Exploring Secondary Teachers' Willingness to Differentiate Instruction for ELLs

SHOSHANNAH HERNANDEZ
Huntington University

ABSTRACT

The growing English language learner (ELL) population is expanding in the United States from concentrated, urban areas to smaller, rural school districts in which mainstream content teachers provide most instruction for these students (DelliCarpini & Alonso, 2014). However, many mainstream content teachers at the secondary level have had little or no training in teaching ELLs and do not currently provide the differentiated instruction necessary for ELLs to be successful (Musanti & Pence, 2010; Rubinstein-Avila & Lee, 2014). This mixed-methods study explored teachers in some of these rural districts, their willingness to differentiate instruction (WTD), and factors that potentially correlate with it by collecting and analyzing data from a questionnaire, teacher interviews, and classroom observations.

This study focused on the three factors of teacher identity, responsibility, and self-efficacy as well as training in teaching English Learners (EL), their relationship to each other, and their potential correlation with a teacher's willingness to differentiate instruction for ELLs in a mainstream classroom. Results indicate that identity and responsibility correlate most with WTD and should be explored more intentionally in teacher education to prepare teachers to differentiate instruction for ELLs adequately. However, a teacher's self-efficacy to teach ELLs and several other emergent factors, such as time and an awareness of ELL needs, were also relevant to WTD and will be discussed

in detail. Results could help lead to changes in secondary teacher education and professional development.

Keywords: ELL, mainstream, teacher identity, responsibility, self-efficacy, professional development, willingness to differentiate instruction

Introduction

As the English language learner (ELL) population continues to grow in the U.S. (National Center for Education Statistics, 2019; Thomas & Collier, 2002; USDOE, 2013), the expectation of language teaching no longer solely lies with those who have English teaching degrees or licenses, but with every classroom teacher (Clegg, 1996). Mainstream content teachers are confronted with issues, possibly for the first time, related to their identity as a language teacher, their responsibility in developing students' English language proficiency, and their self-efficacy in teaching ELLs.

While the ELL population has long been established in urban areas, in the early 2000s, rural areas with traditionally homogenous populations also began to see rapid ELL population growth (Hansen-Thomas, Richins, Kakker, & Okeyo, 2016; Newman, Samimy, & Romstedt, 2010). Northeastern Indiana is one such region. Despite rapid growth, many rural school districts like those in Indiana have limited access to bilingual teachers and "have limited funds to finance bilingual materials and such necessities as full-time English as a second language teachers" (Hansen-Thomas et al., 2016, p. 309).

There is also a growing achievement gap between ELLs and students who speak English as their first language (Calderon, Slavin, and Sanchez, 2011). ELLs nationwide, and also specifically in Indiana (Morita-Mullaney, 2014), are underachieving their classmates and not

meeting state testing goals for academic achievement and improvement (Calderon et al., 2011; NAEP, 2011; Tanenbaum et al., 2012). This achievement gap tends to widen as students progress into secondary grade levels (USDOE, 2013), leading to higher dropout rates among language minority students (Rubinstein-Avila & Lee, 2014).

This gap compels one to consider the instruction and support ELLs receive in U.S. schools as they spend about 80% of their day in a mainstream classroom (DelliCarpini & Alonso, 2014; Reeves, 2006; Tanenbaum et al., 2012). Research has demonstrated a need for intentional language instruction and differentiated content instruction in mainstream classrooms (de Jong & Harper, 2005; Gibbons, 2015; Lyster, 2017; Mathis, 2017). Despite this evidenced need for differentiated instruction and the legal mandates to provide it, the details of how and when that instruction is provided are up to states and school districts, leaving some discrepancy in how ELLs are supported in mainstream classrooms (IDOE EL Guidebook, August 2019). The resulting achievement gap makes it clear that the academic needs of ELLs are not being met.

Review of Literature

Many studies conclude that success in content-based language learning (CBLL) is due to careful implementation and adaptation of instructional methods (Lyster, 2017). Swain (1988) goes on to explain that, based on the outcomes of these studies, content teaching on its own is not necessarily good language teaching, but instead, needs to be supplemented to maximize target language teaching. de Jong and Harper (2005) also point out that it is not sufficient to merely extend good teaching practices for native English speakers to ELLs. While CBLL is sometimes referred to as the "two for one" approach in which language is acquired merely by being surrounded by the language, language acquisition does not happen through osmosis (Lyster, 2017, p. 612; Mathis, 2017).

Research that examines the mainstream teacher's attempts to meet ELLs' needs through this adapted, differentiated instruction consistently lists three key beliefs as relevant: teacher identity, responsibility, and self-efficacy. Tan (2011) found that content teachers perceived themselves only as content teachers, not as language teachers. However, Cammarata and Tedick (2012) recognized that a teacher's ability to allow their identity to evolve and change with their students' needs is one of five key dimensions of successfully teaching ELLs in a content-based, English immersion setting.

Just as some teachers do not identify with teaching ELLs or language, some may not feel responsible for ELLs' English language development (ELD). Yoon (2008) found that teachers who did not identify as a language teacher or as a teacher of all students did not take responsibility for the ELLs in their classroom. Instead, these teachers felt the English as a Second Language (ESL) teachers were responsible for the ELLs' instruction and learning. Other research confirms this finding that content teachers, particularly at the secondary level, feel it is the ESL teacher's responsibility to teach English and the content teacher's responsibility to focus on content (Airey, 2012; de Jong & Harper, 2005; DelliCarpini & Alonso, 2014; Fu, 1995; Walker et al., 2004).

Lastly, secondary mainstream teachers also tend to have low self-efficacy, or perception of their own capability and preparation, about teaching ELLs (Hansen-Thomas et al., 2016). Mathis (2017) found that all K-12 teachers in her study reported low self-efficacy in differentiating instruction for ELLs and that secondary teachers had a "harder time being able to differentiate curriculum and instruction for mainstream ELL students" (p. 74). Rubinstein-Avila and Lee (2014) reiterate this point by stating that "secondary teachers feel ill-prepared to scaffold or differentiate instruction to meet these students' language and academic needs" (p. 187).

Currently, the research has brought three factors to the surface but has not yet explored how these beliefs may correlate with classroom practice or a teacher's willingness to differentiate instruction for ELLs. Ardasheva and Brown (2011) confirm this need by explaining that more research is needed to investigate motivational factors among middle school and high school teachers to increase their ELL preparation and improve teacher self-efficacy. Reeves (2006) says that "teacher views on the scope and types of modifications that they are willing to make have remained largely unexamined" (p. 132). And Yoon (2008) calls for more research to "analyze the link between what teachers know and believe about ELLs…and the stance they take toward ELLs in their classrooms" (p. 518). Understanding the connection between these beliefs and teachers' WTD could lead to more useful teacher preparation and development, leading to more effective classroom practice, thus, leading to more successful English language learners.

Research Questions

This study explored the potential factors, namely identity, responsibility, and self-efficacy by addressing the following questions:

1. *What differentiation strategies do secondary-level mainstream teachers report using in their current classrooms?*
2. *What factors correlate with secondary-level, mainstream teachers' willingness to implement differentiation strategies for ELLs?*
3. *Is there any relationship between those factors?*

Methodology

This correlational study explored the experiences of teachers of ELLs in Northeastern Indiana in a mixed-methods design. To answer the three research questions of this study, a mix

of both quantitative and qualitative questionnaire data from a larger sample followed by qualitative data from individual interviews and observations in smaller samples provide the opportunity to corroborate, elaborate, expand, and complement data from three separate data sources (Bannen & O'Connell, 2015; Bazeley, 2012).

The first part of the study utilized survey research in the form of a questionnaire with self-reported data. The assumption with survey research is that "the characteristics, opinions, attitudes, and intended behaviors of a large population can be described and analyzed based on questioning only a fraction of the particular population" (Dörnyei & Csizér, 2012, p. 74). While there were two open-ended responses in the questionnaire, which required some qualitative analysis, the majority of the questionnaire data were quantitative and analyzed quantitatively.

In the second stage of the study, qualitative data were collected, and analysis was both quantitative and qualitative. Interviews with individual teachers were transcribed and analyzed using qualitative data software but were initially reviewed for emergent themes and patterns. The results of the interview analysis were compared to the questionnaire data analysis. Similarly, the notes from the observations were reviewed for patterns, commonalities, and discrepancies to be compared to other analyses.

Setting and Participants

This study took place among northeastern Indiana school districts with growing but small ELL populations where 20% or less of the total student population identified as ELL. The sample of mainstream teachers, grades 6 – 12, came from the 48 school districts, which are members of the Region 8 Education Service Center of Northeast Indiana (R8ESC, n.d.).

The questionnaire was distributed broadly throughout the region targeting secondary-level, mainstream teachers who currently have ELLs in their classes. 79 teachers participated in the questionnaire, which satisfies Dörnyei & Csizér's (2012) rule of thumb for a minimum of 50 participants to ensure that correlational coefficients are significant. The teachers represented a variety of experiences and teaching backgrounds, ranging in experience from less than five years of teaching to more than 20 and also included teachers from every grade at the secondary level, a wide range of numbers of ELLs in their classes, multiple content areas, as well as a variety of ELL training and exposure. Eight teachers from the questionnaire participants from four different schools agreed to participate in individual interviews, and three were observed teaching in their classrooms.

Questionnaire Instrument

The questionnaire items were created or adapted from previous instruments (DelliCarpini & Alonso, 2014; Gandara et al., 2005; Reeves, 2006). To create construct validity in the questionnaire, some items were adapted from other instruments used with teachers to collect similar attitudes and opinions (DelliCarpini & Alonso, 2014; Gandara et al., 2005; Reeves, 2006), while some were developed specifically for this study based on studies relevant to teacher identity (Musanti & Pence, 2010; Yoon, 2008), teacher responsibility (Fu, 1995), self-efficacy (Ardasheva & Brown, 2014), and differentiated instruction for ELLs (Echevarria et al., 2016). See Appendix A for raw questionnaire items.

Data Collection Procedures

Before distributing the questionnaire broadly, it was reviewed by three regional school administrators and piloted with three regional teachers. The revised questionnaire was available

for participants for approximately two months. Eight questionnaire participants then agreed to be interviewed. All teachers were asked to expound upon the questions and themes from the questionnaire. Specifically, each was asked about their experience teaching ELLs, any previous ELL training they had received, their sense of identity, responsibility, and self-efficacy related to teaching ELLs, motivational factors which could relate to their willingness to differentiate instruction, unique challenges of teaching ELLs at the secondary level, and examples of differentiation strategies used in their classes. Finally, three classes in which ELLs were present were also observed. In addition to a checklist of differentiation strategies adapted from the SIOP observation rubric (Appendix B), qualitative notes were taken to include any occurrences deemed relevant by the researcher (Echevarria, Vogt, & Short, 2016).

Data Analysis Procedures

Analyzing questionnaire data.

Quantitative analysis of the questionnaire data began with data clean-up, reverse item rescaling, and descriptive statistics. JASP was then used to analyze the data with inferential statistics. This process included calculating the reliability of the questionnaire as well as calculating the correlation between the four factors under investigation and WTD and the correlation among all independent variables.

Cronbach's alpha (α) was used to measure the internal consistency reliability of the data set. The mean response for the entire dataset was 3.718, with a standard deviation of 0.73. The α-value was .924, which indicates good internal consistency throughout the questionnaire and falls within the confidence intervals of (0.898, 0.946). Thus, the instrument is considered to be reliable (Table 1).

Table 1

Scale Reliability Statistics

	mean	sd	Cronbach's α	95.0% Confidence Interval	
				Lower	Upper
scale	3.718	0.730	0.924	0.898	0.946

Note. Of the observations, 79 were used, 0 were excluded listwise, and 79 were provided.

The mean scores for each question were calculated as well as a mean score for each variable in the study. Each item aligned to one variable being investigated: identity, responsibility, self-efficacy, previous ELL training, and the outcome variable, WTD. Item responses were separated and grouped accordingly in the spreadsheet for further analysis. Frequency charts for each variable were also produced for analysis. JASP was then used to calculate the correlation between variables.

Lastly, the questionnaire data were analyzed qualitatively by comparing the frequency graphs to the quantitative analysis of questionnaire responses allowed for a deeper analysis of the complexities of each variable and possible discrepancies between individual items and the overall variable score. The open-ended responses to the previous ELL training item mentioned above were also reviewed again for any emerging themes.

Analyzing interview data.

The first step of the interview analysis involved what Bazeley (2012) refers to as "quantitizing qualitative data" (p. 821). Each of the eight interviews was transcribed from the recording and reviewed. After transcribing the interviews and reading the transcripts, the transcripts were loaded into QDA Miner for coding and frequency counting. Initial qualitative analysis identified seven emerging themes in addition to identity, responsibility, self-efficacy, and ELL training. All themes were coded in the transcripts.

Several other potential factors came through in the interviews but were mentioned with less frequency and were coded as "other." Factors mentioned in the "other" category includes low teacher morale, class size, a teachers' unwillingness to go above and beyond in the current political climate, support and guidance from the state, and ELLs' tendency to take advantage of or abuse any accommodations provided

These factors, in addition to the four original factors of focus in this study, led to 12 codes in all:

1. Identity

2. Responsibility

3. Self-Efficacy

4. ELL Training

5. Time

6. Teaching Experience

7. Resources and Administrative Support

8. ELL/co-teacher

9. Awareness

10. Belief that Differentiation is not Necessary

11. Building Relationship/Teaching the Whole Child

12. Other

Once the interview transcripts were coded, the frequency of each code was counted. From the frequency count, each occurrence of each category was then reviewed to see if the mention of it was associated with a higher or lower willingness to differentiate. Once the quantitative analysis of the interview data was complete, a summary of the coded data was written. From there, the

summary of the interview data was compared to findings from the questionnaire and integrated into the qualitative analysis.

Analyzing observation data.

Finally, the three classroom observation notes were analyzed to compare differentiation strategies observed with those self-reported by teachers in the questionnaire and interview phases of the study. The checklist was used to quantify the presence of differentiation strategies. Notes were reviewed to identify any additional strategies observed as well as any actions from the teacher that would indicate an identity as a language/ELL teacher, a responsibility for his/her ELLs' ELD, a high or low self-efficacy related to teaching ELLs, reference to any previous ELL training, or a willingness to differentiate instruction for ELLs.
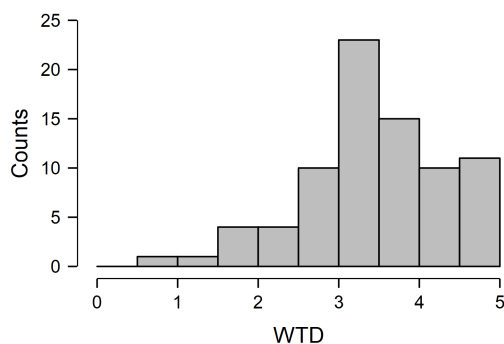
Results

Results from Questionnaire Responses

The descriptive analysis process revealed that the highest mean among the independent variables was teacher identity. Teacher responsibility was next, then self-efficacy. ELL Training, however, had a much lower mean and higher standard deviation. Finally, the mean of WTD is lower than the means of identity, responsibility, and self-efficacy but higher than the mean of previous ELL training. Participants agreed more strongly with statements that indicated that teaching language and language learners was part of their identity, a sense of responsibility for helping ELLs improve their ELD, and a sense of capability in teaching ELLs. However, they agreed less strongly with statements that indicated that they currently differentiate instruction to meet their ELLs' academic and ELD needs.

Table 2

Descriptive Statistics of Variables from Questionnaire Data

	WTD	Identity	Responsibility	Self-Efficacy	ELL Training
Mean	3.454	4.027	3.915	3.737	2.316
Std. Deviation	0.875	0.663	0.666	0.559	0.867
Minimum	0.952	2.286	2.571	2.333	1.000
Maximum	5.000	5.000	5.000	4.778	5.000

Figure 1 demonstrates that the responses associated with WTD show a somewhat normal distribution, with the majority of responses hovering around the middle of the five-point scale. The mean score of 3.454 is consistent with the majority of the responses showing that most participants were neutral in their agreement to statements about differentiating instruction as well as in their reported frequency of use of the ten differentiation practices included. There was more agreement (or reported frequency) than disagreement, but most responses were neutral.
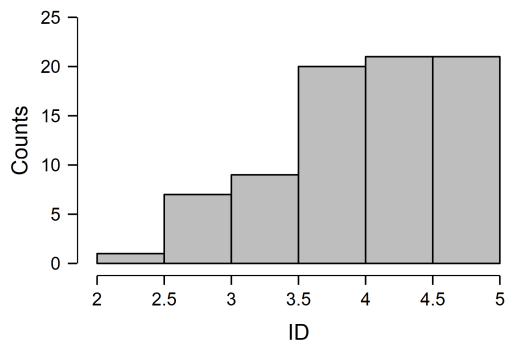
Figure 1

Frequency in Questionnaire Responses - Willingness to Differentiate

The distribution of scores related to identity as a teacher of language and language learners (Figure 2) shows nearly all responses as neutral to strongly agreeing. This result

demonstrates a high self-reported identity of teachers of all students and teachers of language and content.

Figure 2

Frequency - Identity as a Teacher of Language and Language Learners

Looking at responsibility, however, there are two peaks in the distribution (Figure 3). The highest showing strong neutrality, with most responses in the middle of the scale. The other peak shows a high sense of responsibility. So while the sense of responsibility for ELLs and their ELD varies, all respondents report feeling some sense of responsibility.

Figure 3

Frequency in Questionnaire Responses - Responsibility for ELLs' ELD
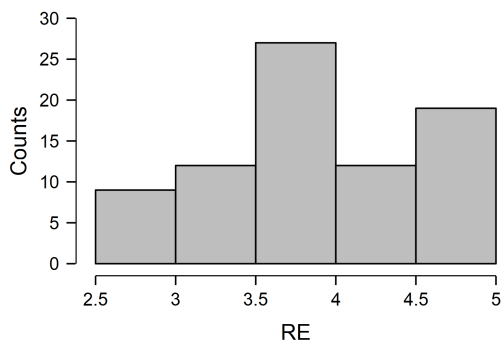
Lastly, the distribution of responses associated with self-efficacy also follows a somewhat normal distribution with mostly neutral to positive responses. Like WTD, this result shows neutrality meaning that participants did not often strongly agree or disagree with a sense of self-efficacy or capability in teaching ELLs.

Figure 4

Frequency in Questionnaire Responses - Self-Efficacy in Teaching ELLs
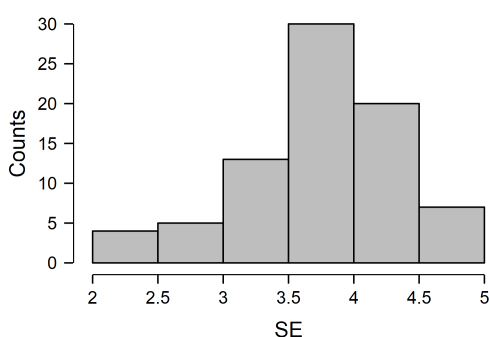
Moving to correlations, JASP was used to calculate the Pearson correlation coefficient to demonstrate the strength of any relationship between the four variables (see Table 3). Oswald and Plonsky's (2010) general rule for interpreting effect sizes says that r = 0.40 is a medium effect and r = 0.60 is a large effect. Both identity and responsibility strongly and positively correlate to WTD. Self-efficacy has a medium, positive correlation, while previous ELL training has a weak but positive correlation to WTD. In looking at the other variables for the third research question, identity and responsibility are strongly correlated, as are identity and self-efficacy. Responsibility and self-efficacy have a medium correlation. Correlations with previous ELL training, while positive, are weak and not all statistically significant.

Table 3

Pearson Correlations

|		WTD	Identity	Responsibility	Self-Efficacy	ELL Training
Identity	Pearson's r	0.609 ***	—			
	p-value	< .001	—			
Responsibility	Pearson's r	0.630 ***	0.737 ***	—		
	p-value	< .001	< .001	—		
Self-Efficacy	Pearson's r	0.501 ***	0.631 ***	0.516 ***	—	
	p-value	< .001	< .001	< .001	—	
ELL Training	Pearson's r	0.375 ***	0.103	0.126	0.257 *	—
	p-value	< .001	0.367	0.270	0.022	—

* $p < .05$, ** $p < .01$, *** $p < .001$

The first of these three items not included in the JASP analysis asked teachers to rank responsibility from most important to least important. When mean scores were calculated for each, the highest mean score was associated with dispersing content knowledge. The next highest was helping students achieve grade-level content, then helping students improve English language proficiency, and finally, correcting students' English language errors. Of the 79 participants, 51 ranked helping students achieve grade-level content as the most important, and 37 ranked dispersing content knowledge as the most important.

The next item not included in the JASP quantitative analysis asked teachers to identify any circumstances which would increase the likelihood of him/her differentiating instruction for ELLs. The top four responses, each selected by more than 65% of the participants, were bilingual resources, more planning time, more ELL training, ELL/Co-teacher. These four were also factors that emerged as relevant in the interview data, discussed later. However, the options related to self-efficacy and responsibility were not highly chosen (see Figure 5).

Figure 5

Which Would Increase the Likelihood of Differentiating for ELLS?
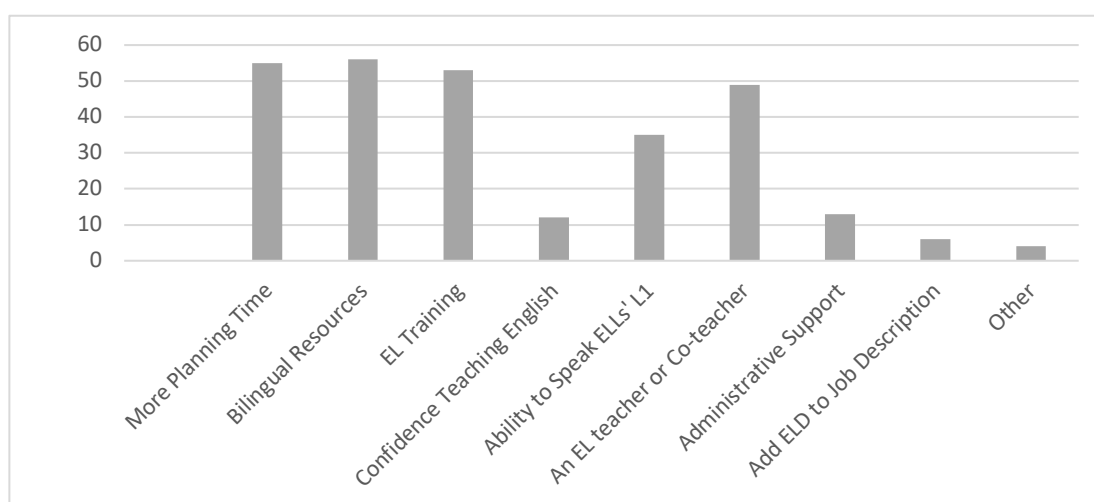
The third item analyzed outside of JASP was related to participants' previous ELL training. 79.7% of the participants indicated that they had participated in some sort of ELL training or coursework in the past. The participants who indicated that they had participated in ELL training were then asked if they found it helpful. 67.2% did and reported that the most useful aspects were quick strategies, practical resources, understanding WIDA, and gaining a new perspective on teaching ELLs. 11.5% did not find the training helpful, and 21.3% found it

somewhat helpful. The least useful aspects listed were a lack of practical strategies, the training not being offered enough, and repetition in content.

Those who had not participated in ELL training were then asked if they would attend a PD session or university course in the future. 75% said they would attend if given the opportunity. 15% said maybe, and 10% said no or that they would only attend if their administration required them. The participants' value of quick and practical strategies confirms what Clair (1995) found in her study of K-12 mainstream classroom teachers. However, contrary to the 51% majority who were resistant to ELL PD in the Walker et al. (2004) study, the participants of this study are largely willing to participate in ELL PD if they feel that it is practical.

The reported differentiation strategies are shown in Figure 6. The three most commonly reported practices with frequency were providing more time for assignments, providing accommodations for testing as listed in the ILP, and providing pictures and visuals while teaching. More than 75% of all participants reported using these three practices with either a 3 or 4 on the scale. All practices were reportedly used by at least some participants, and every participant reported using at least one differentiation practice with at least a 2 on the scale. So, even though only roughly half of the participants indicated that they differentiate, more than half reported using nine out of ten examples of differentiation.

Figure 6

Use of Differentiation Examples Reported in Questionnaire
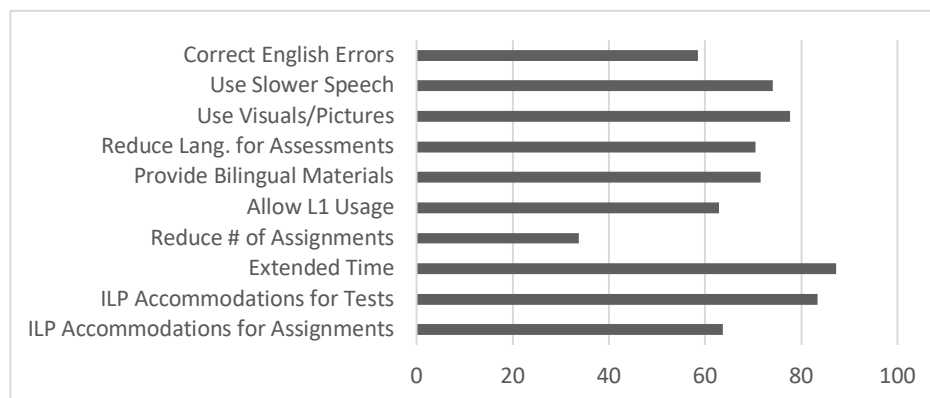
Results from Qualitative Interviews

Following the questionnaire data collection, eight teachers were interviewed individually. Of the eight teachers interviewed, four were middle school teachers, and four were high school teachers. Seven self-reportedly differentiate instruction, and one self-reportedly does not differentiate instruction or assessment because it is not believed to be necessary. Pseudonyms are used to preserve the anonymity of participants. Table 4 shows each teacher's pseudonym, current teaching position, and previous ELL training.

Table 4

Interviewees

| Pseudonym	Current Teaching Position	Previous ELL Training
Amanda	High School Science	Some ELL PD
Jennifer	Middle School English Language Arts	University Coursework
Joanne	Middle School Math	Some ELL PD
Kate	High School Science	Some ELL PD
Marta	High School Spanish	University Coursework
Paul	High School English Language Arts	Some ELL PD
Robin	Middle School English Language Arts	Some ELL PD

| Susanne | Middle School English Language Arts | University Coursework |

Quantitative analysis of interviews.

Of the factors of primary focus, three came through most often in the interviews: identity, responsibility, and ELL training. Self-efficacy was mentioned very little. Awareness of ELLs' proficiency and needs, while not one of the original factors of interest, was the most frequently mentioned factor in the interviews (see Figure 7).

Figure 7

Distribution Plot of Interview Codes
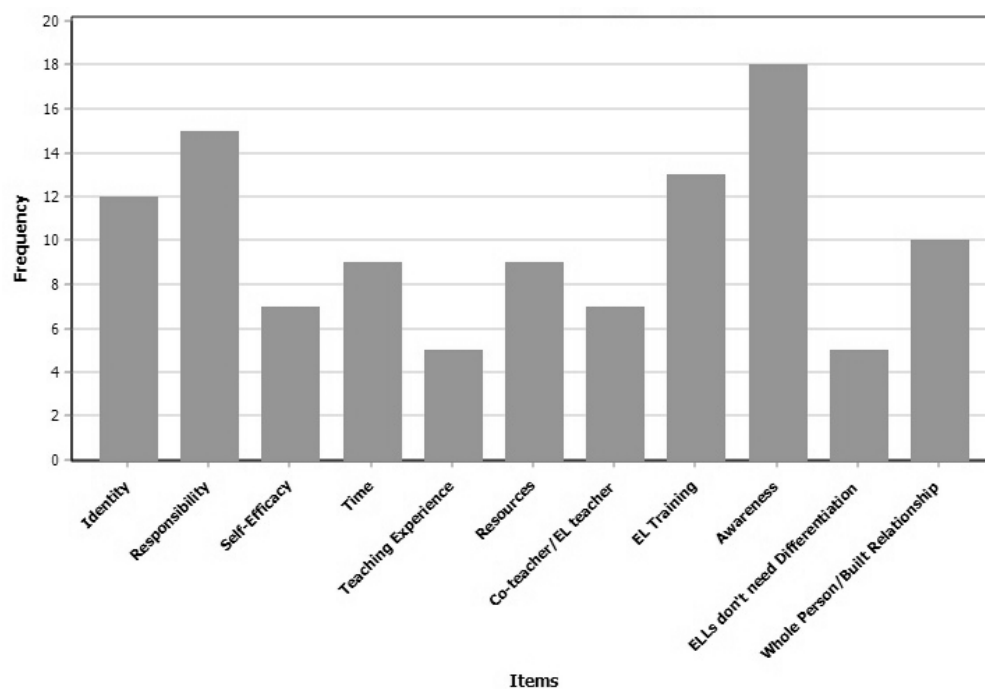
Qualitative analysis of interviews.

Most of those interviewed identify as teachers of both language and content. Several interviewees noted that part of their identity as a teacher and as a professional was teaching all

students and meeting all needs. Robin, a middle school teacher, said, "I can't have students sitting in my classroom not learning" and went on to discuss that meeting ELLs' needs was part of being a professional educator (November 18, 2019).

All eight of the interviewees discussed the fact that secondary teachers generally have a strong sense of identity in being an expert in their content, not necessarily in teaching language. Robin noted that the middle school mindset is different and that there is a lot of pressure for teachers in middle school and high school to make sure students achieve grade-level content. Kate also explained, "At the secondary level, I think all teachers have a priority for their content" (December 5, 2019).

On the other hand, Paul, who self-reportedly does not differentiate, explained that he doesn't see his role any differently no matter who is in his class and doesn't do anything differently. However, in the responses from teachers who differentiate instruction, there is a clear sense that their identity depends on their students in their class and their needs. Joanne said, "We have to think differently for them," reflecting a need to change that secondary mindset that several interviewees mentioned and shift their sense of identity to meet students' needs (November 18, 2019).

Similar to the results with the construct of identity, the seven interviewees who differentiate agreed that English language development is their responsibility. Joanne said, "they [ELLs] are equally my responsibility" (November 18, 2019). Susanne said she would feel responsible if her ELLs' WIDA test scores dropped. Amanda added that she not only felt a responsibility for her ELLs to learn her content but also felt responsible for growth in their English language proficiency. She said her responsibility to them is "a combination of both," and it was just a question of how to balance both.

Teacher Willingness to Differentiate ELL Instruction

Self-efficacy was a topic of lesser frequency in these interviews. Five of the eight interviewees explicitly expressed their confidence and capability in teaching ELLs and attributed that confidence either to their years of teaching experience, experience specifically with ELLs, or ELL training. Jennifer added that she thought her colleagues had the willingness to differentiate, but not self-efficacy, distinguishing the two. She said, "there's more of a willingness than there is maybe knowing or having ability to do that" (November 18, 2019).

Susanne pointed out that she doesn't have any ELL training, but her teaching experience at the elementary level and in the English Language Arts content area gives her a sense of ability and confidence. She said, "I feel confident and it's weird. I don't know if I should" (November 18, 2019). On the other hand, Paul, who self-reportedly does not differentiate and has had minimal ELL training, also expressed confidence and a high sense of capability in teaching ELLs. He explained that he didn't have any concern about teaching ELLs because he's worked with them for more than 15 years. Even though he's never felt the need to differentiate for them, "it's worked out well" (December 4, 2019). So, in these two examples, one sense of self-efficacy is associated with a willingness to differentiate, and the other is not. This discrepancy corresponds with the weak correlation between self-efficacy, and WTD found among questionnaire correlational results.

Discussion of both previous and future ELL training in the interviews was often linked to the most frequent emerging theme of awareness. The reoccurring message was that teachers don't have the training needed to teach ELLs, which leads to a lack of awareness. The lack of awareness includes not knowing who the ELLs are in their classroom, what the WIDA scores or English proficiency levels are, as well as how to meet ELLs' linguistic, academic, and social needs. Susanne explained that WIDA scores are not given to teachers at her school, and there is

no data tracking or checking in on those students. She went on to say, "I bet some teachers don't even know which ones are ELLs." She continued, "if they knew and if there was some sort of guidance in that direction, I'm sure more teachers would [differentiate]" (December 4, 2019).

Of the eight interviewees, three have had university-level coursework in English language teaching and differentiation, and the others all had participated in some sort of ELL professional development, even the interviewee who self-reportedly does not differentiate. Kate explained the training sessions she attended helped her redefine her identity as a teacher of both content and language, and said, "The trainings that I've gone to, that's where I got the notion that English comes first, like I wouldn't have known that if I hadn't gone to the trainings." She went on, however, to explain about her colleagues, "They're just thinking it's a regular student, he just needs everything in Spanish. And that's not the case at all," (December 5, 2019). Susanne even explained that more data, more tracking of her ELLs' progress, and more of a communicated priority from the administration would motivate her to do more than she currently does. She said, "I believe a lot of teachers don't even really think about it" and went on to say, "if a school values it, they probably would have PLCs [professional learning communities], and they will provide resources" (December 4, 2019). When schools don't communicate the importance of ELLs' differing needs and don't provide opportunities for ELL training, the resulting lack of awareness is demotivating. Ultimately, then, the language learners are the ones who are affected. As Kate put it, "…they're gonna miss out on a lot of that support that we give our English speakers because we just don't know" (December 5, 2019).

The last consistent emerging theme in the interviews was the issue of not having time to plan and implement differentiation for ELLs. Five of the eight teachers interviewed specifically mentioned time as a hindrance to differentiation. As Marta noted, "There are only so many hours

in the day, and they [teachers] just have too much on their plate. Maybe if they had time, they would research and figure it out, but they don't have tools at their fingertips." (December 12, 2019).

Results from Classroom Observations

Analyzing the classroom observation notes and checklists for differentiation strategies was the last stage of analysis. Using the checklist adapted from SIOP principles (Echevarria, Vogt, and Short, 2016), each observation received numeric values based on the level of differentiation strategy implementation (see Appendix B). Similar to a scale used in the Short et al. (2012) study on the implementation of differentiation strategies in the classroom, scores indicated high, medium, or low implementation. All three teachers observed were classified as high implementers, which was consistent with their self-reported level of differentiation.

The most frequently observed practices to differentiate for ELLs were using visuals, gestures, or L1 translations to make input comprehensible and utilizing group or pair interaction. The most frequently used strategies which are present in all three data sources are preparation of visuals in handouts, presentations, etc., the use of visuals, gestures, or the ELLs' first language to make input comprehensible during instruction, and the implementation of accommodations listed in the ILP.

Discussion

The first research question asked which differentiation strategies teachers currently report using and was addressed in all three data sources of this study. The most frequently reported differentiation practices reported and observed were extended time for assignments, providing accommodations from the ILP for testing, using visuals, gestures, and L1 translations while

teaching, and utilizing groups or pairs for student-to-student interaction during class. At least some participants reportedly used all ten of the differentiation practices listed in the questionnaire, and all participants reported using at least one. Observations confirmed that the teachers who self-identified as differentiators differentiated at a high level of implementation, and the practices used in class mirrored the frequently reported practices.

The second research question asked which factors may correlate to WTD. Identity and responsibility are most strongly correlated to WTD. All analyses of both questionnaire and interview data confirm the strong correlation and lead to a conclusion that teachers who see themselves as teachers of language as well as content, teachers of language learners as well as all other students, and who feel a sense of responsibility for their ELLs' linguistic development are also willing to differentiate instruction and assessment. This finding confirms what Cammarata and Tedick (2012) found in their study when they concluded that teachers who can embrace roles and responsibilities on both sides of the coin are more likely to differentiate instruction in the content classroom.

The last question sought to explore any relationship among the factors explored in this study. The strongest correlations were among identity and responsibility as well as between identity and self-efficacy. While some overlap was found in teachers' sense of self and their resulting responsibilities, there was also a distinction between responsibility as a duty and responsibility as genuine care that flows from one's sense of self, which could justify further research. With regard to self-efficacy, many teachers' sense of self is defined by areas of expertise and competency. Identity is made up of areas in which the teacher has a high self-efficacy (Britzman, 1991). The teacher also embraces responsibilities associated with that

identity because they believe they can be successful. This point explains why self-efficacy correlated to both identity and responsibility.

Limitations

Any study which includes self-reported data has its limitations, and this study is no different. Teachers' self-reported differentiation techniques, sense of identity, self-efficacy, and responsibility is all subjective and it is noted that many teachers, although the questionnaire could be completed anonymously, may respond in a way that presents them most positively. Additionally, one has to also consider that because participation in this kind of study is voluntary that participants will approach the study with a more favorable attitude than those who choose not to participate.

Aside from these limitations, which would be true of any similar study, one of the limitations unique to this study was enlisting teacher participation in the questionnaire. As most school districts do not allow mass communication directly to teachers from outside sources, the survey had to be distributed through willing administrator contacts and the Region 8 mass communication systems, of which many teachers admittedly opt-out. It is difficult to know the total number of secondary-level content teachers currently teaching ELLs in the region since the ELL population fluctuates regularly and students' schedules also change. ELL populations and ELL teachers of record are numbers that are reported to the state, but teachers with ELLs in their classes are not and, therefore, it is impossible to know what percent of the total population this sample represents.

Conclusion

Results from previous research showed that secondary mainstream content teachers identify solely as content teachers, not as language teachers, do not feel responsible for their ELLs' ELD, have low self-efficacy regarding teaching ELLs, and are somewhat resistant to ELL training. However, this study revealed teachers who largely reported a broad and flexible sense of identity, some responsibility for ELLs, and less resistance to ELL training. While self-efficacy in teaching ELLs was still reportedly low in this study, all teachers reported some use of differentiation strategies, even if rarely, and there were largely positive attitudes about ELL training as well as an openness to future training, especially if it is perceived to be practical by teachers.

From these results, future ELL training, which continues to provide teachers with practical strategies they desire and addresses the factors found to be relevant to a willingness to differentiate, could be effective in improving mainstream classroom practices and closing the achievement gap between ELLs and their classmates. Effective teacher development needs to go beyond quick tips and strategies, however, because this study also showed that a belief that differentiation strategies are necessary doesn't necessarily correlate with a willingness to implement those strategies. Teachers need to have a greater awareness of the interdependence of language and content, the value of differentiated instruction, and its crucial role in ELLs' success. Identity and responsibility need to be addressed specifically in teacher education, and expectations regarding both need to be communicated clearly by the administration so that teachers know the importance of having an identity as a teacher of both language and content and also have a deep sense of responsibility for all students' academic and linguistic development. ELL training, which builds in planning time and collaboration with ELL-licensed teachers and

experts in the field, balances the deeper understanding that is needed with the quick access to tools and resources that teachers need to feel equipped and empowered to meet all of their students' needs.

As a result of this study and others, it is clear that more comprehensive training programs and professional development opportunities need to be created and offered to pre-service and current teachers. In states like Indiana, where small but rapidly growing ELL populations are changing the landscape of education, university teacher education programs need to adapt accordingly. In addition to preparing pre-service teachers with a broader sense of identity and responsibility for their diversifying classrooms, universities with ELL certification programs have the expertise to offer surrounding schools professional development and collaboration. The interview data in this study also suggested a value among mainstream teachers for the ELL teacher as resident experts, and they should be utilized as such. It is partnerships between universities, local school administrations, mainstream teachers, and ELL teachers that are needed to initiate change from within by addressing factors like identity and responsibility and do not simply add another strategy to the teacher job description.

Once universities and school districts decide that closing the ELL achievement gap is a priority and greater partnerships are developed, further research is needed. Implementing changes in teacher education programs and professional development should be followed by research that will measure their effectiveness. This study showed that teachers with more of an identity as a language teacher, more responsibility for their ELLs' ELD, a higher sense of self-efficacy, greater awareness of ELL needs, and an inclination to give the time that is needed to differentiate may also have a greater willingness to differentiate. However, does training that

intends to cultivate all of those things lead to an increase in them? And does that potential increase truly lead to greater WTD? Future research could seek to answer these questions.

Beyond measuring changes in teacher education and professional development, research also needs to explore the effects on classroom practice. The ultimate question will be whether secondary, content teachers who identify as a teacher of both language and content, take responsibility for their students' English language development, and feel capable of teaching all learners will teach more effectively and, in turn, enable English language learners to achieve more consistently at grade level. It is only by equipping those teachers to do so that we will know the answer.

ABOUT THE AUTHOR

Dr. Shoshannah Hernandez is an assistant professor of education and director of the Institute for TESOL Studies at Huntington University. Her research interests include teacher motivation, differentiation, and teacher development.

Inquiries can be directed to Shoshannah Hernandez at shernandez@huntington.edu

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Appendix A

Questionnaire Items

English language learning Training/Coursework

- I have participated in training/professional development about teaching ELLs. Yes No
  - If yes, did you find the training/professional development helpful? Yes No
    - Please explain why this training was helpful or not.
  - If no, would you participate in such training if given the opportunity? Yes No
    - Please explain why you would or wouldn't like training in this area.
- I have an ELL certification/license. Yes No
- I don't have an ELL license, but I've taken at least one college-level ELL class. Yes No
- I hope to get my ELL certification someday. Yes No

Teacher Identity	**Strongly Disagree (1)**	**2**	**3**	**4**	**Strongly Agree (5)**
As a content teacher, I focus on teaching content, not on teaching language.					
Content classes are only for learning content and English should be learned in an ESL class.					
I don't feel comfortable teaching about topics in which I am not an expert.					
I believe that every teacher is a language teacher.					
I see myself as a teacher of content only.					
I see myself as a teacher of both language and content.					
I see myself solely as a teacher of native English speaking students.					
I see myself as an important educator in the lives of my English language learning students.					
Responsibility for Students' Language Development	**Strongly Disagree (1)**	**2**	**3**	**4**	**Strongly Agree (5)**
One of my job responsibilities is to help my ELLs develop their English language proficiency.					
ELLs shouldn't be in my class until their English proficiency is at a higher level.					
The ESL teacher is responsible for ELLs' English language development.					
I feel responsible if the ELLs in my class don't improve their WIDA scores.					

Teacher Willingness to Differentiate ELL Instruction

Content teachers should modify assignments and assessments for ELLs.					
ESL teachers should modify assignments and assessments for ELLs.					
Self-Efficacy	**Strongly Disagree (1)**	**2**	**3**	**4**	**Strongly Agree (5)**
In general, I feel confident teaching the grade-level content I am licensed to teach.					
I feel confident teaching my grade-level content to students who do not speak English as their first language.					
I feel equally confident teaching grade-level content to ELLs and native-English speakers.					
I have adequate preparation to teach ELLs.					
I would feel more confident teaching ELLs if I had more training.					
Classroom Instruction (WTD)	**Strongly Disagree (1)**	**2**	**3**	**4**	**Strongly Agree (5)**
Differentiation isn't really necessary for ELLs. Good teaching is enough.					
It is good practice to modify assignments for ELLs.					
I would welcome tips on providing better instruction for ELLs.					

Please select the option which best describes how often each of the following statements could be used to describe the classes you teach in which ELLs are enrolled. **(WTD)**	**Seldom/ Never**	**Some Days**	**Most Days**	**Every Day**
• I allow ELLs more time to complete assignments.				
• I give ELLs fewer assignments than other students.				
• I refer to ELLs' ILPs for ideas about how to modify assignments.				
• I allow ELLs to use their first language in class.				
• If available, I (would) provide materials for ELLs in their first languages.				
• I reduce the amount of language written/spoken when ELLs are being graded on an assignment or project.				
• I provide accommodations on tests based on an ELL's ILP.				

• I include more pictures and visual aids when teaching.				
• I try to use slower, simplified speech.				
• I address grammar, pronunciation, and other usage errors when I notice them.				

- Rank the following responsibilities you have as a teacher (1 - most important, 4 - least important) **(Responsibility).**
  - o Dispersing content knowledge
  - o Helping my students achieve grade-level content standards
  - o Helping my students improve their English language proficiency
  - o Correcting my students' English language errors

- On a scale of 1 -4 (1 being not at all capable and 4 being fully capable), rate yourself on your ability to teach the following **(Self-Efficacy):**
  - o Grade-level content in your content area
  - o The English vocabulary needed to read, write, or discuss your content
  - o Academic English reading and writing skills
  - o Conversational or social English

- Which of the following would increase the likelihood of you differentiating instruction for your ELLs? (Check all that apply.) **(WTD)**
  - o More planning time
  - o Bilingual resources
  - o ELL training/professional development
  - o Feeling more confident in correcting/explaining English errors
  - o The ability to speak the first language of my ELLs
  - o An ELL assistant/co-teacher
  - o More support from my administration
  - o Adding English language development to my job description
  - o Other _____

Finally, tell us a little bit about yourself:

- What grade(s) do you usually teach?
- What subject area(s) do you usually teach?
- How many years have you been a teacher in your current school district?
- How many total years have you been a teacher in any setting?
- Have you ever had an ELL in your class?
- If so, how many ELLs did you have in your classroom last school year? This year?

- Would you be willing to be contacted for a follow-up conversation? If so, please provide an email address at which you can be contacted:

  _____

Appendix B

Classroom Observation Checklist

(Adapted from Echevarria, Vogt, & Short, 2016)

Differentiation Strategy or SIOP Element	Not Evident (0)	(1)	Somewhat Evident (2)	(3)	Highly Evident (4)
Preparation					
Use visuals in handouts, powerpoints, on board, etc.					
Adapt text, assignments to WIDA levels					
Utilize ELL teacher or bilingual assistant to translate materials					
Instruction					
Introduced, highlighted key vocabulary					
Slower, simplified speech					
Use of visuals, gestures, use of L1, translation, subtitles, or other techniques to make input comprehensible					
Use of groups or pairs					
Increase wait time					
Provide class notes or summaries					
Utilize ELL co-teacher in class					
Provide other accommodations listed in ILP					
Review/Assessment					
Review of key vocabulary					
Review of key content concepts					
Feedback provided from teacher(s) on content learning					
Feedback provided from teacher(s) on English usage					
Adapt assessment expectation and/or grading scale according to level					
Extended time for assignments					
Reduce number of assignments					

Provide word banks on assessments					
Allow small group presentations					
Provide other testing accommodations listed in ILP					

Teacher Willingness to Differentiate ELL Instruction