# Measuring Instructional Competence for Teaching English Language Learners

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## ABSTRACT

As more English language learners are present in United States schools, licensure programs for teaching ENL endorsements, along with general teacher preparation and professional development related to EL teaching, are essential. To better understand educators' preparedness for teaching ELs and to assess the effectiveness of a licensure preparation program, we developed a measure of Instructional Competence for Teaching English language learners. Using Rasch analysis, we confirmed the validity of the measure including the subscales of Understanding and Practices. Pre-post test analysis of six cohorts of ENL program participants showed a significant increase in ratings of Instructional Competence through participation in the program. This measure can be used by other teacher education programs to assess preparedness for teaching ELs, as a supplement to other measures of knowledge and teacher sense of efficacy.

Keywords: *TESOL, Program Evaluation, Teacher Preparation, Professional Development*

According to the National Center for Educational Statistics (NCES), there are around five million students in United States public schools for whom English is not their first language (2020). This accounts for about 10% of public school students. These numbers are expected to continue climbing with current demographic trends and immigration patterns (Yough, 2019). Most English language learners (ELs) spend the majority, if not the entirety, of their school time in mainstream classrooms, perhaps being pulled out for specific English language instruction for a brief period of the day (Guler, 2020). Therefore, some degree of instructional competence for teaching English language learners is essential for all classroom teachers in order to reach their students (Yoon, 2007).

Unfortunately, most teachers have historically been underprepared for the unique challenges of teaching ELs, receiving little to no education preparation coursework or professional development targeted towards theory and practice of English language acquisition (Haworth, 2008; Lucas et al., 2008; O'Brien, 2011). Recently, educators and researchers have been working to improve the situation, with coursework revisions and additions to include EL education in educator preparation programs (de Jong & Gao, 2023). Innovative professional development or licensure preparation programs for practicing teachers have also become popular to expand expertise in this area (Brisk, et al., 2007; Lucas et al., 2008; Walker et al., 2005). These changes can be effective, as when teachers receive even a little preparation for teaching ELs, they tend to have more positive attitudes towards having ELs in their classrooms and higher sense of efficacy for teaching these students (Guler, 2020; Yough, 2019). In addition to attitudes and efficacy beliefs, in this study, we examine teachers' self-reported instructional competence for teaching ELs after completing a licensure preparation program for an ENL endorsement.

Teacher sense of efficacy draws on Bandura's seminal work on social cognitive theory, in which self-efficacy is defined as the belief that one is capable of achieving something (Bandura, 1977). Decades of research have shown that self-efficacy is highly associated with performance in a wide variety of areas, especially within the field of education (Schunk & DiBenedetto, 2016). When applied to teachers, sense of efficacy refers to the belief that one is capable of reaching students and helping them to learn (Klassen et al., 2011; Tschannen-Moran & Woolfolk Hoy, 2001). Teachers with high sense of efficacy for classroom management have been more successful at maintaining student on-task behavior with less implementation of negative consequences or punishments for students (Gordon, 2001). Teacher sense of efficacy has also been associated with instructional quality, commitment to teaching, lower burnout rates, and subsequent student outcomes, including achievement (Arviv Elyashiv & Rozenberg, 2024; Holzberger et al, 2013; Klassen et al., 2011; Schunk & DiBenedetto, 2016; Schwarzer & Hallum, 2008).

It is important to note that sense of efficacy is domain specific. Teachers who have a high general sense of teaching efficacy may feel less efficacious for teaching ELs (Karabenick & Clemens Noda, 2004). Siwatu (2007) developed a specific efficacy measure for culturally responsive teaching self-efficacy and a scale for culturally responsive classroom management with colleagues (Siwatu, et al, 2017), though these do not apply directly to efficacy for teaching ELs. Durgunoğlu and Hughes (2010) adapted a general sense of efficacy scale to be applicable for teaching ELs specifically and found that efficacy was related to self-reported preparedness to teach ELs and to results on an EL knowledge test. Therefore, teacher sense of efficacy for teaching ELs is an important element of teacher effectiveness.

In addition to teacher sense of efficacy for teaching ELs, we believe that teacher effectiveness may depend on teachers' understanding of and use of practices related to key concepts in teaching ELs. Efficacy measures are limited in that they only measure belief that a teacher can do something, not that they are actually implementing practices. Therefore, in this study, we developed a measure of what we are calling "Instructional Competence for Teaching ELs." We believe that both sense of efficacy and instructional competence should increase as a result of professional development focused on EL education. Thus, the purpose of this research is twofold: 1) to validate the newly created Instructional Competence for Teaching ELs measure, and 2) to assess changes in efficacy and instructional competence for teaching ELs after participation in a licensure preparation program.

**Supporting ELs in the Classroom**

All teachers in the United States should be prepared to educate students from homes in which English is not the first language. While some schools may have specific teachers to work exclusively with ELs on learning English, mainstream teachers should be equipped with what Galguera (2011) termed pedagogical language knowledge, or the ability to help students develop language and literacy through teaching the core curriculum. Regardless of the subject taught, teachers can use strategies that allow opportunities for English language development across the curriculum, and teacher preparation and professional development programs should support this learning (Bunch, 2013; Freeman & Johnson, 1998).

Although teacher education programs in the US have recently worked to include more content related to teaching ELs for mainstream educator preparation (de Jong & Gao, 2023), many practicing teachers had not been adequately prepared for teaching ELs. Therefore, professional development programs for practicing teachers are important to implement and

study. A randomized control trial of a professional development program in 12 elementary schools showed that participating teachers implemented strategies effectively and had an impact on student' language and literacy skills (Babinski et al, 2018). Another study showed that targeted professional development improved teachers' technical skills for working with ELs and enabled them to share their knowledge with other colleagues (Hansen-Thomas et al., 2013). As more professional development programs are designed and implemented in schools, whether through university partnerships or external providers, meaningful measurement of the impact of these programs is essential. This study examines a licensure preparation program for practicing teachers as a form of professional development for teaching ELs.

**Catholic Schools Context**

Catholic schools have a long history of serving immigrant populations in the United States (Louie & Holdaway, 2009). While private school data is not as accurately reported as public school data, the National Center Education Statistics indicates that almost 3% of students in private schools, including Catholic schools, are identified as English language learners or limited-English proficient (2020). The exact number of ELs in Catholic schools is unknown, as Catholic schools are well behind their public peers with regard to data collection and standard screening and reporting processes do not exist (Dallavis, 2023). The National Catholic Education Association compiles enrollment and staffing demographic information annually, but EL status is not a collected indicator on their data bank form (2023).

Although we may not be able to quantify the EL students in Catholic schools, we know that embracing and educating EL students in Catholic schools is part of the mission of the Church, as schools seek to welcome and serve all children, especially vulnerable immigrant

populations (Louie & Holdaway, 2009; Suhy, 2012). However, Catholic schools are without public funding and often lack resources to support ELs with dedicated TESOL certified teachers. While Catholic schools may receive Title III funds to provide services for educating formally identified EL students, the number of students identified is often far less than those actually served and the primary way that Catholic schools serve EL students is through full inclusion in mainstream classrooms (Scanlan, 2009). Therefore, the Catholic school context is appropriate for this study on mainstream teachers' competence for educating ELs.

**ACE ENL Licensure Preparation Program**

In 2005, recognizing the need to better serve the growing number of culturally and linguistically diverse learners in Catholic schools, the University of Notre Dame established an 18-credit hour licensure preparation program for educators. The Alliance for Catholic Education (ACE) ENL program prepares teacher leaders to better serve the unique needs of English learners by focusing on three domains: developing an understanding of the process of language acquisition, employing research-based instructional strategies, and creating culturally dynamic classrooms. The ACE ENL program is a 12-month, 18-credit hour cohort model. In each of the six courses, candidates complete key assessments aligned to the Indiana Standards for English Learners (IDOE, 2010), Teaching English to Speakers of Other Languages (TESOL, 2019) Standards, and the Council for the Accreditation of Educator Preparation (2022) Standards. Effective pedagogy is also rooted in the Standards of Effective Pedagogy developed by the Center for Research on Education, Diversity and Excellence (Doherty & Hilberg, 2007) - standards used by the U.S. Department of Education's Office of English Language Acquisition.

The ACE ENL program has an advanced program license designation because it is designed for individuals who already hold an initial teaching license or an undergraduate degree.

The coursework is at the graduate level and the six courses include linguistics and language acquisition, foundations of teaching second language learners, cultural influences on children's lives, designing assessments for English language learners, and two applied practicum courses. ACE ENL program candidates take two courses during the summer semester, two courses in the fall semester, and two courses in the spring semester. Successful completion of the ACE ENL program entails completion of all course-related assessments and overall minimum grade point average, triangulated performance-related evaluations from the field placement (i.e., candidate, school evaluator, and faculty), triangulated dispositional analysis (i.e., candidate, school evaluator, and faculty), and completion of the Praxis Exam - English to Speakers of Other Languages.

## Method

We utilized a pre-post survey study design to measure the impact of a licensure preparation program for an EL endorsement for in-service Catholic school teachers. The survey was given to participants in six cohorts of the program, ranging in size from 14 to 37 people, at the beginning orientation and again prior to graduation the following year. Overall, we have data from 155 individuals who answered the entry survey, and 97 who responded to the exit survey. Sample attrition occurred due to a combination of participants not completing the program or not completing the exit survey, which was administered online by email rather than while participants were in person. From the entry survey sample of 155, 129 of these individuals were teachers, and most of them indicate that they have students whose first language is Spanish, while more than 35 other languages were also listed. Non-teachers included educators working as administrators, teachers' aides, and intervention specialists, all in Catholic schools.

## Measures

The items in the survey are theoretically grouped into three content areas: global knowledge, instructional competence, and teacher sense of efficacy.

**Global knowledge.** This 3-item measure was created by the faculty of the (blinded program) to measure changes in perceived knowledge about the most important content of the program. Items relate to knowledge of culturally responsive pedagogy, the process of language acquisition, and research-based instructional strategies for teaching English language learners.

**Instructional competence.** Items for this measure were again created by the ENL faculty in collaboration with the researchers. We wanted to assess changes in participants' perceptions of their understanding of and practices related to key concepts in EL education. Therefore, we created four items for each of these subscales. We hypothesize that these subscales are highly related and together provide an overall measure of instructional competence that will assess growth over time for professional development programs for teachers. Items are included in the results below.

**Teacher sense of efficacy for teaching ELs.** This measure was used in prior research (Durgunoglu & Hughes, 2010). The authors of that study adapted a measure of general teacher sense of efficacy to be domain specific for teaching ELs. There were 9 items with high internal consistency of the measure (reported alpha of 0.83). In our sample, one reverse coded item was omitted due to poor fit. The remaining 8 items are included in the results below.

## Data analyses

Rasch analysis (Rasch, 1960; Bond and Fox, 2007) is a method of examining survey, assessment, or other data that measures differences in individuals' propensity to agree, and differences in item difficulty, while using all available data. By using the Rasch model, we also

estimate the relative precision of each measure, and accommodate the fact that item responses do not form an equal-interval scale.

Because this work uses the same items in the entry and exit survey, we are faced with a decision before beginning analysis: rack or stack? "Racking" means that, when the same items are administered at two separate times, the items at time 1 are treated as though they are different from the items at time 2. We would then be able study the impact of the intervention on the difficulty of each item, because the difficulties are estimated separately. This is not our primary interest, however, because we want to know about the impact of the program on the participants, rather than on the survey items. Therefore, we "stack" the data: we treat the items at time 1 the same as the items at time 2, and therefore measure each person twice, and then calculate the difference in each person's score from time 1 to time 2 (Wright, 1996).

Using the TAM package in R software (Robitzsch, Kiefer, and Wu, 2018), we used the rating scale model (Wright and Masters, 1982) to create survey measures, estimating the log odds of responding to item *j* in category *k* as:

$$log\left(\frac{p_{ijk}}{p_{ijk-1}}\right) = B_i - D_k$$

where

$p_{ijk}$ = probability of individual *i* responding to item *j* in category *k*

$p_{ijk-1}$ = probability of individual *i* responding to item *j* in category *k-1*

$B_i$ = estimated agreeability of individual *i*

$D_k$ = estimated difficulty of answering in category *k* compared to *k-1*.

We used the SIRT package in R (Robitzch et al., 2018) to examine the results of the Rasch analyses. The fit statistic that we use is a mean-squared residual, measuring the ratio of observed to expected variance in the survey items, so values above 1 indicate more than expected

variation, while those less than 1 indicate less than expected variation (Wright and Linacre, 1994). Values greater than one present more of a concern than those less than one, although values far below one, especially those below 0.5, indicate items that do not provide additional information, and are not helpful for measurement.

## Results

The global knowledge scale consisted of three items – knowledge of culturally responsive pedagogy, the process of language acquisition, and research-based instructional strategies for teaching English language learners. Each item had five possible responses. The resulting measure has reliability 0.87, while the average difference in person measures between entry and exit is about 1.5 SDs (with a standard deviation of 0.79). The correlation of entry and exit measures is 0.17. Items are shown in Table 1, with a Wright map, showing the spread of the individuals and category thresholds for each measure, in Figure 1. All items demonstrated adequate fit, with infit and outfit mean squares falling in the range of 0.6 to 1.4, which prior authors have noted is acceptable (Bond and Fox, 2007).

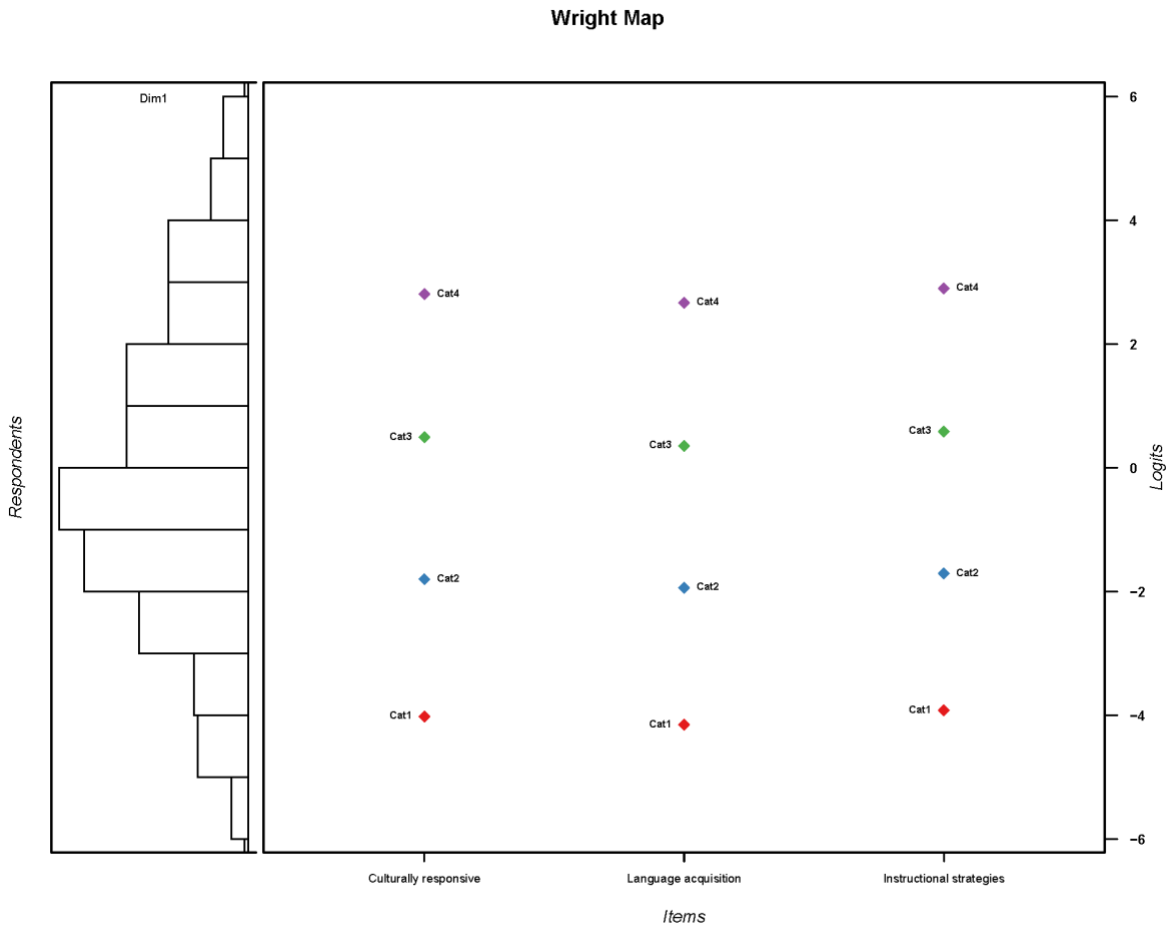
**Table 1**

*Means and Standard Deviations of Participant Ratings of Knowledge*

| Item | Entry | Exit | Outfit Mean | Infit Mean |
|---|---|---|---|---|
| *How much do you know about culturally responsive pedagogy? | 3.00 (0.74) | 4.50 (0.52) | 0.90 | 0.93 |
| *How much do you know about the process of language acquisition? | 2.92 (0.79) | 4.33 (0.49) | 0.92 | 0.92 |
| *How much do you know about research-based instructional strategies for teaching ELs? | 3.08 (0.67) | 4.50 (0.67) | 0.87 | 0.92 |

**Figure 1**

*Wright map for "global knowledge" measure*




In order to be an effective teacher of English language learners, knowledge alone is not sufficient – teachers must understand what they have learned, and be able to put it into practice. We measure these facilities with items that assess instructional competence. These items also have five possible responses, but we must consolidate the lowest two response categories, due to the low frequencies of response. These items were then conceptually divided into two measures of competence, "understanding" and "practices." The "understanding" measure has reliability

0.82, and an average difference from entry to exit of about 1.5 SDs, with a standard deviation of 0.91, while the "practices" measure has reliability 0.85 and an average difference from entry to exit of 1.35 SDs, with a standard deviation of 0.89. Fit statistics fell into the accepted range of 0.6 to 1.4 for each item. The correlation of the entry and exit measures for “understanding” is 0.09, while that correlation for the “practices” measure is 0.30. Items are shown in Table 2, with Wright maps in figure 2 (understanding) and figure 3 (practices).

**Table 2**

*Means and Standard Deviations of Perceptions of EL Instructional Competence*

| Item | Entry | Exit | Measure | Outfit Mean | Infit Mean |
|---|---|---|---|---|---|
| *I have an understanding of the components of language as applied to EL instruction | 3.25 (1.22) | 4.33 (0.49) | U | 1.08 | 1.05 |
| *I understand principles of first and second language acquisition and development | 3.58 (1.16) | 4.50 (0.67) | U | 1.06 | 1.14 |
| *I understand the home cultures of my English language learners and the impact it has on their achievement | 2.91 (1.00) | 4.33 (0.49) | U | 1.00 | 1.02 |
| *I understand concepts and issues related to the assessment of English learners | 3.25 (0.75) | 4.17 (0.72) | U | 0.92 | 0.93 |
| *I use evidence-based English language instructional practices | 3.33 (0.78) | 4.25 (0.97) | P | 0.89 | 0.89 |
| *I feel comfortable designing data driven instruction that enables my English language learners to master content as wEL as language | 3.25 (0.75) | 4.33 (0.49) | P | 1.01 | 0.97 |
| *I use technology–based, culturally representative, developmentally appropriate resources for EL instruction | 3.00 (1.04) | 4.08 (1.00) | P | 0.90 | 0.92 |
| *I have a personal relationship with my students and families to advocate for them within my school community | 3.08 (0.79) | 4.67 (0.66) | P | 1.15 | 1.30 |

** Indicates that the comparison was statistically significant at the .05 level.*

**Figure 2**

*Wright map for Instructional Competence – Understanding*

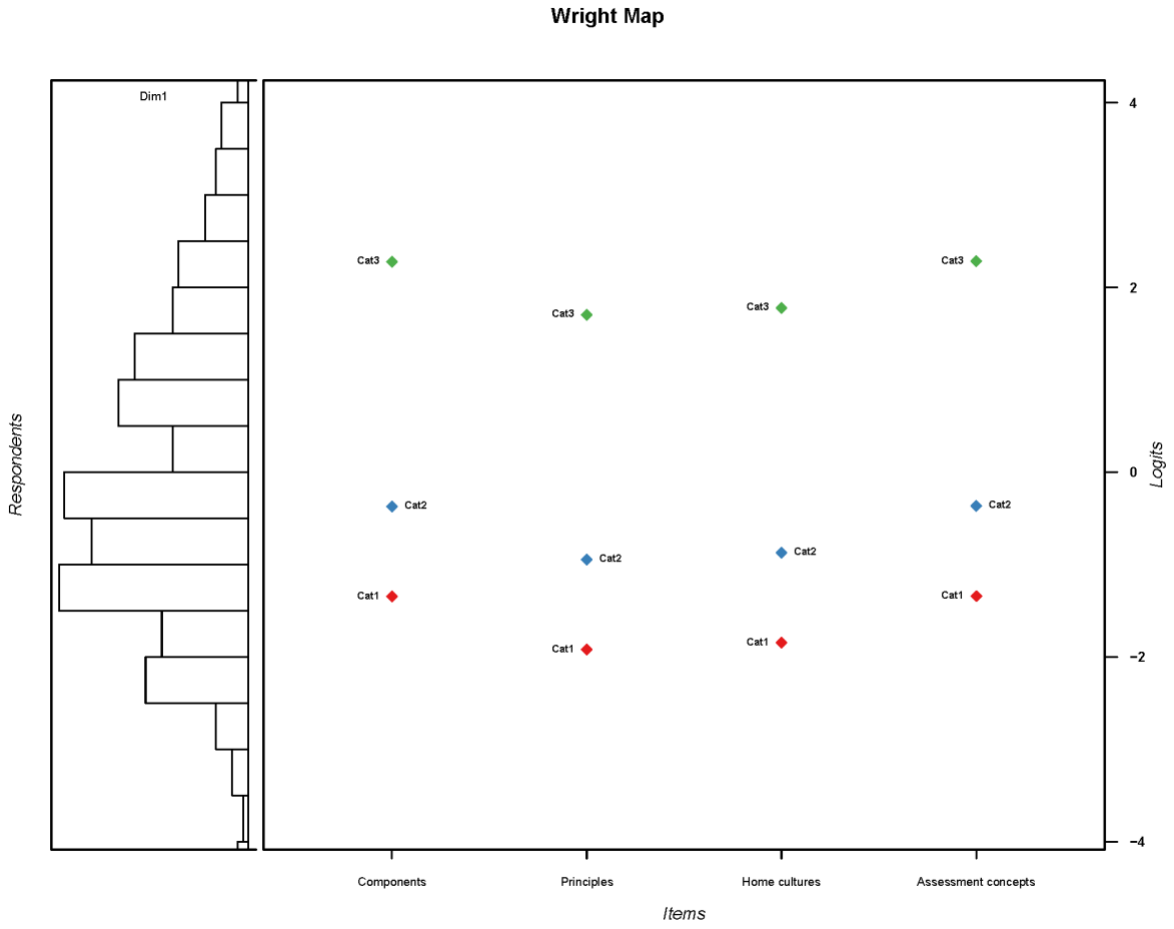
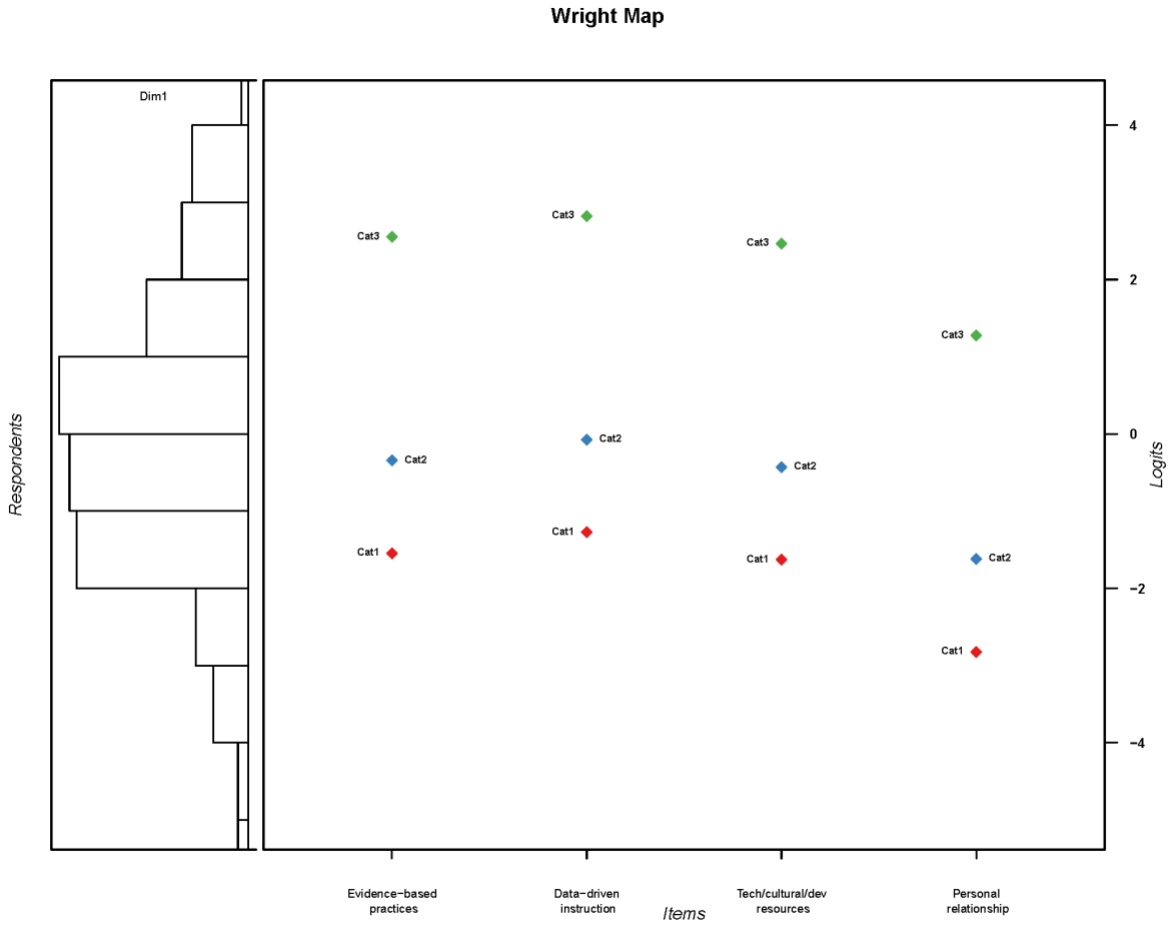


**Figure 3**

*Wright map for Instructional Competence – Practices*




We were also interested in teachers' sense of efficacy for teaching ELs. Items assessing their efficacy required the consolidation of the lowest two response categories (out of the initial five options). The resulting measure had reliability 0.88, and all items exhibit acceptable fit. We found an average difference from entry to exit of 1.05 SDs, with a standard deviation of 1.01, while the correlation of entry and exit measures is 0.31. Items are shown in Table 3, with a Wright map in figure 4.

**Table 3**

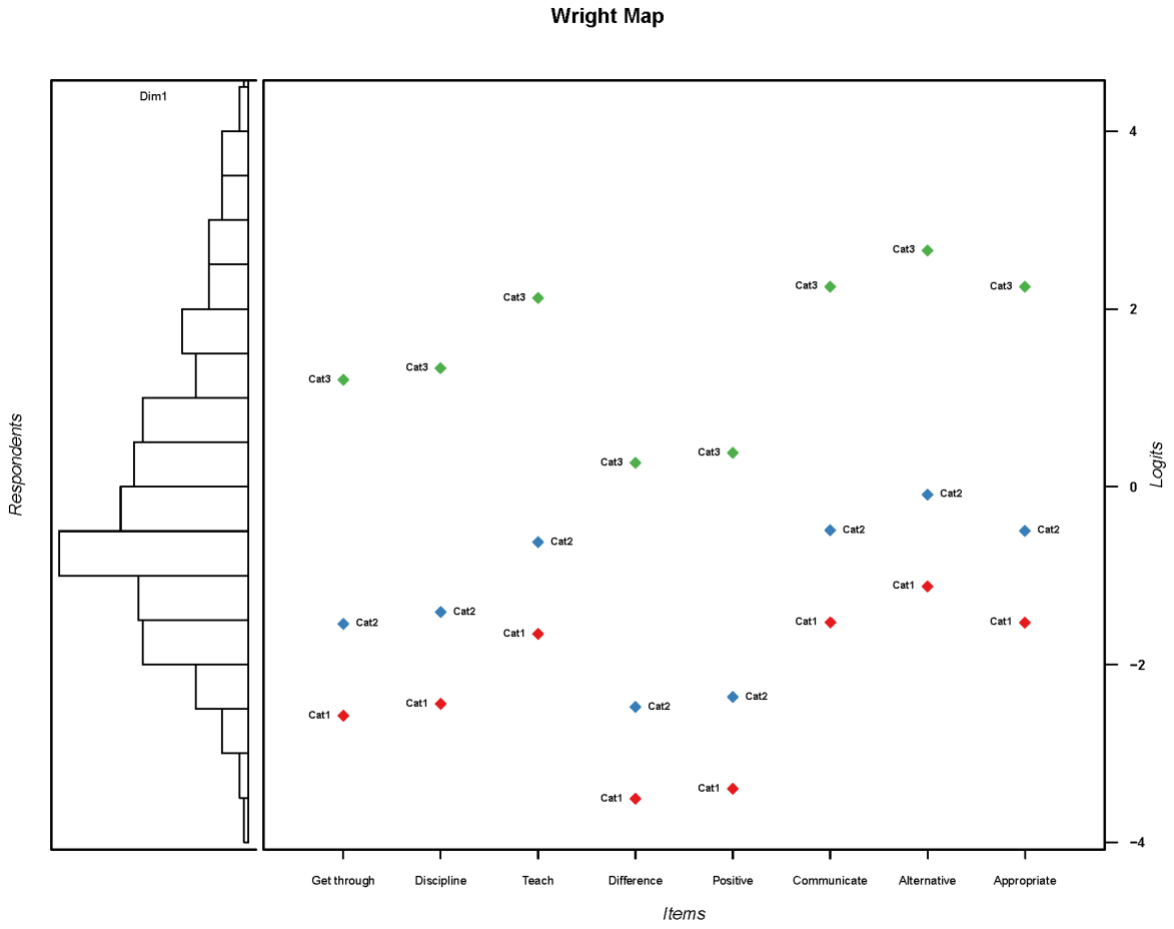
*Means and Standard Deviations of Teachers' Sense of Efficacy for EL Instruction*

| Item | Entry | Exit | Outfit Mean | Infit Mean |
|---|---|---|---|---|
| *If I try hard, I can get through to most of the EL students. | 3.75 (0.97) | 4.33 (0.49) | 1.18 | 1.00 |
| I am confident in my ability to handle most discipline problems with EL students. | 3.83 (0.72) | 4.00 (0.95) | 1.05 | 1.09 |
| *I am confident in my ability to teach all EL students to high levels. | 3.17 (1.03) | 4.17 (0.58) | 0.86 | 0.89 |
| *I am confident I am making a difference in the lives of my students. | 4.17 (0.72) | 4.67 (0.49) | 0.93 | 0.86 |
| I feel confident in providing a positive learning environment and creating a climate characterized by high expectations. | 4.33 (0.78) | 4.58 (0.51) | 1.09 | 1.04 |
| *I am confident of my skills to effectively communicate with parents and guardians of EL students. | 3.50 (1.08) | 4.17 (0.83) | 1.31 | 1.34 |
| *I am confident of my skills to provide alternative/performance assessments to EL students. | 2.83 (0.94) | 3.92 (0.79) | 0.83 | 0.86 |
| *I feel confident in providing linguistically and culturally appropriate learning experiences for EL students. | 2.75 (0.75) | 4.33 (0.65) | 0.88 | 0.88 |

** Indicates that the comparison was statistically significant at the .05 level.*

**Figure 4**

*Wright map for Efficacy*




We expected the resulting measures to be positively correlated, both at entry and exit. We found this to be true, more so at exit than at entry, with correlations shown in Table 4.

**Table 4**

*Correlations Among Measures at Entry and Exit*

| Entry | Instructional Competence: Practices | Global Knowledge | Sense of Efficacy |
|---|---|---|---|
| Instructional Competence: Understanding | 0.57 | 0.47 | 0.42 |
| Instructional Competence: Practices | | 0.35 | 0.65 |
| Global Knowledge | | | 0.19 |
| **Exit** | **Instructional Competence: Practices** | **Global Knowledge** | **Sense of Efficacy** |
| Instructional Competence: Understanding | 0.69 | 0.52 | 0.64 |
| Instructional Competence: Practices | | 0.51 | 0.72 |
| Global Knowledge | | | 0.40 |

## Discussion

In this study, we developed and validated a new measure, Instructional Competence for Teaching ELs, that complements measures of efficacy to more accurately assess preparedness for teaching ELs. This measure is intended to be used within teacher preparation programs and in evaluations of or research on professional development programs or interventions. We demonstrated that this measure can be used to evaluate growth as a result of a licensure preparation program related to teaching ELs. Analysis of program evaluation data for the ACE ENL program showed that participants experienced significant growth in efficacy as well as instructional competence, including both the understanding and practice subscales of the measure.

Program evaluations and research in education have long included measures of teacher sense of efficacy, knowing that it has demonstrated important associations with teacher effectiveness and student learning (e.g., Klassen, et al., 2011). However, efficacy is a belief in one's abstract capabilities, whereas our new measure is designed to be more concrete. We care about teachers' sense of efficacy, but we also believe it is important to know how much teachers know and understand how to teach ELs and the extent to which they are engaging in effective practices within their teaching. This new measure extends beyond efficacy to measure actual instructional competence, though still in a self-reported survey manner.

The Instructional Competence for Teaching ELs measure could be used in any setting where there is a need to assess teachers' preparation for and/or competence in teaching ELs. It is especially useful when there is a need to assess changes in competence as a result of a coursework or professional development experience. Traditional teacher preparation programs may find this measure useful in assessing preservice teachers' competence before and after a course or field experience, for example. For practicing teachers, school administrators or professional development facilitators may find the measure useful for a pre-post test study when conducting professional development focused on EL education. The measure is not specific to Catholic school teachers, so it can be used in different school contexts.

## Limitations

This study was limited in that it only considered the experiences of participants of one program and the sample size was rather small. Future studies with larger samples from more diverse experiences would be helpful to ensure generalizability of the findings. Further research could also include knowledge-based assessments to triangulate the data from the self-reported perceptions of understanding and global knowledge, in particular. Although self-reported data

can be valuable, it is possible that participants may have over reported their knowledge and competence based on social desirability or a positive response bias, for example. Additionally, student-level outcome data would also be interesting to study in order to determine if instructional competence for teaching ELs ultimately results in improved student achievement, for example.

## Conclusion

As United States schools continue to welcome increasing numbers of English language learners, ensuring that teachers are equipped with appropriate knowledge and skills to educate ELs is a priority. Universities and other providers of professional development offerings for teachers must be able to demonstrate effectiveness of interventions. We offer the Instructional Competence for Teaching ELs measure as one instrument to assess preparedness for teaching ELs. We believe this instrument could be useful for both traditional teacher education programs and for professional development offerings. Through programs like the ACE ENL certification program, we believe that all teachers can and should be prepared to educate ELs effectively.

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