

RESEARCH-BASED EFFECTIVE TEACHING PRACTICES IN ENGLISH AS A NEW LANGUAGE, TRANSITIONAL BILINGUAL, AND DUAL LANGUAGE CLASSROOMS

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This case study was carried out to confirm the use of a newly developed observational protocol as a dependable checklist of effective language-focused teaching practices. The goal was to determine whether or not such practices were being consistently utilized when teaching English language learners (ELLs) in English as a new language (ENL), transitional bilingual (TBE), and dual language (DL) program models, and where, specifically, teachers needed more support to infuse these practices into daily instruction. Classes and teaching practices were observed in partner elementary and secondary school classrooms in New York City, and the protocol was utilized to record strategies and methodologies in daily content-area instruction. The results of the study identified areas where ENL, TBE, and DL teachers could more fully meet the needs of ELLs in their classes. A compendium of research-based teaching practices that can be used for professional development for ENL, TBE, and DL teachers was subsequently developed.

Keywords: instructional supports, observational protocol, pedagogical practice, professional development

It is well established that teaching English language learners (ELLs) requires specific pedagogical practices that English as a new language (ENL), transitional bilingual (TBE), and dual language (DL) teachers must consistently implement on a daily basis for instruction to be effective (Calderón, Slavin, & Sánchez, 2011; Cloud, Genesee, & Hamayan, 2009; Echevarría, Short, & Vogt, 2008; Echevarría, Vogt, & Short, 2007; Gersten et al., 2007; Goldenberg, 2013; Linan-Thompson & Vaughn, 2007; Walqui & van Lier, 2010). This year-long case study was approved by two official educational entities in New York City: The City University of New York (CUNY) and the New York City Department of Education (NYC DOE) internal review boards. The purpose of this study was threefold: (a) to identify and analyze effective pedagogical practices in select ENL, TBE, and DL classes in public schools administered by the NYC DOE using a newly developed observational protocol; (b) to identify areas where professional development could be beneficial to support and coach educators teaching in ENL, TBE, and DL programs; and (c) to determine if the observational protocol instrument was reliable and valid.

The target school locations had successful track records in teaching ELLs, as reported in the NYC DOE School Quality Snapshots, School Quality Guides, and School Academic Performance Dashboards (New York City Department of Education, 2019). These schools contained ENL, TBE, and DL classrooms, with ELLs receiving instruction according to the structure of the program. An ENL mainstream classroom can be defined as one where all instruction is conducted in English (Baker & Wright, 2017), though there may be a variety of languages employed with students who are at multiple levels of English language acquisition, as determined by state-wide diagnostic assessments (see EngageNY, 2014, for details). TBE programs typically provide first language literacy for 1–3 years, or until students are assessed and subsequently deemed eligible to transfer into an all-English program. DL programs are typically for a longer period (5–7 years), and first language literacy is developed equally alongside English language literacy throughout the program's grade levels.

Background

History of the Study

In 2011, Dr. Linda Genera, the author of this paper, was awarded a Fulbright Senior Scholar Research grant to study bilingual programs in Madrid, Spain. Throughout 2012, she observed classes and identified bilingual programs in the northwestern section of Madrid as “effective,” based on criteria set forth in the 2010 evaluation report on bilingual programs in Madrid (Dobson, Murillo, & Johnstone, 2010). The result of that research was the development of an observational protocol, the “Analysis of Learning and Teaching in Bilingual Education” (ALTBE) (Genera & Ramírez-Verdugo, 2014). The protocol was a field observation instrument (see Appendix A), consisting of a checklist to record specific teacher strategies and methodologies throughout a lesson, and an open-ended portion to record anecdotal observations. Through this format, the ALTBE aims to identify effective teaching practices as they happen in real time.

The observational protocol was based on existing, validated research-based studies of effective practices, most notably the Sheltered Instruction Observation Protocol (SIOP) (Vogt, Echevarría, & Short, 2010). The follow-up analysis tool contained within the ALTBE drew from the Observational Protocol for Academic Literacies (OPAL) (Armas & Lavadenz, 2011), which was used as a model to create a way to organize and analyze the data obtained from each classroom observation to build a framework of effective practices encompassing a broad range of grade levels and content areas. The resulting tool organized the raw data into five domains that delineate what constitutes effective practice in multilingual classrooms: (a) lesson introduction 1–4; (b) teaching strategies, methods, and techniques 5–9, 11; (c) critical thinking, higher order thinking, and cognitive development 10; (d) effective use of language assistants; and (e) assessment 11–13. Anchor definitions for each domain were established for scoring consistency (Genera & Ramírez-Verdugo, 2014).

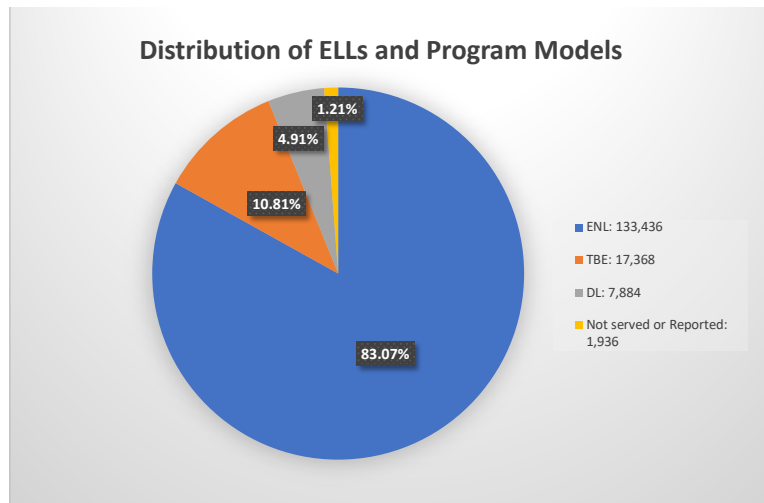
Initiatives in New York City

On March 3, 2016, at the National Association for Bilingual Education (NABE) Conference, then NYC DOE Chancellor Carmen Fariña called for better teacher training in bilingual programs. In April 2016, Chancellor Fariña announced that New York City schools would add 38 bilingual programs, including 29 new or expanded DL programs and nine TBE programs (New York City Department of Education, 2016). In May 2018, the newly appointed NYC DOE Chancellor, Dr. Richard Carranza, after a two-month observational tour (Carranza, 2018), announced an additional 50 bilingual school sites, stating, “It’s a matter of social justice for many of our students. It’s not a luxury. It is our duty” (quoted in Veiga, 2018). As of 2018, over 200 bilingual programs existed throughout the five boroughs (Veiga, 2018), demonstrating a commitment to both bilingual education and the increasing need to provide high-quality, language-focused instruction to students enrolled in these courses.

While the TBE and DL bilingual programs are expanding, ENL instruction remains the most common type of language instruction offered to ELLs, and demand for these is growing as well. According to the most current information available from the NYC DOE (New York City Department of Education, 2017), at the time of this study, there were 959,076 K–12 students enrolled in New York City schools. Of that total, 160,624 students (16.7%) were identified as ELLs, with approximately 55.57% in elementary grades, 18.07% in middle grades, and 26.36% in secondary grades.

The academic program provided for ELLs is overwhelmingly in ENL classroom settings, with 83.07% of ELLs being instructed through this program model. By contrast, only 10.81% are in TBE programs and 4.91% are in DL programs, as shown in Figure 1:

Figure 1. ELL Distribution in New York City Schools, 2017



Courtesy New York City Department of Education (2017)

Along with the number of ELLs in a variety of programs comes the need for teacher professional learning opportunities and support. If teachers are to be successful in meeting the needs of ELLs and demonstrating success in raising academic achievement among ELLs (and indeed all students), they must be provided with the research-based educational and academic tools that constitute the effective practices of their craft. In response, this study, building from the research in Madrid, sought to address the issue of effective practices in current ENL, TBE, and DL classrooms in New York City schools.

Upon returning to New York in 2012 to continue preparing preservice teachers working toward initial ENL or bilingual certification, the author began to track the growth of two of the bilingual programs (TBE and DL) in New York City.

Review of the Literature

The SIOP model. The SIOP (Sheltered Instruction Observation Protocol) model (Echevarría et al., 2007; Vogt et al., 2010) was foundational for this case study. SIOP articulates best practices for teaching academic English to ELLs, providing teachers with a variety of techniques to integrate language and content pedagogy. When consistently used to plan instruction, it has been shown to improve the achievement of ELLs (Echevarría, Richards-Tutor, Chinn, & Ratleff, 2011; Echevarría, Short, & Powers, 2006). The SIOP comprises eight components, each of which is focused on differentiating instruction for ELLs: (1) preparing the lesson, (2) building background knowledge, (3) providing comprehensible input, (4) identifying instructional strategies, (5) planning for interaction, (6) practicing and applying the concepts, (7) delivering the lesson, and (8) providing for review and assessment.

Effective use of the SIOP model is linked to training teachers through appropriate professional development opportunities. Short (2013), for example, states that “effective teaching improves student performance” and that the importance of sound professional development is “the key to improving teacher performance” (p. 125). When such teaching methods are implemented consistently and robustly, ELL students perform better on assessments of academic language and literacy than do those with teachers who are not trained in SIOP (Echevarría et al., 2011). Short, Fidelman, and Louguit (2012) find “significant differences in the average means in favor of the treatment group on Writing, Oral Language, and Total English scores” (p. 353), showing that implementation of the SIOP model has a positive impact on the development of English language proficiency among the ELLs in classes with SIOP-trained teachers. District reports confirm positive longitudinal results in math, reading, and writing test scores both at the target school site and when compared to similar schools in the district after implementing the SIOP model (Echevarría et al., 2008).

Implementing effective teaching practices. Instruction that leads to student gains starts with effective teaching strategies and practices. Without pedagogically sound support and scaffolding, ELLs struggle to acquire basic skills and suffer academically (Facella, Rampino, & Shea, 2005). The question, then, becomes: How does one identify what constitutes effective practices? Notably, there is an extensive

body of knowledge in demonstrated effective practices for ELLs. One of the core principles is the concept of “scaffolding,” or the support teachers provide that allows students to succeed in tasks that apparently are beyond their independent abilities (August, McCardle, & Shanahan, 2014, p. 495). Language-focused scaffolding—which includes such practices as making connections to content concepts and language features by drawing upon students’ background knowledge; using multimodal aids such as videos, multimedia resources, and graphic organizers; modeling; conducting vocabulary previews; adapting texts judiciously; implementing cooperative learning in the classroom; facilitating peer tutoring; and providing native language support—assists ELLs in achieving the lesson and curricular objectives (Echevarría et al., 2008).

In successful teaching practices, grade-level, age-appropriate language and content objectives are interwoven in accordance with national and state standards. Strategies to realize these objectives include planning for activities that facilitate cooperative grouping, engaging in manipulative tasks, providing opportunities for student-to-student interaction, and creating project- or performance-based applications. In addition, teachers must be mindful of their output; tools that require teachers to monitor and adjust their speech, such as paraphrasing, restating, and clarifying, assist ELLs in comprehending teacher talk. In addition, students must be explicitly taught functional language skills, and be provided with opportunities to negotiate meaning, confirm information, describe objects, compare concepts, and persuade the audience (Echevarría et al., 2008; Goldenberg, 2013). In a review of experimental research, August et al. (2014) found that explicit language-focused teaching, along with small-group instruction or individual tutoring, increases fluency outcomes. Incorporating direct instruction of vocabulary with word-learning strategies also serves as an effective technique for teaching ELLs.

Linguistically and culturally diverse classrooms in general, and more specifically those containing ELLs, benefit from incorporating culturally responsive pedagogy (Gay, 2002), which includes incorporating instruction meaningful to the learners’ background and experiences into their planning and instruction. In Gay’s outline of culturally responsive teaching, she lists examples of criteria for teachers to implement in their pedagogy, such as “developing a knowledge base about cultural diversity, including ethnic and cultural diversity content in the curriculum; demonstrating caring and building caring learning communities; communicating with ethnically diverse students; and responding to ethnic diversity in the delivery of instruction” (p. 106). Culturally responsive pedagogy provides ELLs with a curriculum that draws upon their rich and varied background knowledge, providing them with an opportunity to highlight and share their cultural and linguistic funds of knowledge (Moll, Amanti, Neff, & Gonzalez, 1992).

Teacher professional development. Wissink and Starks (2019) point to the importance of teacher preparation as a requisite for incorporating effective teaching strategies in ELL instruction. Walqui and van Lier (2010) and Heritage, Walqui, and Linqanti (2015) connect pedagogically sound teacher training to multilingual student success. In considering the critical need for teachers working with ELLs to have enhanced pedagogical skills, De Jong, Harper, and Coady (2013) state that there are three major dimensions to promote effective learning experiences for ELLs: (a) understanding ELLs from a bilingual and bicultural perspective, (b) understanding how language and culture shape school experiences and inform pedagogy for bilingual learners, and (c) demonstrating the ability to mediate a range of contextual factors in the schools and classrooms where they teach. Therefore, they assert, teachers “need to know when and how to adapt proposed and accepted best practices and be able to articulate why alternatives are necessary for bilingual learners” (p. 94). Lucas and Villegas (2013), in their study of pre-service teacher education, have determined a need to identify the skills, orientations, and knowledge a teacher requires as a foundation for teaching culturally and linguistically diverse students; in addition, they specify the knowledge base teachers need to work with ELLs, the kinds of professional development content teachers need to teach ELLs, and the importance for teachers to self-reflect on their individual needs for ongoing professional development to fairly assess their own individual professional growth.

In preparing for effective instruction in the content area of science, Lee and Buxton (2013) state that teachers must gain proficiency in both the content knowledge and the pedagogical practices to support language development of ELLS. Strategies that are consistent with accepted practices in instructed second language development include providing comprehensible input, accounting for student language levels when engaging in interaction, activation of prior knowledge, explicit instruction in the science expository text and genre, use of graphic organizers, and building upon ELL students’ funds of knowledge to provide instruction that is academically meaningful and culturally relevant (see p. 112).

Methodology

M-ALTBE Protocol

The planned methodology was to gather data using the ALTBE observational protocol developed by Genera and Ramírez-Verdugo (2014) to identify effective teaching practices in ENL, TBE, and DL settings in New York City. However, the original study had focused on a distinct population (teachers in Madrid) with substantial attention on the use and effectiveness of language auxiliaries—native English-speakers employed in the classroom as linguistic models. Thus, the instrument used in this study was modified to reflect the prevalence of content-based instruction in NYC schools, and named the “Modified ALTBE Observational Checklist” (M-ALTBE).

The items to be observed in the current study were condensed to allow for targeted focus on daily NYC DOE teaching practices. The M-ALTBE drew from updated research by Echevarría et al. (2007), and followed a five-point scale, based on a 2011 update to the SIOP model (Echevarría, Vogt, & Short, 2010a, 2010b). The scoring headings were modified as described in Table 1:

Table 1

Frequency Scoring of Observed Practices During the Course of the Observation

1 = Not observed	Practice is not observed at all during any part of the lesson.
2 = Minimally observed	Practice is observed superficially perhaps once or twice.
3 = Somewhat observed	There is evidence that this practice is incorporated into the lesson, but it is curtailed or not fully incorporated.
4 = Clearly and adequately observed	There is evidence that the teacher planned to use the practice in the lesson and did so, although not to its full potential.
5 = Consistently and explicitly observed	Practice is robustly and intrinsically part of the lesson. It is fully articulated and incorporated into the lesson at the appropriate point in the lesson.

Study Questions

The study posed the following questions:

1. Using the M-ALTBE observational protocol, what evidences of consistent use of effective practices were observable in select ENL, TBE, and DL programs in New York City?
2. How can the results of this research using the M-ALTBE protocol be implemented to provide additional support, coaching, and professional development to teachers of ELLs in New York City?

A third research question, regarding the reliability and validity of the instrument, was posited at the inception of the study. To establish statistical reliability of the M-ALTBE instrument, however, there would have had to be access to measured outcomes to ascertain that the instrument can be used as a predictor of either positive student outcomes or more effective teacher practices. Neither predictor was permitted under the CUNY and NYC DOE internal review boards, and as a result, analyzing the statistical reliability of the M-ALTBE checklist was not possible for this study; it is hoped that such a study will be a future endeavor for researchers in the field. As noted in a following section, an analysis of content validity could be performed and is reported in the findings.

Working with administrators and teachers, classes were observed using the M-ALTBE protocol. During observations, detailed and in-depth field notes were made based on each criterion of the observation protocol. After the observations, the notes were analyzed, and a numerical observational result was ascribed to each practice. These results were dependent upon the level of inclusion of each criterion in the lesson. Aggregate scores of all observations (reported anonymously) provided results indicating that while adequately effective practices were consistently in use across the board, other existing practices

and patterns appeared that could be more aligned to research-based effective practices and more robustly emphasized in instruction.

Participants

After sending out requests for access, two partner schools were selected to participate in this case study: an elementary school with both ENL self-contained mainstream classrooms and a DL program, and a high school that has well-developed ENL, TBE, and DL programs.

Elementary school. At the elementary school level, five teachers participated in the study. Two taught Spanish DL classes at the first- and second-grade levels; the other three taught ENL mainstream classes at the third-, fourth-, and fifth-grade levels. Of the five, two teachers were selected for intensive (focus) observations: Focus teacher #1 taught the DL Grade 2 class, and focus teacher #2 taught ENL English Language Arts (ELA) to Grades 3 and 4.

Secondary school. At the secondary-school level, 14 content teachers participated in the study, covering subject areas of ELA—History, Math, Science, and Global Studies; of the 14, 10 taught ENL classes, two taught TBE classes, and two taught DL classes. Two teachers were selected for intensive (focus) observations at the ninth- and 10th-grade levels: Focus teacher #1 taught DL global studies classes in Spanish and English and focus teacher #2 taught ENL science classes.

From January 2018 to June 2018, school visits were made, observations of teaching were conducted, and field notes were completed. At the elementary school, three classes were visited twice: DL Grade 1 and ENL Grades 4 and 5. The two focus classes, DL Grade 2 and ENL Grades 3 and 4, were visited once to twice a week for a 7-week period. At the secondary school, observations were conducted for 50-minute periods. Twelve of the ENL and bilingual classes were observed twice. The two focus classes, DL history and ENL science, were visited once to twice a week for a 7-week period.

Scoring

The M-ALTBE protocol was completed immediately after each observation, referring to the detailed field notes taken during each visit; the results would be reported as percentages of frequency of consistent use. The question of the percentage needed to qualify as “practiced on a consistent basis” and implemented consistently enough to be rated as “effective” was resolved through adopting the figure the NYC DOE (United Federation of Teachers, 2018) uses to evaluate teachers—the Measures of Teacher Practice (MOTP), which draws upon the Danielson’s Framework for Teaching Evaluation Instrument (2013)—to determine teacher effectiveness. The range of the “Effective-3” rating of the MOTP scores averages to 72% (New York City Department of Education, 2014, p. 6). Using these standards, it was determined that 75% indicated an acceptable benchmark for this study.

Research findings and analyses begin on the next page.

Research Findings and Analysis

Question 1: Using the M-ALTBE observational protocol, what evidences of effective practices were observable in elementary and high school ENL, DL, and bilingual programs in New York City?

Elementary Schools

Based on the tabulated results, the following areas listed in Table 2 were observed as being effectively practiced on a consistent basis:

Table 2
Effective Practice Use at the Elementary School Level

Practice	Frequency	%
Lesson Opening/Beginning: Lesson begins with an anticipatory activity or “hook” to gain student interest.	3.80	76
Lesson Objectives: Lesson’s content and language goals/objectives are given verbally or written on board.	4.10	82
Teaching Approaches: Lesson reflects a certain model or teaching paradigm pedagogically sound for ELLs (e.g., constructivist, SIOP, student-centered, culturally responsive, Socratic).	4.00	80
Comprehensible Input/Scaffolding: Lesson contains affordances for ELL comprehension and production. <ul style="list-style-type: none"> • <i>Examples of comprehensible input:</i> modeling, gestures, manipulatives, graphic organizers, visuals, choral repetition, mnemonics, hands-on activities • <i>Examples of scaffolding:</i> emphasizing key vocabulary, providing clear instructions for task completion, breaking down complex material, providing models 	4.00	80
Motivation: Lesson engages students in the topic or task.	3.90	78
Teaching Techniques: Instruction is made accessible to ELLs (e.g., teacher as facilitator, cooperative group work, conferencing).	4.20	84
Practice/Application: Lesson provides students with opportunities to practice and apply lesson concepts (e.g., teacher engages students in inductive learning activities, such as solving problems, answering questions, or completing projects).	3.90	78

Secondary Schools

Based on the tabulated results, the following areas listed in Table 3 were observed as being effectively practiced on a consistent basis.

Table 3

Effective Practice Use at the Secondary School Level

Practice	Frequency	%
Lesson Opening/Beginning: Lesson begins with an anticipatory activity or “hook” to gain student interest.	4.25	85
Lesson Objectives: Lesson’s content and language goals or objectives are given verbally or written on board.	4.21	84
Teaching Approaches: Lesson reflects a certain model or teaching paradigm pedagogically sound for ELLs (e.g., constructivist, SIOP, student-centered, culturally responsive, Socratic).	4.50	90
Motivation: Lesson engages students in the topic or task at hand.	4.00	80
Teaching Techniques: Instruction is made accessible to ELLs (e.g., teacher as facilitator, cooperative group work, conferencing).	4.71	94
Building Background Knowledge: Lesson builds on what students have learned in previous lessons or their general knowledge of the subject.	3.96	79
Engagement: Teacher engages students in active learning. (e.g., students are learning by doing with peers in pairs, partners, or small groups; teacher provides for student interactions; teacher provides appropriate wait time for student responses).	3.75	75
Practice/Application: Lesson provides students with opportunities to practice and apply lesson concepts (e.g., teacher engages students in inductive learning activities, such as solving problems, answering questions, or completing projects).	3.75	75

As Tables 2 and 3 show, at the elementary level, teachers incorporated seven effective practices into their lessons; at the secondary level, teachers were consistently including and implementing eight effective practice commonalities. Overlap occurred in six categories: Lesson Opening and Beginning, Lesson Objectives, Teaching Approaches, Motivation, Teaching Techniques, and Practice/Application. While it is encouraging that teachers across the grade levels are using several effective practices in their teaching, it is necessary to encourage and mentor practices that were not observed, as is discussed in the findings for Question 2.

Question 2: How can the results of this research using the M-ALTBE protocol be implemented to provide additional support and coaching to teachers of ELLs in New York City?

Elementary Schools

Based on the observations in the elementary school, the data shown in Table 4 were compiled. As demonstrated by the M-ALTBE scores, increased support for teachers and additional professional development could be beneficial in these areas:

Table 4
Effective Practices That Need Support at the Elementary School Level

Practice	Frequency	%
Critical Thinking/Higher Order Thinking: Questions that teachers asked and the activities that students were engaged in contain higher levels of Bloom’s Taxonomy.	2.8	56
Formative Assessment: Teacher monitors students’ target language and content progress throughout the lesson (e.g., checks for understanding, provides positive feedback to students, monitors students’ progress, and allows for student self-correction).	3.4	68
Multimedia and Multimodal Resources: Lesson uses interactive technology (e.g., smart boards, tablets, internet-based resources, WebQuests, blogs, webcams), as well as advanced or interactive technology, such as PowerPoint, and less technologically based resources, such as overhead projectors, games, and flash cards.	3.4	68
Providing Ongoing Feedback: Teacher provides support for achieving objectives (e.g., clarifies, corrects nonjudgmentally, advises, encourages, praises, reassures, and reinforces).	3.6	72
Building Background Knowledge: Lesson builds on what students have learned in previous lessons or students’ general knowledge of the subject.	3.7	74
Promoting Student Engagement with Content and Language: Teacher implements specific structures to integrate content and language such as think-pair-share, think-pair-square, shoulder partners, and small-group projects.	3.7	74
Use of Summative Assessment: Teacher determines content and language development at the end of the lesson, through structures such as exit slips, journal entries, checklists, rubrics, and logs.	3.7	74

Above all, at the elementary level, critical thinking and the use of critical thinking questions and activities was most lacking and where professional development is most needed. The areas of formative assessment during the lesson and use of multimedia resources registered a similar level of need. Regular ongoing feedback, building background knowledge, engagement, and summative assessment after the lesson approached satisfactory, but could still benefit from attention to their planning and delivery.

Secondary Schools

Based on the observations in the secondary school, the following results were compiled. As Table 5 shows, increased support for teachers and additional professional development could be beneficial in the following areas:

Table 5
Effective Practices That Need Support at the Secondary School Level

Practice	Frequency	%
Critical Thinking/Higher Order Thinking: Questions that teachers asked and the activities that students were engaged in contain higher levels of Bloom's Taxonomy.	3.36	67
Formative Assessment: Teacher monitors students' target language and content progress throughout the lesson (e.g., checks for understanding, provides positive feedback to students, monitors student progress, and allows for student self-correction).	3.32	66
Multimedia and Multimodal Resources: Lesson uses interactive technology (e.g., smart boards, tablets, internet-based resources, WebQuests, blogs, webcams), as well as advanced or interactive technology, such as PowerPoint, and less technologically based resources, such as overhead projectors, games, and flash cards.	3.29	66
Comprehensible Input/Scaffolding: Lesson contains affordances for ELL comprehension and production. <ul style="list-style-type: none"> • <i>Examples of comprehensible input:</i> modeling, gestures, manipulatives, graphic organizers, visuals, choral repetition mnemonics, hands-on activities • <i>Examples of scaffolding:</i> emphasizing key vocabulary, providing clear instructions for task completion, breaking down complex material, providing models 	3.43	69
Providing Ongoing Feedback: Teacher provides support for achieving objectives (e.g., clarifies, corrects nonjudgmentally, advises, encourages, praises, reassures, and reinforces).	3.57	71
Use of Summative Assessment: Teacher determines content and language development at the end of the lesson, through structures such as exit slips, journal entries, checklists, rubrics, and logs.	3.64	73

At the secondary school level, two practices, the use of multimedia and multimodal resources and formative assessments, were slightly above critical thinking and higher order thinking. Comprehensible input/scaffolding is in the mid-range of professional development need. Providing ongoing feedback approachhappiled the acceptable range and was often supplied as teachers circulated or assisted students and groups engaged in their work. Summative assessments, which also approached the acceptable range, usually entailed end-of-lesson completion of a graphic organizer, responses to oral and written questions, or exit tickets that students had to complete before the lesson was concluded.

Some similarities were observed at both the elementary and secondary schools concerning the areas in which established effective practices needed to be more robustly implemented. It is important to note that four practices—critical thinking/higher order thinking, formative assessment, multimedia and multimodal resources, and providing ongoing feedback—call for professional development at both the elementary and the secondary levels. Two criteria at the secondary school level appear to be more consistently addressed than at the elementary school level: building background knowledge and promoting student engagement. At the secondary school level, the teachers were aware that not all students had the same educational experiences in their elementary/middle school years, so they worked to provide background knowledge more fully. At the elementary level, teachers seemed more acutely aware that their students needed comprehensible input and scaffolding. This was evident in the

abundance of visuals, graphic organizers, hands-on manipulatives, charts, maps, and other realia in the classroom; in addition, elementary school teachers drew upon students' previous learning, using such phrases as "Remember, yesterday, when we talked about . . .?"; "Who remembers what we were discussing yesterday?"; and "In our last lesson, you learned about . . . Who can tell me something about that?"

Overall, NYC ENL and bilingual teachers demonstrated awareness of effective practices, as none were entirely excluded from their pedagogy. When such effective practices were analyzed, however, it became evident that they could be further integrated and produced on a regular basis. Nevertheless, it is the across-the-board low levels of critical thinking and the infrequency of critical thinking questions and activities that should be addressed by both sets of teachers. Although these scores were low, critical thinking questions and skills were not totally omitted, but they were inconsistent and in need of fuller implementation. This, then, is where professional development would enter as a natural response to teacher needs. There are many aspects to developing critical thinking skills, but children of all ages can engage in such work (Alexander, 2014). Developing strong, robust critical-analytic thinking should be systematically incorporated into the school experience for all learners—and perhaps even come at the top of the order of topics to be provided.

A Note on the Content Validity of the Protocol

Although it was not possible because of administrative restrictions to establish reliability, after an analysis of the publications of leading authors and researchers noted given here, it was determined that content validity could be established. Research work that can help confirm the content validity of the effective teaching practices reflected in the M-ALTBE are found in Calderón et al. (2011); Cloud (2017); Cloud et al. (2009); Cloud, Lakin, Leininger, and Maxwell (2010); Danielson (2018); Danielson and Coady (2018); Echevarría et al. (2007); Gersten et al. (2017); Linan-Thompson and Vaughn (2007); and The Alliance for Excellent Education (2005). In each of these resources, effective practices included those that were identified in this study and were included on the M-ALTBE checklist. Content validity for the M-ALTBE was also established by comparing it to the New York City Department of Education Measures of Teacher Practice (MOTP) (New York City Department of Education, 2014; United Federation of Teachers, 2018). This system of teacher evaluation is based on and adapted from the Danielson (2013) Framework for Teaching, which sets forth four domains of education: planning and preparation, classroom environment, instruction, and professional responsibilities. The M-ALTBE closely matched and corresponded to all 16 components of the first three Danielson's domains: planning and preparation (1a-f), classroom environment (2a-e), and using questioning and discussion techniques (3a-e).

Recommendations for Follow-Up

Professional development could prove to be beneficial in each of the practices found to be inconsistent or underdeveloped during the class observations. Each one of these practices could be part of professional development, addressed in face-to-face and online modules, to support and increase teacher effectiveness. According to Echevarría et al. (2008), such training needs to incorporate three elements of quality: context, process, and content, all of which are considered in these recommendations:

- *Context* would include an explicit purpose to each module, with teacher/administrative support and with sessions held at the local school setting.
- *Process* would include using multifaceted student data to determine priorities, presenting a variety of strategies to select from to meet the needs of individual educators and provide for participant collaboration.
- *Content* would include preparing educators to have high expectations for all students; providing teachers with research-based instructional strategies, knowledge, and skills to assist students in meeting rigorous academic standards; and establishing ways to encourage and involve families and the community.

Based on the ten best practices to assure effective teaching given in Genera and Ramírez-Verdugo (2014, 2015), as well as other sources (e.g., Danielson, 2013; Echevarría et al., 2007, 2008; Wagner & King, 2012), and the results of the observations conducted in this study, personal development modules have been developed and can be delivered to teachers. These professional development modules, which create a compendium of best practices (see Appendix B) to prepare teachers to best meet the academic

needs of their ELLs, include focused and appropriate workshops on how teachers can best present the six overlapping areas in both elementary and secondary teaching, as well as exhibit the three distinct practices at each of the grade level contexts. Each module has a list of “must-have” components, and training can be tailored to a specific audience of professionals, based on their students’ needs.

Conclusion

This case study identified effective practices that were consistently used in select ENL, TBE, and DL classrooms; it also identified areas where ENL, TBE, and DL teachers could use heightened support and coaching to implement additional effective strategies in their daily instruction. Finally, it corroborated that results were similar to those observed in a cross-national teaching setting. Subsequently, it produced a compendium of best practices, strategies, and research-based teaching approaches that can be presented in learning modules or as part of an inclusive professional development program.

As noted above, professional development modules have been produced using current academic publications, such as the National Staff Development Council (2001), and the work of Calderón (2007); Cloud et al. (2010); Echevarría et al. (2008); Escamilla et al. (2014); Herrell and Jordan (2012); and Valdes, Menken, and Castro (2015), as models and resources. These modules have been developed to support teacher education programs, partner schools, program completers currently teaching in the NYC DOE, and service area schools, as well as to support other teachers in ENL, TBE, and DL programs across New York City. With over 200 bilingual programs now in effect, and with Chancellor Carranza’s emphasis on increasing the number of effective bilingual programs, the opportunity to influence the NYC DOC is immeasurable. Perhaps, however, even more important—as over 80% of ELLs are being taught in ENL mainstream classes, properly preparing teachers for integrated content and language instruction in English certainly should be a focus of professional development. As such, it is hoped that there will be an expressed interest from administrators, teachers, and other stakeholders in attending professional learning seminars or workshops to become knowledgeable about including research-based effective teaching practices in their daily instruction across the content areas. It is hoped as well that the continued study of effective teaching practices for English language learners in ENL, TBE, and DL classes will add to the body of professional knowledge of effective teaching practices, and will help to support teachers as they provide ELLs with the skills and knowledge needed to be ready for college and careers, to be lifelong learners, and to be the critical thinkers of tomorrow.

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APPENDIX A: M-ALTBE OBSERVATIONAL PROTOCOL

1 = Not Observed 2 = Minimally Observed 3 = Somewhat Observed
4 = Clearly and Adequately Observed 5 = Consistently and Explicitly Observed

I) INTRO: Warm-Up/Anticipatory Set

- 1) **Lesson Objectives or Aims** **Result** _____
- Content objectives are apparent/discussed.
 - Language objectives are apparent/discussed.
- 2) **Motivation** **Result** _____
- Interest is activated in the pre-lesson warm-up.
 - Lesson is linked to students' lives and experience.
- 3) **Lesson Opening/Beginning** **Result** _____
- Goals and expectations are clearly explained before lesson begins.
 - Clear instructions for task completion are provided.
- 4) **Building Background** **Result** _____
- Prior knowledge is activated and linked to current lesson.
 - Key vocabulary is introduced and linked to previous learning.

II. THROUGH: Lesson Delivery—Teaching the Lesson

- 5) **Teaching Approach** **Result** _____
- The teacher uses a clear and specific teaching approach that reflects a certain model or research paradigm or theory:
- Constructivist
 - Socratic
 - SIOP
 - Teacher centered
 - Interactive/group or team based
 - Student centered
 - Communicative
 - Directed to whole class
 - Cooperative learning
 - Mini lesson
 - Jigsaw group
 - Small groups
- 6) **Teaching Techniques** **Result** _____
- The teacher uses specific teaching techniques, such as:
- Modeling
 - Elaborating
 - Demonstrating
 - Questioning that promotes higher order thinking skills
 - Lecturing (teacher talk)
 - Summarizing
 - Teacher as facilitator
 - Jigsaw
 - Role playing
 - Numbered heads
 - Visualizations
 - Four corners
 - Real-world learning
 - Roundtable
 - Brainstorming
 - Sending a problem
 - Discussions
 - Conferencing/Interacting
 - Hands-on activities
 - Cooperative group work
 - Thinking aloud
 - Inquiry-based instruction
 - Previewing and predicting
 - Differentiation
 - Prompting
- 7) **Student Engagement** **Result** _____
- The teacher plans and promotes student engagement, discussion, and interaction, partner work, think pair share, turn and talk, student-to-student interaction, small groups, cooperative groups, jigsaw groups, discussion groups, peer-to-peer teaching, and literature circles.

APPENDIX A—Continued

- 8) **Comprehensible Input and Scaffolding** **Result** _____
- The teacher provides comprehensible input and scaffolding, such as teacher think aloud, self-questioning ("I wonder . . ."), breaking down complex materials, examples, manipulatives, graphic organizers, maps, globes, pictures, choral repetition, mnemonics, and verbal or visual cues.
- 9) **Multimedia/Multimodal Materials** **Result** _____

The teacher incorporates multimedia material, such as SMARTBoards, videos, blogs, wikis, virtual tours, podcasts, webcams, WebQuests, BrainPoPs, internet games, virtual manipulatives, and e-books, into the lesson. Multimodal materials include PowerPoint, overhead projectors, games, and flash cards.

10) Critical Thinking

Result _____

The teacher includes metacognitive and cognitive questions that are formatted according to Bloom's Taxonomy and that promote higher order thinking. Included are such activities and tasks as brainstorming, mind mapping, predicting, sequencing, summarizing, categorizing, comparing/contrasting, making inferences, problem solving, evaluating, asking literal vs. inference questions, organizing, and self-monitoring.

11) Practice and Application

Result _____

The teacher incorporates practice and application during and after instruction, including hands-on activities, providing experience using manipulatives, encouraging student reading and interactive writing, listening for a purpose, speaking activities to practice both linguistic form and content, games, graphic organizers, jigsaw projects, chants, songs, student-created summaries and peer challenges, discussion circles, peer-to-peer teaching, and problem-solving activities.

III. BEYOND: Feedback, Assessment

12) Feedback

Result _____

The teacher provides feedback to students during the lesson, including:

- Specific, academic, positive feedback to students throughout the lesson. Extends feedback to go beyond a sprinkling of such general comments as "Good" or "Correct" to offer such specific encouragement as: "Good job! You listened carefully and identified the main character and gave a detailed description."
- Gives periodic review during the lesson.
- Clarifies and corrects misconceptions.
- Paraphrases students' responses using academic language and specific target vocabulary.
- Includes in the feedback speaking manner, oral expression, and body language (thumbs up, smiles, nod).
- Allows for peer feedback in small-group and partner configurations.
- Monitors and checks student work.

13) Formative/Summative Assessment

Result _____

The teacher assesses student achievement during and after the lesson in the following ways:

- Gauges student comprehension and learning throughout the lesson with frequent comprehension checks.
- Uses a variety of formative assessments, such as entrance/exit slips, class check-in, response logs, number wheels, art and illustration, and outcome sentences for individual or group formative assessment.
- Conducts group assessment, such as agree/disagree, thumbs up/down, and response boards.
- Allows for student self-assessment during and after the lesson.
- Uses a variety of summative assessment tools, such as checklists, rubrics, journals, logs, and exit slips.

APPENDIX B: COMPENDIUM OF STRATEGIES AND TEACHING METHODOLOGIES

Using research-based effective practices to promote effective teaching—e.g., Danielson’s (2015) Framework for Supporting ELLs, Wagner and King’s (2012) 12 implementation practices, Echevarría et al. (2008) coaching implementation models, Echevarría et al.’s (2010a, 2010b) SIOP models, along with the results of the observations conducted in this study—the following teacher modules should be developed and offered to teachers. Professional development modules would include meaningful and targeted workshops on how teachers can incorporate each of the following into their pedagogy on a consistent basis and at robust levels by doing the following:

- 1) Build background knowledge/link to previous learning:
 - Prior knowledge is activated and linked to current lesson through reading a related story, play, or article and viewing videos on the topic.
 - Prior concepts and vocabulary learning are bridged to the current lesson.
 - Students are given opportunities to link prior experiences by reviewing such material as graphic organizers, charts, visuals, word banks, and illustrations.
 - Lessons are linked to students’ experiences, cultures, environment, and socio-cultural experiences.
 - Key vocabulary is introduced and linked to previous learning.
- 2) Pose higher order thinking questions and develop critical thinking skills, such as:
 - Formatting questions according to Bloom’s Taxonomy of higher order thinking categories
 - Asking metacognitive and cognitive questions or tasks that promote higher order thinking skills
 - Asking literal vs. inference questions
 - Brainstorming
 - Categorizing
 - Comparing/Contrasting
 - Drawing inferences
 - Evaluating
 - Mind mapping
 - Organizing
 - Predicting
 - Problem solving
 - Self-monitoring
 - Sequencing
 - Summarizing
- 3) Encourage student participation, in both small groups and partners; devise an abundance of active student engagement strategies:
 - Cooperative groups
 - Jigsaw groups
 - Small-group projects
 - Student-to-student interaction
 - Think alouds
 - Think-pair-share
 - Think-pair-square
 - Turn and talk

APPENDIX B—Continued

- 4) Make effective use of multimedia technology built into lessons, with such tools as:
 - Blogs
 - Internet games
 - Podcasts
 - SMARTBoard
 - Videos
 - Virtual manipulatives
 - Virtual tours
 - Webcams
 - WebQuests
 - Wikis
- 5) Incorporate practice and application into each lesson:
 - Provide ample opportunity for students to practice or apply skills or concepts related to the direct lesson that was taught.
 - Incorporate practice and application activities after instruction, such as hands-on activities; experiments' use of manipulatives; differentiation of tasks; student reading, writing, listening, speaking activities.
 - Provide for "gradual release of control" by allowing students to practice and apply new learning in small-group or peer engagement activities.
- 6) Provide ongoing positive feedback and reinforcement to let students know if they are successfully accessing the lesson's objectives through these actions:
 - Specific, academic, positive feedback to students throughout the lesson; extending feedback to go beyond a sprinkling of such general comments as "Good" or "Correct" to offer such specific encouragement as "Good job! You listened carefully, identified the main character, and gave a detailed description."
 - Give periodic review during the lesson
 - Clarify and correct misconceptions
 - Paraphrase students' responses using academic language and specific target vocabulary
 - Give feedback that encompasses oral, and body language (thumbs up, smiles, nods)
 - Allow for peer feedback in small-group and partner configurations
 - Monitor and check student work throughout the lesson
- 7) Include formative assessments throughout the lesson and a summative assessment after the lesson:
 - Gauge student comprehension and learning throughout the lesson with frequent comprehension checks
 - Use a variety of formative assessments, such as entrance/exit slips, class check-in, response logs, number wheels, art and illustration, and outcome sentences for individual or group formative assessment
 - Group assessment such as agree/disagree, thumbs up/down, and response boards
 - Allow for student self-assessment during and after the lesson
 - Use a variety of summative assessment tools, such as checklists, rubrics, journals, logs, and exit slips
- 8) At the elementary school level—Lesson beginning and motivation:
 - Clearly present goals and expectations before lesson begins
 - Provide clear, specific instructions for task completion
 - Activate interest in the pre-lesson warm-up
 - Incorporate multimedia materials to introduce the lesson and stimulate student interest
 - Emphasize how lesson relates to students' backgrounds, lives, and experiences
 - Include in lesson meaningful experiences that students are interested in

APPENDIX B—Continued

- 9) At the secondary school level—Comprehensible input and scaffolding strategies:
- Use a variety of *comprehensible input* techniques in teaching:
 - Breaking down complex materials
 - Choral repetition
 - Demonstrations
 - Developing content and academic language vocabulary through contextual or visual cues
 - Gestures, pantomime, movement
 - Graphic organizers
 - Hands-on, discovery, interactive activities
 - Manipulatives
 - Maps, globes, pictures
 - Modeling
 - Moderating speech; explaining idiomatic expressions; clarifying metaphors, homonyms, and graphophones
 - Previewing and reviewing lessons
 - Providing examples
 - Realia
 - Restating, paraphrasing, repeating
 - Teacher think aloud, self-questioning (“I wonder . . .”)
 - Verbal or visual cues
 - Visuals
 - Word walls
 - Written charts and transparencies
 - Use a variety of *scaffolding strategies*:
 - Comprehension strategies (many are available)
 - Directed readings
 - GIST (Generating Interaction between Schemata and Text)
 - Graphic organizers
 - Metacognitive, cognitive, and social/affective strategies
 - Mnemonics
 - QAR (Question Answer Response)
 - Rehearsal strategy
 - SQ3R: (Survey Question Read Recite Review)
 - SQP2RS (Survey, Question, Predict, Read, Respond, Summarize)
 - Student think alouds
 - Use of skim, scan, selective attention
 - Summarization strategies: four-two-one, final countdown, chain of events, problem-solution, summary star, story pyramid