Pedagogical Translanguaging in Content Areas: Exploring Preservice Teachers’ Lesson Plans for Emergent Bilinguals

Marwa Elshafie * and Jie Zhang

Department of Curriculum and Instruction, College of Education, University of Houston, Houston, TX 77004, USA; jzhang72@central.uh.edu
* Correspondence: melshafi@central.uh.edu

Abstract: The increasing linguistic and cultural diversity in K-12 schools necessitates preparing preservice teachers [PSTs] to address the unique needs of Emergent Bilinguals [EBs]. This study examined elementary preservice teachers’ (PSTs) lesson plans in English Language Arts, social studies, math, and science, focusing on integrating pedagogical translanguaging strategies. The research questions were the following: (1) What translanguaging practices are evident in PSTs’ lesson plans? (2) How do PSTs integrate these practices into their instructional planning for EBs? Fifty-six PSTs enrolled in a second language methodology course at a large urban research university participated in this study. This course, taken in their senior year or during student teaching, aimed to equip PSTs with skills for delivering linguistically and culturally appropriate instructions and assessments for EBs. For the final assignment, 56 lesson plans were analyzed using deductive and inductive coding methods with the Dedoose 4.2 software. The findings reveal that while PSTs effectively identified key vocabulary and used multimodal resources to support EBs, they need more training in leveraging EBs’ home languages, strategic grouping, multilingual collaboration, and translanguaging assessments in their instructional planning.

Keywords: translanguaging; emergent bilinguals; preservice teachers; instructional planning

1. Introduction

With the fast-growing multilingual student population in U.S. public schools, it is pivotal to prepare teachers to work with students from diverse cultural and linguistic backgrounds. However, teachers or preservice teachers generally feel less prepared to effectively teach emergent bilinguals (EBs) [1,2]. Deficit views of EBs are prevalent in teachers who position EBs and newcomers, in particular, as disadvantaged compared to their English monolingual peers. Translanguaging, as both a theoretical lens and a pedagogical approach, has promise in preparing asset-oriented teachers who can work effectively with emergent bilinguals [3]. In the current study, we adopted translanguaging as a guiding theory and pedagogy in a second language acquisition methodology coursework in a teacher education program.

Despite the growing interest in translanguaging as a theory and pedagogy among in-service teachers [4–6], to date, little research has investigated how preservice teachers make sense of translanguaging and adopt translanguaging practices in teaching and learning. In the sections below, we will first review the translanguaging theory and pedagogy and teachers’ language ideology and perceptions of translanguaging, and then we will discuss translanguaging in teacher education and, finally, how translanguaging is a promising venue for language and content integration.

1.1. Translanguaging Theory and Pedagogy

As a theoretical lens, translanguaging offers a dynamic view of bilingualism, challenging traditionally held monolingual-based approaches to bilingualism. Furthermore,
translanguaging is a transformative approach to disrupting linguistic hierarchies and breaking artificial boundaries created in schools [7]. Translanguaging has the “potential to transform structural inequalities perpetuated by schools that sort students as learners [or not] based on race, class, and language differences” [8] (p. 556). As a pedagogical approach, translanguaging affirms and leverages emergent bilingual learners’ full linguistic repertoire for teaching and learning rather than treating languages as separate, bounded entities [3].

García et al. (2017) [9] identified three strands of translanguaging pedagogy: stance, design, and shifts. First, teachers who take a translanguaging stance affirm bi-/multilingualism as a resource and honor and encourage students to use their diverse language practices or deploy their full linguistic repertoires. Second, teachers who practice translanguaging pedagogy design and plan their instruction in ways that leverage their students’ communicative repertoires. Translanguaging classrooms feature multilingual collaborative work [e.g., reading/writing partners and multilingual research] using a variety of multimodal and multilingual texts and resources such as technology tools (e.g., Google Translate, apps, videos, and Internet resources) and incorporating translanguaging strategies to build vocabulary and background knowledge, such as multilingual word walls, cognates, or preview–view–review [10]. The last strand, translanguaging shifts, is moment-by-moment decision making in the classroom that is responsive to students’ language needs and content understanding.

1.2. Preservice Teachers’ Language Ideologies and Translanguaging

Despite its promise, the translanguaging pedagogy is rarely incorporated in teacher education programs and can be challenging to implement because of the predominant assimilationist and deficit views of non-white students [11]. Furthermore, teachers’ commonly held views about EBs may be exacerbated by their prevailing monologic language ideologies, that is, emphasis on the clarity, appropriateness, and formality of language, as well as other approaches valuing the standardization of the English language. Another commonly held view is that translanguaging only works for bilingual teachers in bilingual settings but not for monolingual teachers whose cultural and language backgrounds do not match their students. Considering that most emergent bilinguals are placed in mainstream classrooms, it is important to empirically test whether the use of translanguaging pedagogy in linguistically and culturally diverse yet English-medium classrooms promotes content and language learning. By leveraging students’ translanguaging, teachers can also encourage the development of students’ multilingual and multicultural identities, form valuable socio-emotional bonds with students, disrupt inequalities, and challenge language hierarchies [12,13]. Our previous study showed that preservice teachers generally had conflicts between seeing students’ home languages as a problem and a resource [14]. The current study aims to see whether PSTs can take up translanguaging pedagogy in lesson planning across content areas after taking an ESL methodology course with an emphasis on translanguaging.

1.3. Translanguaging in Teacher Education

Among the few studies focusing on translanguaging with preservice teachers [15–19], research attention has been largely paid to teacher candidates in TESOL and bilingual teacher education programs. For instance, Deroo et al. (2020) and Flores and Aneja (2017) [15,16] explored how preservice ESL teachers in TESOL programs interpreted and engaged in translanguaging pedagogy in teacher education classes. Musanti and Rodríguez (2017) [19] studied academic writing of Latina bilingual teacher candidates. Herrera (2023) [17] examined how preservice teachers in a teacher education course made sense of culturally and linguistically sustaining pedagogy (CLSP) and the ways they engaged with translanguaging practices in student teaching contexts. Tian and Zhang-Wu (2023) [18] examined how preservice content area teachers made sense of translanguaging and how they infused translanguaging pedagogy in content area lesson planning in a graduate-level teacher education course. The findings suggest that participating teachers developed a
dynamic view of bilingualism and student sense-making practices and employed some translanguaging strategies (e.g., strategic grouping based on students’ home languages, providing translations, and allowing students to use home languages) in their content area lesson plans in mathematics, science, social studies, and ELA, spanning from elementary to high school grades. Despite the promising results, most previous studies have used case studies, and the sample is limited to a few PSTs. By working with a larger sample of PSTs, the current study aims to capture their pedagogical design capacity to employ a wider range of translanguaging strategies in different content areas after a one-semester ESL methodology course.

1.4. Content and Language Integration through Translanguaging

In light of the multilingual turn in language education and practice turn in content area education, researchers have proposed the synergy between translanguaging pedagogy and disciplinary practices [20]. Translanguaging pedagogy can provide a fruitful direction toward a critical integration of content and language learning in multilingual settings [21]. Such a synergy is motivated by at least two theoretical reasons. First, translanguaging aims to activate multilingual resources and expand language and content meaning making. Second, incorporating translanguaging can leverage multimodality to support disciplinary learning in content areas.

In the case of science education, reform initiatives such as Next Generation Science Standards [22] have switched from instruction that focuses on discrete facts to instruction that focuses on students making sense of phenomena and designing solutions to problems the way scientists and engineers do in their work [23]. These shifts towards disciplinary sense-making practices must occur in settings where language learning is understood as a complex process focusing on communication and comprehension in sense-making activities. Translanguaging aligns well with science and engineering practices (SEPs) because engaging in SEPs provides opportunities for students to use their full linguistic repertoires, including multiple languages and multimodalities [e.g., visuals and gestures], to learn and increase understanding [24]. Empirical evidence suggests that emergent bilinguals exhibit productive disciplinary engagement when teachers create translanguaging spaces in which students are allowed to use their familiar communicative practices and multimodalities [e.g., speech, text, gestures, visuals, sounds, etc.] to support science learning [25].

In the current study, we aim to work with preservice teachers to find ways to value and build on the range of students’ language and cultural resources and connect disciplinary practices to translanguaging practices so that students are empowered to use their full communicative repertoires to make sense of content.

2. Materials and Methods

2.1. Participants

Fifty-six preservice teachers (PSTs) were enrolled in two sections of an asynchronous second language methodology course required for a bachelor’s degree in elementary education in a large urban research university. This study was part of a larger research study that explored PSTs’ language ideologies by analyzing interviews, language autobiographies, and vlogs. PSTs were pursuing undergraduate teaching degrees, with the majority preparing to become early childhood through grade 6 (EC-6) generalists and some pursuing middle-grade (4–8) teaching certificates. Students took the course in their senior year during their student teaching stage.

2.2. Second Language Methodology Course

The primary objective of this 16-week course was to equip these prospective students with the skills necessary to deliver linguistically and culturally appropriate classroom instruction, create effective learning opportunities, and conduct appropriate assessments for EBs in grades K to 12. The course also aimed to heighten PSTs’ awareness of the linguistic needs and strengths of EBs in mainstream classrooms. The curriculum introduced
PSTs to the cognitive, academic, and linguistic domains of EBs’ education, as well as the sociocultural characteristics of EBs. It covered differentiated instruction, the integration of instructional strategies across content areas, EBs’ program models, and second language development and acquisition theories.

Towards the end of the course, there was a dedicated two-week unit focused on translanguaging pedagogy. This unit delved into translanguaging strategies, such as using home languages as a resource, multilingual word walls, teaching cognates, and using Internet resources like Google Translate inside the classrooms. Students explored how these strategies could be effectively employed to enhance the development of EBs and facilitate content area learning in culturally and linguistically sustaining ways. Participants had the opportunity to watch videos of classes where these translanguaging strategies were employed and engaged in discussions and reflections on implementing these methods in their own classrooms. As a final course assignment, students were asked to adapt a prior lesson plan developed by infusing translanguaging strategies to address EBs’ needs and resources. In the current study, we analyzed 56 lesson plans across four content areas: mathematics \((N = 17)\), science \((N = 16)\), English Language Arts (ELA, \(N = 13\)), and history and social studies \((N = 10)\).

2.3. Data Collection

The researchers [the first author is the instructor] collected and analyzed fifty-six lesson plans submitted by PSTs as their final assignment in a second language methodology course. The PSTs were asked to develop a lesson plan [using the same university template] for a one-hour class in their content area. Drawing on their course training, they were expected to incorporate translanguaging strategies for their EBs. Grading was carried out based on the integration and effectiveness of these strategies. As the lesson plans were their final assignments before graduation, these PSTs were expected to have learned the essential skills necessary for planning effective lessons across content areas.

Considered part of instructional artifacts, lesson plans can be used as indicators of the PSTs’ instructional design capacities [26,27]. Several studies used lesson plan analysis as a data source to evaluate PSTs’ plans to accommodate diverse students’ academic needs [28,29]. While lesson delivery is not the same as lesson planning, instruction begins in the lesson planning stage. In constructing a lesson plan, a teacher must make a variety of decisions encompassing structure, strategies, pacing, grouping, scaffolding tools, and other aspects of how the lesson is to be conducted and the educational goals to be achieved [28]. Thus, this study’s analysis of the PSTs’ lesson plans could show how they integrate pedagogical translanguaging practices into their instructional planning for EBs.

2.4. Data Analysis

In qualitative research, data analysis involves organizing, reducing, and representing data [30]. It is an inductive and ongoing process, starting from raw data to codes. Building on the work of Baecher et al. (2014) and Brown and Endo (2017) [28,31] and using the Dedoose 4.2 software, fifty-six lesson plans were analyzed for their content to investigate the translanguaging strategies used by the PSTs. First, the lesson plans were coded both inductively and deductively. While the inductive codes came from the data, the deductive codes were adapted from the literature on translanguaging [9,32]. After an initial set of codes were generated, they were grouped into themes and subthemes. Finally, the researchers refined and merged some themes/subthemes into single coherent themes. See Table 1 for the themes and codes.
Table 1. Codebook.

<table>
<thead>
<tr>
<th>Theme</th>
<th>Codes</th>
<th>Definition</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multimodality</td>
<td>Visuals (pictures, drawings, maps) Slides</td>
<td>This refers to incorporating diverse sensory and technological elements to engage students and foster content understanding.</td>
<td>“Teacher will use body gestures to indicate how energy flows to benefit visual and ELL learners” (science lesson).</td>
</tr>
<tr>
<td></td>
<td>Videos/YouTube Subtitles Sounds Realia Gestures</td>
<td></td>
<td>“I will create an anchor chart and define the terms survive, perish, flood, and drought along with pictures and definitions on the whiteboard describing each word. Creating and posting these visual clues for these vocabulary terms will serve as a review for the students and have a reference if they forget the meaning of the word” (science lesson).</td>
</tr>
<tr>
<td>Vocabulary development</td>
<td>Multilingual word wall Cognate chart Graphic organizers Bilingual dictionary Translating key vocabulary</td>
<td>The focus is on enhancing students’ vocabulary by utilizing various tools.</td>
<td></td>
</tr>
<tr>
<td>Strategic grouping</td>
<td>By home languages By English proficiency By default (no explicit discussion of grouping criteria)</td>
<td>This involves the intentional organization of students into groups based on different criteria to optimize collaborative learning and support each student’s needs.</td>
<td>“Pair up students in a way that the students who understand the activity can help them” (science lesson).</td>
</tr>
<tr>
<td>Teacher-directed translanguaging</td>
<td>Teacher’s scaffolding in students’ languages</td>
<td>This refers to the teacher’s support and clarification in students’ home languages to facilitate understanding and comprehension of the lesson content.</td>
<td>“Teacher will clarify and scaffold using EBs home language throughout the lesson” (science).</td>
</tr>
<tr>
<td>Multilingual collaborative work</td>
<td>Collaboration Reading partners</td>
<td>This refers to encouraging students to work collaboratively in multilingual settings that promote effective communication and understanding using various languages.</td>
<td>“EB students can explain in their L1 if needed, then their classmates will help in translation” (math lesson).</td>
</tr>
<tr>
<td>Translanguaging assessment</td>
<td>Using students’ home languages in assessments</td>
<td>The incorporation of students’ various languages in the assessment process, allowing them to demonstrate their understanding.</td>
<td>“The students can write the poem in their first language if they are still incorporating forms of comparison—either to objects, people, or things and using descriptive language” (ELA lesson).</td>
</tr>
</tbody>
</table>

3. Results

Table 2 presents the percentages of each translanguaging strategy among all strategy codes for the entire lesson plans and lesson plans in each content area. Among 56 lessons, multimodality occurred most often (62%), followed by vocabulary development (16%), teacher-directed translanguaging (9%), and strategic grouping (8%). Other strategies, such as multilingual collaborative work and translanguaging assessment, occurred the least (less than 2%). Only about 2% of lesson plans did not include any accommodation strategies for EBs. The translanguaging strategy used in each consent area followed a similar pattern. For example, among 13 ELA lessons, multimodality appeared most frequently (57%), followed by vocabulary development (17%) and teacher-directed translanguaging (14%); other strate-
gies such as grouping, multilingual collaborative work, and translinguaging assessment occurred least often (3%). Similarly, for 17 math and 16 science lesson plans, multimodality appeared most frequently, followed by vocabulary development, strategic grouping, and teacher-directed translinguaging. For ten history and social studies lesson plans, multimodality accounted for 72% of all coded translinguaging strategies, followed by strategic grouping (13%), teacher-directed translinguaging (9%), and vocabulary development (6%).

Table 2. Percentages of translinguaging strategies used in PSTs’ lesson plans.

<table>
<thead>
<tr>
<th>Content Area</th>
<th>ELA</th>
<th>Math</th>
<th>Science</th>
<th>History and Social Studies</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Lesson Plans</td>
<td>13</td>
<td>17</td>
<td>16</td>
<td>10</td>
<td>56</td>
</tr>
<tr>
<td>Multimodality</td>
<td>57%</td>
<td>61%</td>
<td>61%</td>
<td>72%</td>
<td>62%</td>
</tr>
<tr>
<td>Strategic Grouping</td>
<td>3%</td>
<td>12%</td>
<td>6%</td>
<td>13%</td>
<td>8%</td>
</tr>
<tr>
<td>Teacher-Directed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Translinguaging</td>
<td>14%</td>
<td>10%</td>
<td>6%</td>
<td>9%</td>
<td></td>
</tr>
<tr>
<td>Vocabulary Development</td>
<td>17%</td>
<td>14%</td>
<td>24%</td>
<td>6%</td>
<td>16%</td>
</tr>
<tr>
<td>Multilingual Collaborative Work</td>
<td>3%</td>
<td>2%</td>
<td>0%</td>
<td>0%</td>
<td>1%</td>
</tr>
<tr>
<td>Translinguaging Assessment</td>
<td>3%</td>
<td>0%</td>
<td>2%</td>
<td>0%</td>
<td>1%</td>
</tr>
<tr>
<td>No Accommodation</td>
<td>3%</td>
<td>2%</td>
<td>2%</td>
<td>0%</td>
<td>2%</td>
</tr>
</tbody>
</table>

Table 3 presents the frequency breakdown of each code of translinguaging strategy by content area. The sections below will explain each area of translinguaging strategies in detail.

Table 3. Frequencies of translinguaging strategy subcodes by content area.

<table>
<thead>
<tr>
<th>Theme</th>
<th>Code</th>
<th>ELA</th>
<th>Math</th>
<th>Science</th>
<th>History and Social Studies</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multimodality</td>
<td>Realia</td>
<td>0</td>
<td>8</td>
<td>5</td>
<td>1</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>Slides</td>
<td>2</td>
<td>1</td>
<td>6</td>
<td>4</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>Sounds</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Subtitles</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Videos/YouTube</td>
<td>6</td>
<td>8</td>
<td>8</td>
<td>7</td>
<td>29</td>
</tr>
<tr>
<td></td>
<td>Visuals</td>
<td>11</td>
<td>13</td>
<td>11</td>
<td>7</td>
<td>42</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>20</td>
<td>31</td>
<td>31</td>
<td>23</td>
<td>105</td>
</tr>
<tr>
<td>Vocabulary development</td>
<td>Bilingual dictionary</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Cognate chart</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Graphic organizers</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Multilingual word wall</td>
<td>0</td>
<td>2</td>
<td>3</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Translating key vocabulary</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>0</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>6</td>
<td>7</td>
<td>12</td>
<td>2</td>
<td>27</td>
</tr>
<tr>
<td>Strategic grouping</td>
<td>By home languages</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>By English proficiency</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>By default</td>
<td>0</td>
<td>4</td>
<td>3</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>1</td>
<td>6</td>
<td>3</td>
<td>4</td>
<td>14</td>
</tr>
<tr>
<td>Teacher-directed translinguaging</td>
<td>Technology</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Translating key vocabulary</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>3</td>
<td>16</td>
</tr>
<tr>
<td>Translanguaging assessment</td>
<td>Translanguaging assessment</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Multilingual collaborative work</td>
<td>Reading partners</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>No accommodation</td>
<td>No accommodation</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>3</td>
</tr>
</tbody>
</table>

Note. Frequency means the number of lessons coded for each translinguaging subcode.
3.1. Translanguaging through Multimodality

Multimodality, the most frequently used translanguaging strategy, emphasizes using various sensory and technological elements to foster understanding. As shown in Table 3, more than half of the lesson plans used multimodality strategies such as visuals (42 out of 56 lessons, 75%) and videos/YouTube (29, 52%), about a quarter of the lesson plans used realia (14, 25%) and slides (13, 23%), and less than ten percent of the lesson plans used subtitles (4, 7%) and sounds (3, 5%). The math and science lessons contained the highest number of multimodality strategies, with 31 codes in each subject area. The ELA and history and social studies lesson plans incorporated fewer multimodality elements, with 20 and 23 codes, respectively.

An example of the use of realia was evident in a fourth-grade science lesson plan describing the earth’s renewable and nonrenewable sources of energy. The teacher wrote, “Students will be given a cup of oil, a cup of water, a small plant, and a yellow ball to represent the sun.” Another example appeared in a sixth-grade science lesson plan about unicellular and multicellular organisms. The teacher used 3D models of a prokaryotic cell, animal cell, and plant cell, enabling the students to “look at, manipulate, and use”.

The use of multimodality through technology was evident in a first-grade math lesson when the teacher used a BrainPOP video to discuss telling time. Another BrainPOP video was also used in a fifth-grade social studies lesson to explain the causes of the Civil War. The use of visuals was also evident in several lesson plans. For example, in a first-grade science lesson, the teacher mentioned creating “a chart by drawing a picture of a plant that will include roots, a stem, a flower, and leaves in the drawing”. Similarly, in a fourth-grade science lesson, the PST used visuals [drawings] to illustrate the difference between conductors and insulators (Figure 1).

![Figure 1. Conductors and insulators.](image)

3.2. Translanguaging through Vocabulary Development

The second highest translanguaging strategy evident in the PSTs’ lesson plans was vocabulary development. These strategies included providing translating key vocabulary (9 lessons out of 56, 16%), bilingual dictionaries (6 lessons, 11%), using cognate charts (5 lessons, 9%), utilizing multilingual word walls (5 lessons, 9%), and employing graphic organizers (2 lessons, 4%) (see Table 3). Notably, the science lessons showed a strong emphasis on vocabulary development, followed by math and ELA. Translanguaging through vocabulary development was not evident in the history or social studies lesson plans.

Several PSTs ensured that their students had access to bilingual dictionaries. In a fifth-grade science lesson on environments, the teacher stated, “Every table has Spanish-English dictionaries provided for students to utilize as needed”. Similarly, in a fourth-grade math
lesson, the teacher utilized a word wall to reinforce key vocabulary: “Vocabulary will be posted on the word wall as well as on a poster with visual representations”. The PSTs also ensured to translate key vocabulary to students’ home languages to help their EBs. In a second-grade ESL lesson focusing on character descriptions, the PST noted, “annotating will involve translating words from English to Spanish”.

3.3. Teacher-Directed Translanguaging

In teacher-directed translanguaging, the teachers were more actively involved in guiding the learners [33]. It was less evident that the PSTs’ lesson plans incorporated technology use (8 out of 56 lessons, 14%) and translating key vocabulary (8 lessons, 14%) (see Table 3). The science and social studies and history lesson plans exhibited slightly less teacher-directed translanguaging than the ELA and math lesson plans.

In a sixth-grade ELA lesson about English poems, the PST ensured the use of technology and translation: “The student can use Google Translate to help them translate words that they do not know; this will enhance their vocabulary as they create phrases and lines in their poems”. Similarly, in a seventh-grade history lesson about segregation in the United States, the PST made good use of technology to assist EBs in the class, stating, “I will make Google Translate available on their phone or computer so that they may put out their best effort on their assignment”. She also said, “On my smart board, I’ll also have text-to-speech so children may read in their native language. In addition, I intend to give material in Pashto and Spanish for our Afghan people”. In the same lesson, she translated the key vocabulary into her students’ home languages (see Figure 2).

![Figure 2. Translated vocabulary words.](image)

3.4. Translanguaging through Strategic Grouping, Multilingual Collaborative Work, and Assessment

With regard to strategic grouping, the PSTs often employed various grouping methods based on their students’ English proficiency (four lessons, 7%), home language (two lessons, 4%), and, by default, without explicit grouping criteria (eight lessons, 14%). Among these, the math lessons exhibited the most frequent use of strategic grouping strategies, with 6 out of 17 lesson plans emphasizing small-group activities and cooperative learning. History and social studies and science followed closely, with four and three lesson plans incorporating strategic grouping techniques, respectively. However, the history and social studies lessons showed a lower utilization of strategic grouping, with only two instances.

In several lesson plans, the PSTs implemented flexible grouping strategies where students were grouped based on specific tasks or activities for the lesson. The students were also grouped by home languages into two lesson plans (history and math). For example, in a third-grade math class, the teacher ensured that the students had bilingual partners to facilitate understanding during partner talk, as all instruction must be conducted
in English for math and science. Similarly, in history, the teacher also grouped the EBs by their home languages.

In an eighth-grade social studies class about industrial revolutions in the United States, the EBs were grouped by their English proficiency levels: “ELL students will be provided opportunities for discussion with partners of similar cooperative learning English proficiency and inclusion in whole-class discussions”. Similarly, in a first-grade ELA lesson, the teacher mentioned “Pairs/partners based on language strengths”.

Very few lesson plans (only two) employed translanguaging through multilingual collaborative work and formative assessments. An example of multilingual collaborative work was evident in a fourth-grade ELA lesson analyzing plot elements in short stories, where the PST ensured that “students will partner up and collaborate to finish filling out their graphic organizer using their home languages and English”. Regarding the use of translanguaging in assessments, in a first-grade science lesson plan about force, motion, and energy, the teacher provided the EBs with the option to draw pictures instead of writing to complete the assignment.

4. Discussion

Despite the brief duration of exposure to translanguaging pedagogy, the current findings suggest that the PSTs began to make sense of it and adopt various strategies in their lesson plans. The most frequent translanguaging practice evident in the lesson plans was the use of multimodality in the form of visuals, videos, and realia. This finding aligns with earlier research indicating that multimodality is an effective translanguaging strategy, even for novice monolingual teachers [34,35]. The other three often-used translanguaging strategies were teacher-directed translanguaging through technology use, providing translations and vocabulary development through translanguaging, and strategic grouping. The PSTs were very successful in implementing the translanguaging vocabulary development strategies. One reason for this success might be the repetition and exposure to the strategy throughout the course’s duration. In addition to the unit on translanguaging, the vocabulary development strategies were emphasized throughout the semester, and there were topics on teaching literacy development in the four skills [listening, speaking, reading, and writing] and sheltered instruction in the content areas.

The math and science lesson plans showed the highest incorporation of multimodality strategies, which may be due to the multimodal nature of math and science learning. It could also be that the science and math courses incorporated more fluid language practices. Faculty who teach math and science methods courses have relevant expertise in translanguaging and language/literacy integration in content areas. This finding is consistent with earlier studies highlighting mentors’ critical roles in PSTs’ education. Several researchers have stressed the importance of mentorship in producing quality teachers [36,37] and introducing positive change in the framework of educational programs [38]. In fact, [39] highlighted that teachers trained using monolingual models are frequently unwilling or unable to utilize and incorporate bilingualism in their classrooms. PSTs are more likely to adopt teaching methods, models, and strategies when they receive extensive training during their education [40,41].

The use of home languages as a resource was not evident in the lesson plans. These findings echo those of previous findings that many teachers are either reluctant or unable to make use of their students’ home languages as educational resources [40,42–45], perhaps due to the prevalent monolingual language ideologies and restrictive language policies that have long dominated public education in the United States.

Multilingual collaborative work and using translanguaging in formative assessment were rare in the lesson plans, which reflect the PSTs’ lack of preparedness to incorporate flexible group work and fluid language practices and tensions between English-only standardized assessments and alternative formative assessments, which allow students to use their full linguistic repertoires to express content understanding. Using translanguaging in assessment was mentioned in two lesson plans. This finding also aligns with earlier
research indicating that changing ideologies to accept and implant equity-oriented pedagogical practices takes time. It also requires repeated exposure to the equity concepts and ample opportunities for PSTs to reflect on the critical role of language in their own lives and in students’ lives [14,46]. Infusing translanguaging in formative assessment requires coordinating district expectations and providing curriculum and PSTs’ creativity in lesson plans. Transforming teacher education towards more equity-oriented practices requires meaningful and coherent course experiences and teacher placement for PSTs to gain agency to advocate for EBs. In order for preservice teachers to develop asset-orientated beliefs and practices to adequately teach EBs, they not only need to study multilingualism and second language learning in their coursework but also be exposed to a multilingual school environment and receive support to work with EBs in their fieldwork [47], preferably in dual-language settings [2,41,48,49].

The current study has several limitations which will inform future directions. First, the current lesson plans are the culmination of methods courses and adaptation efforts in the ESL methodology course during the PSTs’ senior year. Future studies may compare original lesson plans with the adapted lesson plans to examine changes, strengths, and areas of growth. The current study only analyzed the lesson plans, and including other data sources such as language autobiography, interviews, discussion boards, and teacher placement observations will present a more coherent picture of PSTs’ language ideology, pedagogical understanding, and practices. Although lesson plans can serve as a proximity indicator of PSTs’ pedagogical practice capacities, it will be interesting to follow up on their first-year teaching experience and determine whether there is any gap between what the participants described about their teaching in lesson plans and their actual practices.

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