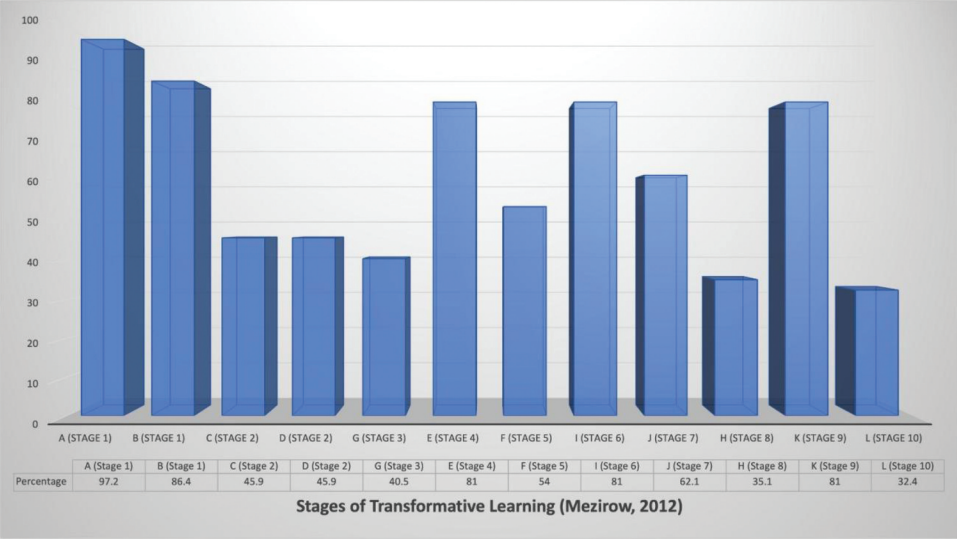
### ***Transformative Learning at the End of the Course***

In the LAS survey and interviews, the candidates reported if the course influenced their beliefs, attitudes, or assumptions about the varied linguistics concepts (e.g., standard vs. nonstandard language), language learning processes, and EL education. Of all the candidates, 82% (37/45) reported such a change in their perspectives. Based on a scale of 1–5 (1=strongly disagree, 5=strongly agree), 13 (29%) reported a strong agreement (5) and 22 (49%) reported an agreement (4). The responses from the candidates who picked a score of 1–3 were qualitatively reviewed again and based on their comments, two more candidates were considered to have experienced a change in their perspectives. The perspective shifts associated with transformative learning in this candidate pool are related to misconceptions about SLA, bilingualism as perfection in two languages, and language ideologies and policies disregarding the research evidence.

Another question in the LAS survey asked the candidates to elaborate on the processes of experiencing the change, linking learner experiences to Mezirow's (2012) ten precursors to transformative learning. The question items and the precursor stages, provided in [Appendix](#), made it possible to see the most and least frequently experienced steps of transformative learning. [Figure 1](#) provides a visual representation of the responses and the corresponding TL stages. For instance, Item A corresponds to Stage #1, i.e., questioning one's thoughts or actions.

More than 97 percent of candidates (97.2%) experienced a situation that caused them to question the way they thought or acted about course topics (Stage 1). More than 86 percent of the candidates also reported questioning their beliefs about the educational roles of teachers in schools (Stage 1). The process of learning a second language was a common topic mentioned in the candidates' responses.





**Figure 1.** Teacher candidates’ responses to learning activities survey.

For instance, one teacher candidate said, “After reading and learning about how people actually acquire an L2, I had to step back and reframe my beliefs about how students learn.” More than 80% of the candidates’ responses indicated an experience relating to some other stages of transformative learning such as noticing their peers’ questioning their beliefs (Stage 4), trying out new roles aligned with their new thoughts (Stage 6), and thinking about others’ reactions to the new insights they learned (Stage 9). The rest of the survey items received relatively fewer responses. The materials and activities in this course likely stimulated teacher candidates’ interest in the topics, so more than 60% of the candidates gathered more information about their new learning (Stage 7). The least picked item related to taking an action based on their new insights (Stage 10). As the first course in the ESL endorsement program, introductory linguistics allowed learners to study concepts and research on SLA, but seldom set any expectations for action. However, some teacher candidates mentioned their intentions to take an action in the future such as “incorporating their learning into teaching,” “advocating for linguistic justice,” and “making classrooms less problematic for ELs.”

**Misconceptions about second language acquisition.** This theme refers to the processes of teacher candidates questioning and changing their existing thoughts on SLA, specifically that a second language (L2) can be learned quickly and effortlessly. They initially explored this perspective as a folk myth in the SLA textbook (Brown & Larson-Hall, 2012) and critiqued why this myth reflects neither the findings from SLA research nor the real learning experiences of ELs in classrooms. Candidates explored multiple concepts related to SLA (e.g., input, interaction, bilingualism, noticing) and the amount of time needed to acquire academic and social language proficiency in English (Cummins, 1981). At the end of the course, teacher candidates expressed the shift in their understanding of SLA:

An example of my changes in beliefs are from the Second Language Acquisition Myths. Specifically, the fact that students can learn a language in under a year. [T]his is a myth and children learn languages around 2–4 years.

I used to think that children could learn languages quickly compared to adults. As teachers and adults, we should stop expecting that a child will retain a language quickly because learning in a formal setting takes longer.

Similar assumptions about the SLA process related to the ratio of language acquisition time between children and adults. Like previous research reported (Busch, 2010), these candidates initially believed

that young learners could “pick up” an L2 quickly. Such assumptions may affect teachers’ expectations of young learners, so the second candidate raised this as a matter of teacher awareness. Teacher candidates also took a deeper look at adults’ reasons for learning an L2, adults’ cognitive capacities, and social expectations attached to adult L2 acquisition. For example, adults utilize their first language literacy and cognitive strategies (e.g., retaining vocabulary) actively to progress in SLA while young learners are still developing and testing those strategies for language learning. Such perspectives grounded in SLA research assisted in addressing the candidates’ initial beliefs.

***Bilingualism as perfection in two languages.*** In this course, many candidates also thought of bilingualism as a binary concept that defined a bilingual as someone equally proficient in two languages. This understanding of bilingualism reflected a deficit perspective of EL populations since it does not acknowledge ELs’ linguistic repertoires or developing language proficiencies. However, by reading research on bilingualism and the varied sociocultural contexts for learning an L2, the candidates taking the linguistics course started to view bilingualism differently. One candidate expanded her understanding:

The [issue] I found most interesting was that there is no perfect or true bilingual. This was interesting to me because I’ve always believed a bilingual was one who both spoke and understood a second language fluently. However, that is not the case. There are different types of bilinguals depending on the input, interaction, and output they received.

Teacher candidates realized that the input that L2 learners receive in one language may vary considerably and impact their language proficiency levels in different language domains (e.g., writing, speaking). Therefore, teacher candidates better understood that perfection in language use is not a realistic expectation in school settings and social life. Additionally, many teacher candidates stressed the importance of encouraging home language development to prevent language loss.

One of the transformative impacts of the course became clear when bilingual candidates challenged previously held perceptions of themselves as unskilled or flawed speakers of another language. About one third of the candidates consisted of learners of Mexican or other Latinx heritage. As we interacted with these candidates throughout the course, we often heard them defining themselves as less proficient in their home language. Some indicated they could comprehend the heritage language (e.g., Spanish), but could no longer speak it fluently. This course enabled them to explore their own past learning experiences and reflect on similar assumptions they had formed related to bilinguals. Most importantly, the research on bilingualism that they read in the course affirmed that they were legitimate bilinguals with different language development histories. The following statement from a bilingual teacher candidate illustrates the influence the course on her:

This course has changed my perspective of what speaking a second language is. Now I understand that even if you are not able to speak the language perfectly or “the right way,” you are still able to speak the language. I used to believe that just because I was not able to speak Spanish like my Spanish teachers or like my mom, I wouldn’t consider myself able to speak a second language. Now I believe that how I speak Spanish is my own version and just because I do not know how to speak it perfectly, I am still able to communicate, making myself bilingual.

Developing a nuanced understanding of language development in such forms is critical for teacher candidates since they are likely to encounter ELs in the U.S. public schools who might benefit from strength-based perspectives on language repertoires and teachers’ support to build their first language literacy along with English language.

***Language ideologies and policies.*** The teacher candidates’ learning experiences also extended to language ideologies about standard vs. nonstandard language constructs (Anzaldúa, 2012; Baker-Bell, 2020; Lippi-Green, 2011), social vs. academic language (Faltis, 2013), and the structure and history of Black language (Baker-Bell, 2020). As part of the linguistic justice focus in the course, for example, the candidates explored debates around socially constructed “standard languages” and how different varieties of English may be socially undervalued compared to White Mainstream English. The rule-governed grammatical structure of Black language was reviewed using prominent

grammatical examples (e.g., subject-verb agreements, plurals) and sample teaching activities. Class discussions centered on attitudes toward Black language users and introduced a descriptive approach to understand the Black language like any other language. In an interview on this topic, one candidate shared her self-questioning process:

I learned a lot when reading Anti-Black language. It opened my mind more and made me think about the way I speak to others. I think that [anti-Black racism topic] really gave me something to think about. Or maybe I did back then, as a student, thought that it was just poor language, but I didn't understand that it was so ingrained in culture and with the connection to slavery [...] and how we tend to view White Mainstream English [...] as being the standard for how people should speak [...]

These examples illustrate some candidates' lack of knowledge, stereotypes, or negative assumptions about the Black language as "poor English," a perspective that began to shift in the course.

This course also impacted the way that teacher candidates considered state policy mandates on public education. Examining SLA processes, schooling experiences of ELs, and later the laws organizing language education, candidates began to view the multidimensionality of EL education. In the initial reflection survey, most candidates noted that they did not bring any specific knowledge of educational policies related to ESL teaching. However, at the end of the course, the candidates had developed an awareness of educational policies related to the history of Arizona's English-only teaching practices. In the course, learners were asked to critique the implications of this law for teachers and ELs. In the final reflection, one learner noted:

I just remember, like reading the policies and how it basically says that students can and should acquire English in a year and then reading about the second language learning [research] that it actually takes something like four to seven years for students to acquire, particularly academic language. I think our policies need to be revised. [...]

As this example shows, addressing the discrepancies between the policies and research evidence can help teacher candidates critically reflect on how research should inform educational policies related to language education. Another learner summed up her thoughts by advocating for ELs:

This course also made me realize how unfair some of the United States' and Arizona's education policies are. This course made me want to help ELL students have a voice in policies, because they do not have one now.

***Quantitative results and candidates transformative learning processes.*** The statistical comparison of bilingual and monolingual candidate groups in the two-tailed chi-square test revealed no statistically significant differences or relationships between candidates' responses to the survey items (A-L) and their language status ( $p > .05$ ), possibly due to the small sample size (Table 1). In other words, monolingual and bilingual learner groups did not differ from each other significantly regarding the processes of transformation.

Bilingual teacher candidates bring invaluable experiences to college classrooms such as language development experiences in the school and family, and possibly language shift in a predominantly English-speaking society. However, our interpretation of the statistical finding is that bilingual candidates also bring to college classrooms certain beliefs and assumptions on the topics such as SLA, bilingualism, language ideologies, home languages, or Black Language speakers. As such, the bilingual candidates in this study also experienced a change in their perspectives similar to their monolingual peers. The statement of one bilingual student confirms this shift clearly:

Another topic that I found interesting were the myths. In this section, I noticed how many misconceptions about language I believed. I thought it was ironic, considering that I am an English learner myself. However, I think it is crucial to debunk these myths because I will teach all kinds of students in the future, including English learners.

While recognizing her bilingual identity, this teacher candidate understands the value of demystifying the myths related to language learning and addressing her own assumptions on language development. Perspectives and experiences that bilingual candidates bring to college courses may also function as a dissonance contributing to peers' transformation as the following example from a reflection shows:

**Table 1.** Two-Tailed Chi-Square Test Results for LAS Survey ( $N = 37$ ).

Survey Items related to Perspective Transformation	Test Results
Item A (Critiquing one's actions)	$\chi^2 (1) = 6.31, p = 1.00$
Item B (Critiquing the roles of educators)	$\chi^2 (1) = 1.12, p = 1.00$
Item C (Disagreeing with one's actions/beliefs)	$\chi^2 (1) = 0.68, p = .408$
Item D (Agreeing with one's actions/beliefs)	$\chi^2 (1) = 0.21, p = .641$
Item E (Noticing others critiquing themselves)	$\chi^2 (1) = 0.37, p = .540$
Item F (Thinking of acting differently)	$\chi^2 (1) = 0.23, p = .624$
Item G (Feelings uncomfortable about common teacher beliefs)	$\chi^2 (1) = 0.06, p = .812$
Item H (Trying out new roles)	$\chi^2 (1) = 2.63, p = 1.00$
Item I (Figuring out ways to adopt new ways of thinking)	$\chi^2 (1) = 1.12, p = 1.00$
Item J (Gathering more information about topics)	$\chi^2 (1) = 0.03, p = .850$
Item K (Thinking about others' reactions to new beliefs)	$\chi^2 (1) = 1.02, p = .312$
Item L (Taking action and adopting new ways of thinking)	$\chi^2 (1) = 1.77, p = .182$

I came into this course not really knowing what the field of linguistics entailed and came out with an entirely different view ... I have gained a better understanding of language hierarchies, teaching English learners, and becoming a social justice educator in terms of language. I was able to hear my peers' perspectives and learn from them as well.

In an interview, one bi-racial candidate who described himself a “white looking” half Mexican half White male also stressed the different treatments that he and his peers received in school due to his appearance and language, benefiting from hearing peer experiences in this class. He said, “During the class, there were different perspectives from people that I’ve never been around, so that was a good experience to hear what they went through with school.”

As reported above, dialogue among a diverse candidate group fosters reflection and brings alternative perspectives to teacher candidates' attention as an important source of dissonance, contributing to perspective shifts (Kiely, 2005; Mezirow, 2012; Taylor, 2007).

### **Research Question 2. Learning Activities Contributing to Transformative Learning**

The LAS survey at the end of the course also asked candidates to list the activities that contributed to their transformative learning experiences (Table 2). The most favored and influential learning activities reported by candidates included collaborative presentations and in-class learning activities (e.g., language exploration activity, 73%). More than half of the candidates mentioned that instructor support, lectures on SLA myths and Black linguistic justice, and reflective discussions contributed to their awareness at varying degrees (62%).

One pattern that we identified in the analysis illustrates how learning activities caused a disorienting dilemma (Cranton, 2016; Kiely, 2005; Mezirow, 2000; Taylor & Cranton, 2012) and how the candidates were prompted to reflect on their prior beliefs about the SLA process. For example, one of the highly rated in-class learning activities was called “language exploration activity” that engaged learners in linguistic fieldwork. Candidates applied their understanding of SLA to a new language by interviewing international multilingual graduate teaching assistants invited to the class. During this activity, learners explored the guests' home language, English learning background, and

**Table 2.** Learning Activities That Influenced Perspective Changes.

Learning Activity	Total Response	Percentage	Learning Activity	Total Response	Percentage
Group Presentations	27	73%	Linguistic Justice	23	62%
In-class Learning Activities	27	73%	Lectures	23	62%
Instructor Support	26	70%	Reflective Discussions	23	62%
SLA Myths	23	62%	Discussion Questions	15	40%

\* One section used weekly review quizzes. \*\* Two sections used Flip and VoiceThread.

Note. This table demonstrates the list of learning activities used in the course and what percent of the candidates considered them influential in a perspective change.

lived experiences in the U.S. The candidates expressed that dialogs with the guests were “eye-opening” and were able to better empathize with ELs’ potential linguistic challenges. A teacher candidate described this learning experience in the interview:

I really enjoyed the language exploration with the international guests. [...] so, the guest I spoke with spoke Swahili [...]. Learning about different phonemes that exist in English, but don’t exist in Swahili and those other tribal languages really helped connect what we had read about how English is difficult, a difficult language to learn.

Additionally, small group discussions in the course created space for learning from peers’ personal stories. Candidates stated that these discussions and debriefings with group members shaped “new ideas” and “perspectives” that were “very helpful.” In their mid-semester reflections, a student expressed the experience this way:

I heavily learned from my fellow classmates and the ideas they shared in discussions. It made me form new ideas and information in ways I never thought I would. Others’ opinions on the material are very helpful...

Collaborative presentations about SLA myths, on the other hand, challenged the groups to demystify a myth for their peers and provide a research-based explanation of SLA. The myth that was most frequently noted in the qualitative data stated that “Children learn languages quickly and easily while adults are ineffective in comparison.” For instance, during the interview, one candidate mentioned the collaborative myth presentations, “I did like using the presentation and kind of being forced to step into the teacher role [in the class] with having to provide an activity with it.” Both the presenting groups and peers in the audience mentioned collaboration for myth dispelling as an influential course activity for transformative learning. Another interviewee said, “[Before this course] I did believe the myth that children are sponges and they can learn language quickly and easily.”

These examples illustrate how working with peers and international guests encouraged teacher candidates to think critically about their existing knowledge and consider alternative perspectives that others may bring to learning situations (Cranton, 2016; Taylor & Snyder, 2012).

## Discussion

Using the framework of perspective transformation has demonstrated the possibilities to better understand teacher candidates’ initial backgrounds and subsequent learning in the linguistics course. The qualitative data from reflections and interviews showed that as the teacher candidates prepared to become linguistically and culturally responsive educators, they experienced major changes in perspectives related to language learning, bilingualism, and EL education. The quantitative data from the LAS survey corroborated the qualitative report by showing the process of teacher candidates’ shifting their perspectives more evidently such as questioning personal beliefs and the roles of ELs’ teachers widely, and then going through other learning phases such as noticing peers’ self-questioning experiences and gathering more information about their new learning. These processes reveal how transformative shifts occur in candidates’ initial frames of references. Particularly, the sociocultural activities like collaborative tasks, reflective discussions, and dialogs with peers and multilingual individuals contributed to perspective shifts. These activities served to provide alternative perspectives regarding EL education and demystify bilingualism and SLA processes.

Prior to the course, many teacher candidates viewed SLA as a rapid and effortless process experienced by school-aged learners. We recognized that many teacher candidates believed ELs “soak up” language “like sponges.” This study provides supportive evidence for teacher candidates’ needs for language awareness (Busch, 2010; Fischer & Lahmann, 2020). Specifically, the candidates developed a more nuanced awareness of language acquisition among young vs. adult learners. Through discussions on research and peers’ experiences, readings, and myth-dispelling assignments, the candidates began to see SLA as an outcome of multiple factors.

A transformative shift in learners’ construal of language was regarding a deficit view of bilingualism and English learners. While initially thinking of bilingualism as perfection in two or more languages,

teacher candidates developed an expanded view of bilingualism as a phenomenon emerging from varied learning contexts (e.g., amount of input in the family). Both monolingual and bilingual teacher candidates questioned their internalized beliefs related to ELs' language development experiences leading to bilingualism. Finally, teacher candidates developed an awareness of Black Language and educational policies impacting classroom teaching. The strength of the TL perspective used in this study is that it highlights the candidates' growth over a long period of time.

This study offers additional insights into teacher candidate groups and course contents. The use of a survey aligned with transformative learning (King, 2009) showed that two different teacher candidate populations (e.g., bilingual or monolingual), regardless of their linguistic status, may begin introductory linguistic courses with unreliable perspectives and similarly question their assumptions and beliefs after building their knowledge of SLA and bilingualism. The current findings provide support for TESOL professional development and other teacher education experiences (e.g., fieldwork) that integrate a transformative learning perspective through reflections and learning myths in order to develop linguistically and culturally responsive teachers (Coppersmith et al., 2019; Lucas & Villegas, 2013; Villegas & Lucas, 2002). Specifically, this study provides the literature with new evidence for perspective transformation in linguistics courses through qualitative and quantitative data.

Transforming internalized beliefs may allow teacher educators to assess the effectiveness of their EL instructional practices. Learning activities aligned with the ten precursors of the transformative learning framework (e.g., self-reflection) and sociocultural perspectives (e.g., collaborative tasks) may lead to change in candidates' attitudes and beliefs (Bartolomé, 2004; Cranton, 2016; Johnson, 2006; Mezirow, 2012) that teacher educators may be interested in exploring. Reflective tasks introduced at different moments in the courses assist in examining existing beliefs considerably.

## Implications

An important implication of the current research relates to the content of ESL endorsement teacher education courses. The findings corroborate the small, but growing body of knowledge demonstrating the potential impacts of ESL endorsement courses on teacher candidates' perspective shifts (Coppersmith et al., 2019). The findings demonstrated the benefits of exploring SLA and contexts of learning that influence ELs' language development. The candidates reported that the discussions related to SLA myths as well as the roles of linguistic constructs (e.g., input, interaction, output) on bilingualism provided valuable insights to become more responsive teachers and advocates for ELs. Our experiences also suggest that teacher candidates often expressed their inaccurate understandings of language learning initially, but gradually developed more insightful perspectives on working with ELs.

The findings yielded the following instructional practices for ESL endorsement courses for preparing linguistically and culturally responsive teachers: (1) enriching the curriculum with what we call "folk theories" related to language development and critically analyzing how they are not grounded in research; (2) engaging teacher candidates in informal interactions with multilingual individuals; and (3) integrating reflective discussions and collaborative tasks throughout the curriculum. For example, the myth of perfection in multiple languages was dispelled through intensive study of SLA and sociolinguistic principles, and language variation research in the current course. Centering the courses on dialogue about linguistic diversity helped apply linguistic knowledge to a new learning situation as in the example of language exploration activity with multilingual graduate students. Asking the teacher candidates to reflect on the course topics at multiple moments also allowed them and us to capture teacher professional growth more explicitly.

## Conclusion

Designing courses to track teacher candidates' perspective shifts through reflective tasks is a useful method to assess learning and developing teacher self-efficacy (Gorkski & Dalton, 2020; Sugimoto et al., 2017; Villegas et al., 2018) as well as address candidates' inaccurate understandings of language issues. We have realized that a transformative lens helped us become more intentional about teacher



candidates' learning and synchronize our efforts to become better instructors and researchers. A transformative learning framework is also a useful tool for reflecting on teacher candidates' learning in multiple moments and finding evidence for learning through changing perspectives.

In higher education contexts where linguistic status may present learner differences, future studies may yield additional insights into the specific learning experiences of bilingual and monolingual populations. We are aware that the teacher education field may benefit from deeper examination of learning with larger data sets including interviews with more candidates. Future studies may also consider using recordings of actual classroom discussions to capture learner experiences more comprehensively. While the initial results from the current study are not generalizable to other higher education contexts, an examination of transformative learning through stages of learning and sociocultural activities provide meaningful insights into college courses (Cranton, 2016; Stuckey et al., 2013).

## Notes

1. As of this writing, the newly elected superintendent of public instruction in the state has initiated efforts to restore the original restrictive model of English grammar and vocabulary curriculum and prohibit access to dual language programs for English learners until they are reclassified as English proficient.
2. We adopted Baker-Bell's (2020) definition of Black language. She argues that language should be described through race to understand how language and power are challenged. Black language is a language of "its own right that includes features of West African Languages" (p. 3).

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## Notes on contributors

**Ali Yaylali** is an Assistant Professor in the Department of Teaching, Learning, and Educational Leadership, Eastern Kentucky University. His research interests include multilingual adolescent writing, critical teacher education, disciplinary literacies, GenAI and writing education, and graduate mentoring.

**Yousra Abourehab** is an Assistant Professor in Teaching, Learning, and Sociocultural Studies at the University of Arizona. Her research interests include multilingualism, global education, language planning policy, and Arabic teaching and learning.

**Juanita J. Sandoval** is a PhD candidate in the Department of Teaching, Learning, and Sociocultural Studies at the University of Arizona. Her research interests include critical pedagogy, migration studies, border studies and preservice teacher preparation.

**Mary Carol Combs** is a Professor in the Department of Teaching, Learning, and Sociocultural Studies, University of Arizona. Her research interests include critical pedagogy, language planning and policy, immigration policy and education, sociocultural theory, sheltered content instruction and teacher preparation for refugee, immigrant, and citizen English-learning students.

## Author Contributions

**Ali Yaylali:** Conceptualization, Methodology, Investigation, Formal Analysis, Software, Writing- Original draft preparation, Supervision, Writing- Reviewing and Editing. **Yousra Abourehab:** Conceptualization, Methodology, Writing-Original draft preparation, Data curation, Formal Analysis, Software, Writing- Reviewing and Editing. **Juanita J. Sandoval:** Conceptualization, Methodology, and Formal Analysis. **Mary Carol Combs:** Conceptualization, Methodology, Investigation, Formal Analysis, Writing- Reviewing and Editing, Supervision.

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## Appendix

### Learning Activities Survey Items (King, 2009) & Corresponding Stages of Mezirow’s Transformative Learning

Question 1. Reflecting on your learning experiences in the Linguistics for Teachers course, check off any statements that may apply.

Item #	Learner Statements
A	I had an experience that caused me to question the way I normally think or act ( <b>Stage 1. Disorienting dilemma</b> ). <b>Examples:</b> <i>A story that a classmate shared about her home language made me question the role of schools in the development of bilingualism.</i>
B	I had an experience that caused me to question my ideas about the educational roles of teachers (i.e. how a teacher should teach diverse student populations; <b>Stage 1. Disorienting dilemma</b> ).
C	As I questioned my ideas, I realized I no longer agreed with some of my actions and previous beliefs related to language learning and teaching diverse student populations ( <b>Stage 2. Self-examination of beliefs and feelings</b> ).
D	Or instead, as I questioned my ideas, I realized I still agreed with some of my actions and previous beliefs related to teaching diverse student populations ( <b>Stage 2. Self-examination of beliefs and feelings</b> ).
E	I realized that other people also questioned their actions, beliefs, or ideas about learning English and teaching diverse student populations ( <b>Stage 4. Recognizing others’ examination of their own beliefs and feelings</b> ).
F	I thought about acting in a different way from my usual actions and beliefs or how I see my role as an educator ( <b>Stage 5. Exploring options for new roles, relationships, and actions</b> ).
G	I felt uncomfortable with commonplace actions or beliefs that teachers bring to the teaching profession related to diverse populations and teaching them ( <b>Stage 3. A critical assessment of assumptions</b> ).
H	I tried out new roles so that I would become more comfortable or confident about my emerging beliefs and actions. <b>Example:</b> I volunteered to work with an English learner in the classroom because I will be teaching in a diverse classroom ( <b>Stage 8. Trying new roles</b> ).
I	I tried to figure out a way to adopt these new ways of thinking or actions as a teacher ( <b>Stage 6. Planning a course of action</b> ). <b>Example:</b> I discussed my thoughts with classmates or the teacher during the class and strengthened them.
J	I gathered more information that I needed to adopt these new ways of thinking or acting ( <b>Stage 7. Gathering new information and skills to accomplish actions</b> ). <b>Example:</b> I watched a video or read an article about language learning or English learners to further my understanding.
K	I began to think about the reactions of and feedback from others with regard to my new insights ( <b>Stage 9. Building self-confidence and -efficacy in the new roles</b> ). <b>Example:</b> I received positive feedback from a peer or teacher, which strengthened my new thoughts.

(Continued)

Item #	Learner Statements
L	I took action and adopted these new ways of thinking or acting ( <b>Stage 10. Reintegrating into life with adopted perspectives</b> ). <b>Examples:</b> I participated in a professional development activity about English learners. I actively shared my new thoughts in other classes. OR, I purchased a book about teaching ELs.
M	I don't identify with any of the statements above.