

Initial Validation of the TESOL Competencies Scale

•**Kimberly F. Colvin:** *University at Albany, SUNY, United States.*

Gretchen P. Oliver: *Siena University, USA.*

Karen M. Gregory: *Siena University, USA.*

Alison Egan Fisk: *Siena University, USA.*

ABSTRACT: *The purpose of this study was to collect and evaluate initial validity evidence for the Teaching English to Speakers of Other Languages (TESOL) Competencies Scale in the context of a 15-month professional development program for in-service teachers of English language learners and school leaders. The scale was developed to assess attitudes and competencies toward teaching students who are English language learners. The scale was administered to the participants before and after the professional development, along with open-ended questions about their attitudes toward English language learners, as well as approaches to working with these students. Many of the participants also took a standardized certification test for teachers of English to Speakers of Other Languages. The validity of the scores from this new scale were supported by the participants' teaching portfolios, open-ended survey responses, and positive correlations with the certification exam and scores on a scale for attitudes towards English learners. The results of this study support the further refinement of the scale with a larger sample of teachers with a more diverse set of experiences with English language learners. The TESOL Competencies scale can be used by school districts to quickly assess their teachers' needs for professional development for working with English language learners; no such instrument currently exists.*

Key words: *English learners (ELs), professional development (PD), scale development, teaching English to speakers of other languages (TESOL), validity.*



1. Initial Validation of the TESOL Competencies Scale

With an increase in English learners (ELs) in K-12 schools, there is a pressing need for ongoing, sustained, and classroom-based professional development for in-service teachers. Likewise, school leaders need professional development to ensure that they know how to support teachers who serve these students and how to include ELs and their families into the fabric of their school communities. Furthermore, many initial teacher preparation programs do not sufficiently address how all teachers can support language and literacy development among students who are learning English as a new language as they are simultaneously expected to learn grade-level content. As such, we have designed an alternative approach to professional development (Gregory & Oliver, 2018) that consists of a 15-month job-embedded program that brings these three groups of educators together, where they learn from and with one another. This offers them ongoing and continuous professional development that is situated in practice. To evaluate this professional development, a tool was needed to measure educators' knowledge, skills, and dispositions toward teaching ELs. With an instrument to evaluate teachers' and other school personnel's competencies in this area, appropriate professional

development can be planned and delivered. The purpose of this paper is to evaluate the initial validity and reliability evidence of the Teaching English to Speakers of Other Languages (TESOL) Competencies Scale, an instrument developed as a part of a grant-funded research and professional development project supported by the U.S. Department of Education, Office of English Language Acquisition, National Professional Development Project.

The following research question was used to guide our inquiry of the professional development project: How does in-service teachers' participation in the professional development project contribute to the development of their knowledge, skills, and dispositions for teaching linguistically and culturally diverse students? Specifically, we examined the ways in which in-service teacher participants were able to apply foundational ideas about the three research-based frameworks, Knowledge Building (Lesaux & Harris, 2015), Sheltered Instruction Observation Protocol (SIOP) (Echevarria et al., 2017, 2024), and Understanding by Design (UbD) in the Culturally and Linguistically Diverse Classroom (Heineke & McTighe, 2018), introduced to them in graduate-level coursework to their teaching practice.

2. Theoretical Framework

Using de Jong & Harper's (2005) seminal "just good teaching" (JGT) framework, we looked at the knowledge, skills, and dispositions educators need to be effective in meeting the unique needs of ELs in mainstream classrooms. We consider language development, with an emphasis on oral language and literacy (reading and writing), the linguistic demands of the various content areas, and cultural factors that affect learning. First, this framework was used in the development of the professional development curriculum, as well as the TESOL Competencies scale. "In order to move from 'just good teaching' to good teaching for all students, including ELs, mainstream teachers need additional knowledge and skills" (de Jong & Harper, 2005, p. 117), the professional development project included TESOL Literacy Methods, Curriculum and Methods for Teaching English to Speakers of Other Languages, and TESOL Teaching and Assessment Methods, followed by an internship course where professional development participants were able to directly apply their learning from these methods courses' learning activities to their teaching practice. The goal of the methods courses was to develop or enhance participants' understandings about language and culture, effective practices for ELs, and their dispositions (e.g., helping teachers to see their role as language teacher and cultural facilitator, helping teachers to have high expectations and positive attitudes towards ELs).

De Jong and Harper's JGT framework also provides us with a lens through which we can evaluate the extent to which participants in our professional development project have the requisite knowledge, skills, and dispositions for working with ELs. This, in turn, allowed us to see which in-service teacher participants were able to apply what they learned in the methods courses, specific to each individual framework as well as the integration of the three frameworks, to their teaching practice. We report on the changes these content area and classroom teachers made to their teaching practice as the result of their participation in the professional development project. We look not only at their new understandings about language development and effective practices for teaching ELs (i.e., their knowledge - what they know, and skills - what they are able to do), but also at their commitment to and preparedness for teaching these students (i.e., their dispositions).

This study employs a grounded theory approach (Strauss & Corbin, 1998) as we seek to "generate a general explanation (a theory) of a process" (Creswell, 2013, p. 83). Using both quantitative (e.g., pre- and post-survey questions and teacher certification exam scores) and qualitative (e.g., teaching portfolios and written reflections) data, we focus on in-service teachers' processes and actions over a 15-month time span. Our overarching goal, therefore, is to develop a theory of this process (Creswell & Brown, 1992) in an effort to explain how teachers' knowledge, skills, and dispositions can be developed or enhanced through on-going and job-embedded professional development. This manuscript documents the initial validation of one tool used to evaluate the professional development program, the TESOL Competencies Scale.

3. Methodology

3.1. Participants & Setting

The sample in this study were participants in the first four cohorts in a 15-month professional development program, ALL4ELs. The program included four graduate-level courses that were designed to develop the knowledge, skills, and dispositions for teaching linguistically and culturally diverse students. A focus of the program was the participants' ability to apply foundational ideas of three research-based



frameworks, Knowledge Building (Lesaux & Harris, 2015), SIOP (Echevarria et al., 2017, 2024), and Understanding by Design in the Culturally and Linguistically Diverse Classroom (Heineke & McTighe, 2018).

The sample used for instrument validation included 142 participants in the first four cohorts in a 15-month professional development program who started the program and took the pre-program survey that included the TESOL Competencies Scale, various survey questions, and a scale about teachers' attitudes toward ELs. The participants were predominantly in-service teachers ($n = 120$) but also included pre-service teachers ($n = 14$) and school leaders ($n = 8$). So far, 60 participants from the first three cohorts completed the program and completed a certification exam.

3.2. Measures

TESOL Competencies Scale. The 20-item instrument was developed by the second and third authors to assess teachers' knowledge, skills, and dispositions for teaching ELs. Items were formulated to reflect the features of the three frameworks (i.e., Knowledge Building, Understanding by Design, and the SIOP Model), as well as learning outcomes for the professional development project's three methods courses.

The scale can also be used by schools and districts seeing an increase in ELs so that they can identify areas for targeted professional development. The responses are on a 4-point scale, from *strongly disagree* (0) to *strongly agree* (3); total scores range from 0 to 60. Sample items include: *I know how to assess students' academic language development* and *I am good at modifying content to make it accessible to linguistically and culturally diverse students*. In the current sample of pre-program scores for the first four cohorts, the mean scale score was 36.4 points ($SD = 8.4$) with the following estimates of reliability, $\alpha = .92$, ω -hierarchical = .72, and ω -total = .93.

Attitudes toward Including English-Language Learners. Reeves (2006) developed a 19-item survey to assess secondary teachers' attitudes towards including English-language learners in their classrooms; the items were intended to address four areas: inclusion, coursework modifications, professional development, and language and language learning. However, some of the items were not directly related to the classroom or ELs, such as, *I would support legislation making English the official language of the United States*. Therefore, the second and third authors of the current study each independently identified items directly related to teachers' attitudes toward ELs, including items such as: *I would welcome the inclusion of ESL students in my class*. Responses to these 9 items, on a scale from *strongly disagree* (0) to *strongly agree* (3), were summed to serve as a measure of attitudes toward ELs with scores that range from 0 to 27, $M = 20.7$, $SD = 3.3$, $\alpha = .73$, ω -hierarchical = .41, and ω -total = .81.

Content Specialty Test in ESOL. The New York State Content Specialty Test (CST) in ESOL is an approximately 90-item, 195-minute state certification exam that addresses pedagogical and content knowledge. The exam is made up of seven competency areas, such as Language and Language Learning, Knowledge of English Language Learners, and Instructing English Language Learners in the Content Areas; scale scores range from 400 to 600 points with a passing score of 520. All but one of the participants in the current sample passed the CST ($M = 565.3$, $SD = 17.8$).

Other Data Sources. Upon completion of the professional development program, participants completed a survey that included the TESOL Competencies Scale and a variety of closed and open-ended questions. We highlight the self-reported changes a purposefully selected group (nonprobability sample) of in-service teacher participants have made to their teaching practice as the result of participation in this professional development project and their commitment to and preparedness for teaching ELs. Examples of the closed-ended questions include: *My participation in this program has made me more committed to the education of ELs* and *Based on my experiences in ALL4ELs, I am prepared to work with ELs*. In addition, in the post-survey, participants were asked to reflect on their learning and provide information related to their new understandings, skills, and attitudes towards teaching ELs. A sample of the post-survey open-ended questions include: *In your internship, you had the opportunity to apply what you learned in TESL 542, 517, and 513. To what extent were you able to apply what you learned in these courses to your teaching practice?* and *Which of the frameworks were you able to apply with fidelity?* and *What has changed in your teaching practice as a result of your participation in this program?*

A third data source was participants' internship portfolios, which included specific applications of the frameworks they had learned, such as a complete Knowledge Building (Lesaux & Harris, 2015) Instructional



Cycle (10-14 days of instruction) planned with a UbD template (Heineke & McTighe, 2018), daily lesson plans using a SIOP (Echevarria et al., 2017, 2024) lesson planning template, classroom ready materials, a summative performance-based assessment with rubric(s), three annotated videos of instruction, student work samples with analysis, and a reflective essay. All portfolios were evaluated by the research team, using a rubric that was shared with participants at the beginning of their internship experience.

3.3. Data Analysis

The TESOL Competencies Scale was evaluated according to aspects of validity as suggested by the Standards for Educational and Psychological Testing (AERA, APA, & NCME, 2014), including evidence based on test content, relations to other variables, and internal structure. In addition, reliability will be evaluated using coefficients *alpha*, *omega*-hierarchical, and *omega*-total. Classical test theory item analyses were conducted on the scale items and correlations between the scales and other measures (i.e., Reeves’ Attitude Scale and certification exam) were computed.

4. Results

4.1. Validity Evidence Based on Test Content

Items for the TESOL Competencies Scale were developed by the second and third authors to address the knowledge, skills, and dispositions educators need to be effective in meeting the unique needs of ELs in mainstream classrooms, based on de Jong & Harper’s (2005) seminal “just good teaching” (JGT) framework. We considered language development, with an emphasis on oral language and literacy (reading and writing), the linguistic demands of the various content areas, and cultural factors that affect learning.

4.2. Item Analysis and Reliability

Results of a classical item analysis included strong item-to-total correlations. The item-to-total correlations were greater than .50 for 17 of the 20 items, the other 3 with correlations of .26, .31, and .33. In addition, there were no items for which *alpha* improved if the item was dropped (see Table 1), indicating that none of the items detract from the internal consistency of the scale. The internal reliability (was strong, $\alpha = .92$, ω -hierarchical = .69, and ω -total = .93).

Table 1. TESOL Competencies Scale – Item Analysis.

Item	Original Item	M (SD)	<i>alpha</i> with Item Dropped	Item to Total Score Correlation with Item Dropped
1	On the whole, I enjoy teaching linguistically and culturally diverse students.	2.7 (0.5)	0.92	0.33
2	I am confident about teaching English as a new language.	1.6 (0.8)	0.91	0.60
3	I know a lot about using different methods to make content comprehensible and accessible to culturally and linguistically diverse students.	1.6 (0.7)	0.91	0.66
4	I know how to tap into students’ background knowledge and prior learning and connect this to new learning.	2.0 (0.6)	0.91	0.57
5	I know how to use strategies to support interaction in the classroom.	2.0 (0.6)	0.91	0.67
6	I know how to assess students’ academic language development.	1.5 (0.7)	0.91	0.66
7	I am able to scaffold and differentiate grade-level instruction for linguistically and culturally diverse students.	1.8 (0.6)	0.91	0.69
8	I can identify and understand the different levels of	1.5 (0.7)	0.91	0.60



	language proficiency.			
9	Formative assessment practices guide my teaching.	1.9 (0.7)	0.92	0.26
10	I am good at interpreting or monitoring student progress related to language development.	1.5 (0.7)	0.91	0.59
11	I am good at modifying content to make it accessible to linguistically and culturally diverse students.	1.8 (0.6)	0.91	0.67
12	I have a positive attitude toward myself and my abilities, related to teaching linguistically and culturally diverse students.	2.1 (0.6)	0.91	0.57
13	I know how to develop students' reading, writing, speaking, and listening skills in an integrated way.	1.7 (0.7)	0.91	0.65
14	I understand how trauma may impact students' learning.	2.3 (0.6)	0.92	0.31
15	I know how to connect standards to learning targets for English learners.	1.7 (0.7)	0.91	0.58
16	I know how to explicitly teach key vocabulary to English learners.	1.7 (0.7)	0.91	0.6
17	I know how to integrate grade-level reading and writing objectives alongside listening and speaking.	1.7 (0.7)	0.91	0.67
18	I know how to provide ELs with sufficient opportunities to use new vocabulary in various contexts through activities such as discussion, writing, and extended reading.	1.7 (0.7)	0.91	0.67
19	I know how to provide students with strategies to make them independent vocabulary learners.	1.7 (0.6)	0.91	0.57
20	I know how to employ culturally responsive teaching practices.	2.0 (0.6)	0.91	0.58

4.3. Evidence Based on Relations to Other Variables

The TESOL Competencies Scale scores were moderately correlated with the 9-item Attitudes' Toward ELs scores, $r = .38$, $df = 140$, $p < .001$. This moderate correlation indicates that, as expected, there is some shared variance between the competencies and attitude scales, but not enough to indicate that the two scales are measuring the same construct.

While all but one participant who took the CST in ESOL at the conclusion of the program passed the exam, some were more successful than others in developing effective practices for ELs. The correlation between scores on the TESOL Competencies Scale (administered at the end of the program) and CST-ESOL scores was $.25$, $df = 58$, $p = .054$ (after removing an outlier: $r = .27$, $df = 57$, $p = .042$), which provides preliminary validity evidence that the TESOL Competencies Scale does measure competency to teach English to speakers of other languages. See Figure 1 for a scatterplot of the positive relationship between CST scores and increases in TESOL Competencies Scale scores before and after the program, $r = .25$, $df = 55$, $p = .063$.



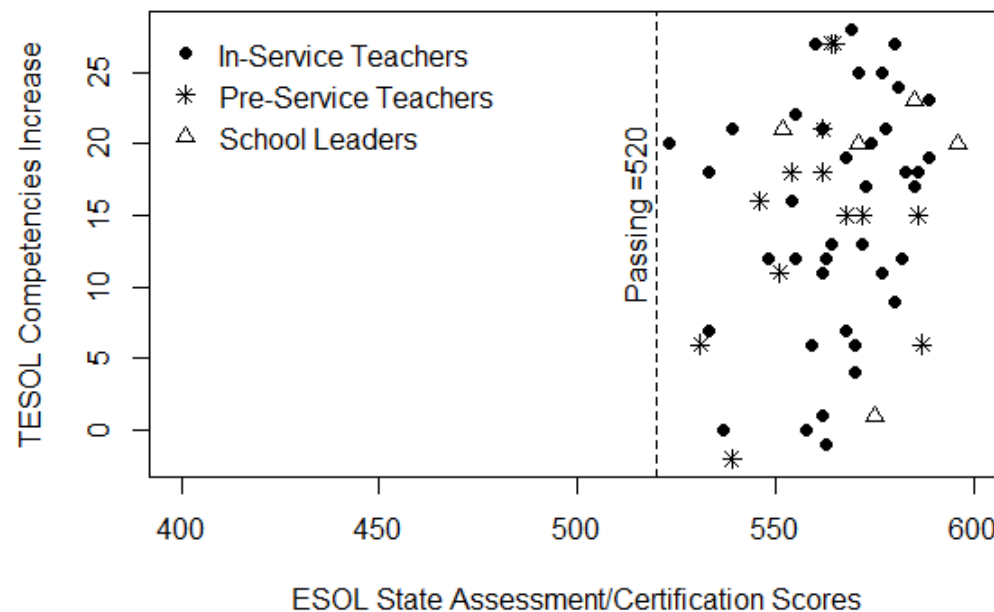


Figure 1. Relationship of CST Scores & Increase in TESOL Competencies.

4.4. Evidence Based on Internal Structure

With only 142 respondents for the pre-program TESOL Competencies Scale, the sample size is too small for a complete evaluation of the internal structure of the scale. However, preliminary results indicated a strong dominant factor; the scree plot had a clear elbow and the ratio of the first eigenvalue (8.18) to the second (1.47) is 5.55. Using the R package *lavaan* (Rosseel, 2012), a confirmatory factor analysis of a one factor model, using robust maximum likelihood estimation, showed weak to moderate fit, $\chi^2 = 383.4$, $df = 170$, $p < .001$, CFI = .825, RMSEA = .09, 90% CI [.08, .10], SRMR = .068. There is a theoretical argument that a bifactor model is more appropriate, with a general factor of TESOL competencies and subfactors of personal belief in those competencies and of TESOL-specific pedagogical knowledge. However, the bifactor model did not converge with this small sample.

4.5. Evidence Based on Open-Ended Questions

In the first cohort, eight teachers who were able to move from “just good teaching” to good teaching for all students, including ELs, were identified by their portfolios and performance in the program. These teachers demonstrated “strong evidence” of their ability to apply foundational ideas from each of the three frameworks and integrate these frameworks into their teaching practice, based on an established rubric. Table 2 shows data from the content specialty test, where a passing score is a 520, on a scale from 400 to 600, along with participants’ pre- and post-scores on the TESOL competencies instrument. This is further support that the TESOL competency instrument does measure competency to teach English to speakers of other languages.



Table 2. Selected Participant Scores.				
Teacher	CST Score	TESOL Competency Score		Change from Pre-to Post
		Pre	Post	
Teacher 1	585	30	47	17
Teacher 2	570	56	60	4
Teacher 3	580	33	60	27
Teacher 4	562	49	60	11
Teacher 5	578	37	58	21
Teacher 6	539	18	39	21
Teacher 7	577	30	55	25
Teacher 8	586	30	48	18

Having the knowledge of TESOL best practices is not enough for teachers to move from “just good teaching” to good teaching for all students; teachers need to be able to understand the core competencies and have opportunities to enact them. The results from the preliminary study show how on-going and job-embedded professional development can develop or enhance teachers’ knowledge about best practices for planning, instruction, and assessment, as well as the ability to apply their learning to their practice.

In addition to these specific changes in teachers’ practice, we also saw changes to their dispositions, which were evidenced in their post-competency survey responses, see Table 3. For example, all eight of these teachers either agreed or strongly agreed with the statements: *My participation in this program has made me more committed to the education of ELs* and *Based on my experiences in ALL4ELs, I am prepared to work with ELs*. In their portfolio reflections, all eight teachers expressed a focus on the future and an enthusiasm for the opportunity to apply their learning in the upcoming school year.

Table 3. Self-Reported Changes in Teachers’ Practice	
Finding	Example
Contextualized vocabulary instruction for literacy development	“A number of SIOP strategies were already included in the unit... However, with the creation of the [KBIC] unit, I integrated a number of other SIOP-based components, such as the focus on comprehensible inputs with each reading provided: pre-reading activities, activating prior knowledge and introducing relevant vocabulary; reading and annotation as a means to process the material; vocabulary development through read-alouds and class conversation about specific vocabulary and the larger meaning of the texts.” (Teacher 7)
Change in assessment practices	“I think including one Language Production Project per marking period would be doable for my students. I believe this will promote academic achievement and success. Creating an instructional cycle for every unit will allow ELs to be engaged and receive a deeper understanding of the concepts being taught.” (Teacher 6)
Dual focus on language and content	“Creating lessons that had a dual focus on content learning and language development was made easier by using the SIOP daily lesson plan and by initially creating a unit plan with the UbD framework.” (Teacher 3)
Improved differentiation	“One invaluable skill that I have learned in my TESOL coursework is the value of adapted texts. It is so important for students to be able to engage with texts that are accessible but also contain the content required of grade level skills.” (Teacher 5)
Increased student interaction	"Prior to my learning in TESOL coursework, most new material would have been delivered in whole-group, teacher-led instruction. Now, at least twice a



	unit, I make a point to assign [my students as] expert teachers, as the routine forces students to learn a topic at a deep level and mandates the use of both productive and receptive linguistic modalities from all students in the classroom. Most importantly, it is engaging, and builds discourse between students as a continued routine in the classroom.” (Teacher 1)
--	--

The increase in TESOL Competencies scale scores for these eight teachers, chosen for their improvement in teaching as demonstrated by their teaching portfolios, class performance, and self-reflections, is further evidence that the TESOL Competencies scale is measuring the knowledge, skills, and dispositions necessary to support ELs.

5. Conclusions

The initial validity and reliability evidence on the limited sample size of 142 participants is promising, including only the 60 participants for whom we have certification test scores and post-program survey results. However, given this data, there is strong evidence that the TESOL Competencies Scale is a useful measure of the knowledge, skills, and dispositions necessary to support ELs.

This preliminary study shows how on-going and job-embedded professional learning can contribute to the development of in-service teachers’ knowledge, skills, and dispositions related to teaching ELs. Building on the de Jong and Harper (2005) framework, this study affirms the importance of providing teachers with the opportunity to grow in their practice as the demographics of their students continue to diversify. While de Jong and Harper focused on pre-service teacher preparation, we assert that this same framework can be used for professional development and on-going learning for all educators. This empirical study expands the model to include professional development so that teachers can adjust and adapt their practice to consider ELs and their unique needs in the forefront of their planning, instruction, and assessment. Several of the Cohort 1 in-service participants in our professional development project received their initial teacher preparation at a time when the majority of their students were native English-speaking students, and as such, they were not prepared for the realities of their classrooms today. By offering them the opportunity to learn about language development, with an emphasis on oral language and literacy (i.e., reading and writing), the linguistic demands of the various content areas, and cultural factors that affect learning, we can work to reduce inequities and construct education possibilities across P-20 systems.

6. Limitations and Next Steps

There were a limited number of professional development participants who completed the scale and the certification exam, which resulted in relatively small sample sizes for the correlational analyses and factor analysis of the internal structure of the TESOL competencies scale. In addition, the subjects were voluntary participants in a professional development program about improving their knowledge, skills, and dispositions toward ELs, so the participants were not expected to have a wide range of attitudes toward ELs. Even with this limitation, we found a positive correlation between scores on the TESOL Competencies Scale and both the certification exam and the attitudes towards ELs scale.

Even though two of the authors who are experts in TESOL developed the scale items, before beginning data collection with a larger sample, we will have outside TESOL experts review the items for clarity and relevance and suggest item refinements. The resulting revised set of TESOL Competency items will be administered to a new sample. This next study will include a larger and more diverse sample with respect to attitudes toward and experience with ELs. This will allow us to complete a confirmatory factor analysis as well as evaluate the relationship between the TESOL Competencies Scale and several other measures. Ultimately, the final version of the TESOL Competencies Scale will provide actionable, useful information for schools and districts who want to better serve their ELs. The results from this scale can be used by school leaders to identify areas for targeted professional development so that teachers and school leaders, alike, are better prepared to work with their English language learners.



Acknowledgment:

This work was supported by the National Professional Development (NPD) program through the U.S. Department of Education, Office of English Language Acquisition [T365Z210091 and T365Z240151]. The Department does not mandate or prescribe practices, models, or other activities described or discussed in this document. The contents of this manuscript may contain examples of, adaptations of, and links to resources created and maintained by another public or private organization. The Department does not control or guarantee the accuracy, relevance, timeliness, or completeness of this outside information. The content of this manuscript does not necessarily represent the policy of the Department. This publication is not intended to represent the views or policy of, or be an endorsement of any views expressed or materials provided by, any Federal agency.

References

- American Educational Research Association, American Psychological Association, & National Council on Measurement in Education. (2014). *Standards for educational and psychological testing*. American Educational Research Association.
- Creswell, J. W. (2013). *Qualitative inquiry and research design: Choosing among five approaches* (3rd ed.). Sage.
- Creswell, J. W., & Brown, M. L. (1992). How chairpersons enhance faculty research: A grounded theory study. *The Review of Higher Education*, 16(1), 41–62. <https://doi.org/10.1353/rhe.1992.0002>
- De Jong, E. J., & Harper, C. A. (2005). Preparing mainstream teachers for English language learners: Is being a good teacher good enough? *Teacher Education Quarterly*, 32(2), 101–124.
- Echevarria, J., Vogt, M. E., & Short, D. J. (2017). *Making content comprehensible for English learners: The SIOP® model* (5th ed.). Pearson.
- Echevarria, J., Vogt, M. E., Short, D. J., & Toppel, K. (2024). *Making content comprehensible for multilingual learners: The SIOP model* (6th ed.). Pearson Education.
- Gregory, K., & Oliver, G. (2018). Alternative approaches to professional development. In J. I. Lontas (Ed.), *The TESOL encyclopedia of English language teaching*. Wiley-Blackwell. <https://doi.org/10.1002/9781118784235.eelt0386>
- Heineke, A., & McTighe, J. (2018). *Using understanding by design in the culturally and linguistically diverse classroom*. ASCD.
- Lesaux, N. K., & Harris, J. R. (2015). *Cultivating knowledge, building language: Literacy instruction for English learners in elementary school*. Heinemann.
- New York State Teacher Certification Examinations. (2018). *Field 116: English to speakers of other languages test design and framework*. https://www.nystce.nesinc.com/content/docs/NY116_OBJ_FINAL.pdf
- New York State Teacher Certification Examinations. (2024). *English to speakers of other languages*. https://www.nystce.nesinc.com/TestView.aspx?f=HTML_FRAG/NY116_PrepMaterials.html
- Reeves, J. R. (2006). Secondary teacher attitudes toward including English-language learners in mainstream classrooms. *The Journal of Educational Research*, 99(3), 131–143. <https://doi.org/10.3200/JOER.99.3.131-143>
- Rosseel, Y. (2012). lavaan: An R package for structural equation modeling. *Journal of Statistical Software*, 48(2), 1–36. <https://doi.org/10.18637/jss.v048.i02>
- Strauss, A., & Corbin, J. (1998). *Basics of qualitative research: Grounded theory procedures and techniques*. Sage.
- Tomlinson, C. A. (2014). *The differentiated classroom: Responding to the needs of all learners* (2nd ed.). Pearson.



International Journal of Educational Studies
Vol. 8, No. 6, pp. 73-81
2025
DOI 10.53935/2641-533x.v8i6.540

✉Corresponding Author: Kimberly F. Colvin

Copyright:
© 2025 by the authors. This article is an open access
article distributed under the terms and conditions of the
Creative Commons Attribution (CC BY) license
(<https://creativecommons.org/licenses/by/4.0/>).