Instructional Practices for English Language Learners During Content Instruction

THE CENTER ON STANDARDS & ASSESSMENT IMPLEMENTATION
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As the population of English language learners continues to grow across K–12 school systems, states, districts, and schools must consider how to ensure that English language learners are given the appropriate academic supports to enable curricular access and academic achievement. ELLs need instructional content and resources that advance their proficiency in English, while also needing support for their development of deep content knowledge. The concurrence of English and disciplinary proficiency is especially important given that to achieve the new college and career ready content standards, all students must understand academic and disciplinary language and literacies (Moore, Schleppegrell, & Palincsar, 2018; Spires et al., 2018). Drawing from research on ELL learning and instruction, this brief provides a high-level overview of considerations for supporting ELLs and addressing their learning needs in the classroom[1]. It focuses on three areas of instruction needed for ELLs: scaffolding strategies, academic language, and disciplinary language and content knowledge. Teachers should address these three foci during their instruction to provide ELLs with different opportunities to engage with the content and build their proficiency in both the subject matter and with the English language (Heritage & Linquanti, 2018). The resources summarized in this brief are intended for readers to consult the particular text for more detail in order to apply effective instructional practices to meet the varied learning needs of ELLs.

Scaffolding Learning

As part of instruction, all students need specified supports for learning, and these supports are particularly important for students learning in a second language. Teachers can use scaffolding with students to address students' learning needs while also preparing them for independent learning (Spycher, 2017). Instructional scaffolding is the process by which students can complete a task or accomplish a goal with instructional supports. Scaffolds can take the form of teacher modeling, providing support for using manipulatives or graphic organizers, and structured conversations (Zwiers et al., 2017). Scaffolding focuses on bridging the gap between what a student can currently do and what the student will be able to do in the future with support.

[1] This brief is the result of a larger report for a state that requested information on integrating English language development standards with content-area instruction.

To scaffold students, teachers temporarily "control," or handle, the more difficult aspects of a task or activity while the students use their competencies to address the task elements that are within their range. As students progress in their learning, teachers gradually remove supports and enable students to take on increasingly difficult task aspects on their own (Wood, Bruner, & Ross, 1976). This facilitates narrowing the gap for students between existing skills and new skills, and helps students build their capabilities within a structured environment. For ELLs, scaffolding provides targeted support that is responsive to ELL students' learning needs while they are developing content and linguistic proficiency. Scaffolding has the potential to develop a supportive learning environment where students can take ownership of their learning and participate in a learning community (Center for the Collaborative Classroom, n.d.).

Wood et al. (1976) identify the following as functions of scaffolding:

- Enlist the student's interest in and adherence to the task at hand;
- Simplify the task by reducing the number of constituent acts required to reach the solution;
- Direct students to focus on the task and help students identify prior success and its relation to increasingly difficult tasks;
- Explicate the relevant features of each task; and
- Demonstrate or model solutions to a task.

When implementing scaffolding into classroom instruction, Walqui (2006) identifies six overarching central features of scaffolding that should be considered:

- Continuity – Repeating tasks with variations and connections to one another.
- Contextual Support – Providing a safe, supportive learning environment that includes different points of access to learning means and goals.
- Intersubjectivity – Providing a learning environment that encourages mutual engagement, rapport, and participation.
- Contingency – Adjusting task procedures to learner's actions.
- Handover/Takeover – Increasing learner's role as skills and confidence increase.
- Flow – Balancing task skills and challenges.

Scaffolding is a central aspect of strong instruction, especially for teaching ELLs and giving them the supports needed to acquire English fluency while also meeting learning standards (Center for the Collaborative Classroom, n.d.). When utilizing scaffolding with ELLs, Walqui (2006) recommends that instruction focus on providing multiple opportunities to develop understanding with structured linguistic and conceptual supports. Teachers can support ELLs in the classroom with verbal scaffolds—prompts, questions, and elaboration—that facilitate student use of comprehension and thinking skills to improve language proficiency. Procedural scaffolds can also be used to support ELLs by providing tools, resources, and other supports before, during, and after instruction. Both types of scaffolds (verbal and procedural) can be implemented to support ELLs as they develop English fluency while also concurrently developing content knowledge (Center for the Collaborative Classroom, n.d.).

Walqui (2006) identifies six main types of instructional scaffolding strategies that can be incorporated into instruction for various subjects:

- Modeling – Model tasks and activities to demonstrate appropriate performance, as well as academic language use.
- Bridging – Activate students' prior knowledge to support their understanding of new concepts and language skills, as well as highlight the link between students and subject matter to demonstrate relevance.
- Contextualizing – Support accessibility and understanding of academic language by embedding materials in sensory contexts (e.g., using manipulatives, film, or realia); provide contextualization by using analogies based on students' experiences.
- Schema Building – Help students recognize how new information fits into preexisting knowledge and understanding.
- Re-Presenting Text – Engage students in activities that require them to apply linguistic connections across different genres (e.g., using short story writing skills to create a narrative essay, changing a third-person historical narrative into a first-person narrative).
- Developing Metacognition – Support students' development of strategies for the development of learner autonomy.

Visual and verbal supports can be developed and used as a scaffolding support to help ELLs comprehend content and to provide different tools for student access (National Academies of Sciences, Engineering, and Medicine, 2017). Supports like videos and graphic organizers can be strategically used to present material in different ways and meet learning needs. For some ELLs, verbal supports might be of more help, depending on student learning needs and styles. Verbal supports can help clarify content and support understanding by encouraging students to engage with content in different ways, as well as help uncover areas where students might be experiencing confusion (National Academies of Sciences, Engineering, and Medicine, 2017). Depending on ELL learning needs, visual and verbal supports can be supplemental tools for encouraging student content understanding and providing instruction with multiple entry points.

The Council of the Great City Schools (2016) suggests that teachers be intentional about selecting scaffolds that are reflective of students' previous educational experiences and language development history, ensuring that scaffolds are also aligned to students' individual learning needs and progress toward content goals. These strategies can be applied in different subjects to support ELLs as they develop academic and linguistic proficiency, while also helping students build their academic confidence.

Project EXCELL (Exceptional Collaboration for English Language Learning) developed a guide for scaffolding strategies that can be referenced when developing instructional plans and activities that address the linguistic and cultural needs of ELLs.

Developing Academic Language Knowledge

Academic language consists of the ways students are expected to use language (reading, writing, speaking, and listening) to participate in learning tasks and demonstrate learning (Scarcella, 2003; Schleppegrell, 2004). Two aspects of academic language are language functions—how students use language to serve various communicative purposes (e.g., explaining, justifying, inferring, seeking information, informing)—and language features at the word, sentence, and discourse levels (see Chang et al., 2017, for descriptions and examples). For all students, and ELLs in particular, academic language knowledge is considered a bridge that connects English language development with academic achievement.

Academic language should be explicitly taught. As part of instructional planning, teachers must consider how academic language might impact student understanding; this consideration is heightened for ELLs as they continue to develop linguistic fluency that supports their academic language understanding. Teachers can incorporate academic language across different content areas to help ELLs develop academic language skills that can then be used to develop content understanding (National Academies of Sciences, Engineering, and Medicine, 2017). For lesson planning, Chang et al. (2017) recommend that teachers identify possible academic language demands found in lesson tasks and texts and incorporate supports ELLs may need to understand academic language (e.g., stopping and probing for understanding, pre-teaching academic language features, or clarifying or rewording directions).

Across all discipline areas, the What Works Clearinghouse found that teachers can help ELLs develop language skills by the following: providing structured opportunities for engaging students in academic conversations, using instructional tools to clarify and anchor content, and explicitly teaching academic vocabulary that is critical for content understanding (Baker et al., 2014). In doing so, teachers can support ELLs to develop both discipline-based knowledge and English fluency skills that support academic learning. The What Works Clearinghouse identified the following strategies for integrating English language instruction into different disciplines (Baker et al., 2014):

- Strategically using instructional tools (e.g., short videos, visuals, graphic organizers) to help students make sense of content;
- Explicitly teaching both general academic vocabulary and discipline-specific academic vocabulary;
- Providing daily opportunities for students to have content-based discussions, either in pairs or small groups; and
- Providing writing opportunities that allow students to apply newly learned concepts and skills and extend their own content learning and understanding.

To support ELLs in developing academic vocabulary, the What Works Clearinghouse found that a focus on intensively teaching academic vocabulary demonstrated a positive impact. Baker et al. (2014) define academic vocabulary as "words that are used primarily in the academic disciplines (science, history, geography, mathematics, literary analysis, etc.). These words are much more frequently used in discussions, essays, and articles in these disciplines than in informal conversations and social settings" (p. 14). According to Baker et al. (2014), teachers can incorporate this focus on academic vocabulary by:

- Choosing accessible, content-rich texts (e.g., brief excerpts from text or trade books, magazine or newspaper articles) that include academic vocabulary to help ELLs connect vocabulary and context;

- Selecting and intensively focusing on a small set of academic vocabulary words and teaching these over several lessons to give ELLs time to deeply learn the concepts and nuances associated with the words;
- Using multiple modalities (writing, speaking, and listening) to give ELLs multiple opportunities to understand academic vocabulary; and
- Teaching word-learning strategies (using context clues, word parts, cognates) so ELLs can independently figure out the meaning of unknown words.

Extended discourse is a critical method in developing ELLs' academic language knowledge (Anstrom et al., 2010). It involves conversations or discussions between two or more people (i.e., students, teachers) and requires turn-taking in which those speaking are using several utterances (or sentences). This supports ELLs as they develop their speaking facilities and encourages both acquisition and demonstration of language and content learning. Extended discourse allows ELLs the opportunity to practice, extend, control, and master academic language (Zwiers, 2007). Collaborative opportunities can be valuable for encouraging ELL conversations. Teachers might consider group structures that allow ELLs to demonstrate their fluency and expertise, while also enabling ELLs to receive peer supports in other areas. This helps students take on active speaking roles and be positioned as contributing classroom members, supporting ELLs who may be hesitant to speak or engage in discussion otherwise (National Academies of Sciences, Engineering, and Medicine, 2018). Teachers should develop collaborative groups that allow ELLs to take on both leadership and facilitator roles. As with extended discourse, teachers model what collaboration looks like and what the norms are for those collaborations.

ELLs may also benefit from having model texts to use as examples that help them deconstruct the academic language features of texts. Model texts can be used as tools to demonstrate expectations for ELLs and provide guidance on how to complete tasks correctly. In their examination of ELL students' high school experience, Gebhard (2019) identified the use of model texts as an effective component of students' literacy development, as model texts provide guidance on how the student could complete progressively difficult tasks without prescribing what to do. Model texts can be valuable resources for ELLs to deconstruct the linguistic features of texts and understand how meaning is developed in different types of texts (Gebhard, 2019).

Developing Language and Content Knowledge in the Disciplines

To appropriately support ELLs to develop advanced linguistic and content competencies, instruction must include the development of disciplinary language and disciplinary knowledge and practices. The following sections focus on suggestions and resources that can be used in discipline-specific classrooms.

English Language Arts (ELA)

Helping ELLs develop strong reading, writing, listening, and speaking skills will support them as they take on complex analytic demands in other disciplines. Supporting ELLs in ELA lessons does require recognition of the difficulties that students may have in processing complex and intricate aspects of English. This can be especially pressing for ELLs who are learning to decode written text while simultaneously acquiring basic conventions of English. While this can be challenging, ELA teachers can provide instructional supports as ELLs engage in language and literacy practices that support the development of English fluency and skills that will also allow students to develop understanding in other disciplines (Bunch, Kibler, & Pimentel, 2012).

To support ELLs as they develop fluency and skills for ELA and other disciplines, ELA teachers can help ELLs identify and leverage the resources and skills they already possess in their home languages. Teachers can draw on students' language and literacy backgrounds, interests, and motivations to determine and implement supports that can support them with complex reading, writing, speaking, and listening tasks (Chang et al., 2017). For support with reading tasks, Bunch, Kibler, and Pimentel (2012) suggest ELA teachers consider the following strategies to help students develop independent reading skills:

- Focus on vocabulary building using meaningful activities that incorporate classroom texts;
- Use more accessible texts (perhaps texts in ELL students' home languages) to prepare students to read more difficult texts within the same lesson or unit; and
- Focus on grammatical structures that support meaning making (and how these structures compare to grammar use in students' home languages).

ELL students' development of speaking and listening skills can be similar to that of reading in that it draws from multiple interrelated knowledge sources. Speaking and listening requires ELLs to draw on English comprehension and vocabulary, but it also requires that they understand and participate in different types of conversational structures. To provide these opportunities for varied types of conversations, Bunch, Kibler, and Pimentel (2012) suggest that ELA teachers consider the following:

- Engage students in a variety of conversational structures (e.g., individual, small group, whole class) that include opportunities for ELLs to engage in extended oral discourse;
- Utilize collaborative tasks that require linguistically rich discussions; and
- Teach ELLs strategies that will help them use their still-developing English language skills to engage in different conversations.

As ELLs develop and strengthen their English writing skills, ELA teachers might consider how instruction and activities support students to develop different types of texts for different readers and purposes. Similarly, this supports ELLs in developing English fluency skills that can be applied in different disciplines. Strategies that ELA teachers might incorporate to support ELL students' development in writing include (Bunch, Kibler, & Pimentel, 2012):

- Allow students to use their existing knowledge and strengths (e.g., home language, prior experiences, prior practices) when developing their writing;

- Provide ELLs exposure to the different types of texts students will be developing, with a discussion of the different linguistic and rhetorical patterns in texts; and
- Provide opportunities for ELLs to communicate with their teacher and peers about their writing feedback.
- Teachers in ELA classrooms can draw on their knowledge of students' existing skills and competencies as leverage for developing English language learners' fluency with ELA activities.

Mathematics

To support ELLs in the mathematics classroom, instruction should include a focus on uncovering, hearing, and supporting students' mathematical reasoning, and encouraging ELL participation in mathematics instruction, regardless of English fluency (National Academies of Sciences, Engineering, and Medicine, 2018). Prior research has found that ELLs are capable of participating in mathematical understanding, even as they are developing their English fluency (National Academies of Sciences, Engineering, and Medicine, 2018). As ELLs work through mathematical concepts and problems, there are naturally occurring opportunities for mathematical sensemaking and discussion (Zwiers et al., 2017). Mathematics teachers can provide supports for ELLs by highlighting and encouraging the different ways ELLs demonstrate mathematical thinking, and by explicating the different ways students can communicate mathematical ideas (Zwiers et al., 2017). Teachers can also focus on identifying and bolstering students' emerging mathematical reasoning, rather than on grammatical accuracy or vocabulary use, ensuring that ELLs strengthen their mathematical content knowledge (National Academies of Sciences, Engineering, and Medicine, 2018).

Mathematics teachers should understand how ELLs might switch between languages when performing mathematical computations and how that might influence their mathematical learning. Moschkovich (2007) notes that all students participate in important mathematical discourse practices, such as describing patterns, making generalizations, and using representations to support claims. These are practices that ELLs may exhibit in their home languages, which demonstrates how ELLs may switch between languages to participate in mathematical discourse. Moschkovich (2007) recommends that educators examine how switching between languages can be a resource for ELLs in their mathematical communication and allow them multiple avenues for mathematical discourse.

Mathematics instruction also contains linguistic demands that can pose a challenge for ELLs. To demonstrate mathematics fluency, students must grasp mathematical expressions as well as how these expressions intersect with English comprehension. For example, the Council of the Great City Schools (2016) points out that students may experience difficulty with word problems as these require comprehension in both mathematical and linguistic demands. Students may be able to identify the mathematical procedures required for solving the word problem, but experience difficulty in understanding its context. The Council of the Great City Schools (2016) notes that mathematics instruction for ELLs should encompass both mathematical understanding and language-strengthening skills. Such instruction can help ELLs learn rigorous mathematics skill sets and also help them understand high cognitive demand tasks. Supporting both mathematics and linguistic fluency can help ELLs reinforce and advance their development of English proficiency by encouraging use of language skills across different subject areas.

To support ELLs in developing both strong mathematics and English fluency, the Council of the Great City Schools (2016) recommends that instruction focus on using multiple communication modes (e.g., speaking, listening, reading, writing), multiple representations (e.g., pictures, diagrams, tables, charts), and multiple communication settings (e.g., small-group discussion, partner discussion, sharing written explanations). This allows students to not only demonstrate their thinking in ways that are comfortable and accessible, but to also help students build linguistic skills in different formats. This also helps ELLs in their development of academic mathematical language, encouraging students to express their mathematical reasoning in an academic way and engage in mathematical discussions with classmates. Teachers should also engage ELLs in "productive struggle," which gives ELLs time to work through a problem before intervention. In this, teachers provide rigorous problems with scaffold supports that help students strengthen their problem solving, reasoning, and explanatory skills.

Science

The National Academies of Sciences, Engineering, and Medicine (2018) states that science learning requires students to make and test evidence-based conjectures about the world, engaging in scientific and engineering practices to understand phenomena or design solutions. ELLs possess cultural and linguistic resources that support scientific sense-making, and teachers should draw on these resources to link science and linguistic learning.

Lee and Buxton (2011) conducted a review of perspectives toward science instruction and how each perspective can be leveraged to support ELLs in science learning. Each perspective emphasizes the importance of connecting students' cultural and linguistic experiences and practices to science instruction and learning. A cognitive science perspective, which focuses on students' scientific reasoning and argumentation skills, prompts teachers to identify areas where students' everyday knowledge aligns with scientific practices. From a cross-cultural perspective, which focuses on cultural patterns of communicating, interacting, and knowing, teachers can support ELLs by making science norms and practices explicit, especially when these norms and practices are not aligned to students' cultures. Science teachers might also take a sociopolitical perspective to science instruction, which highlights issues of power, prestige, and privilege in science. From a sociopolitical perspective, teachers can support their ELLs in the science classroom by first establishing trusting and caring student relationships that will help ELLs engage in science learning. Contingent on student learning needs, science teachers may find that these perspectives can help guide instructional decisions that support ELL learning.

Similar to suggestions for instructing ELLs in other content areas, the National Academies of Sciences, Engineering, and Medicine (2018) identifies the use of ELL students' home languages and discourse styles as an effective instructional tool. Their existing linguistic skills can be leveraged as a resource to understand—and eventually take ownership of—discourse in science classrooms. Teachers can use ELL students' existing linguistic resources to help them engage in the sense-making of science instruction, supporting students as they use their linguistic background to interpret and understand science instruction.

Social Studies

Social studies can be a particularly difficult discipline for ELLs, as understanding of social studies concepts can be largely dependent on English language skills (Weisman & Hansen, 2007). Understanding social studies vocabulary can be a challenge as ELLs try to understand complex social studies concepts, some of which may not have overlap or use in other disciplines, while simultaneously developing English fluency. To adequately support ELLs in the social studies classroom, Weisman and Hansen (2007) note that teachers must look for ways to offer contextual supports that help ELLs understand social studies concepts and develop linguistic skills at the same time.

Another strategy social studies teachers may use to support ELLs is the reverse chronology approach, which focuses on themes and their connections to students' existing knowledge (Misco & Castañeda, 2009). The reverse chronology approach focuses first on concepts that are familiar to students and builds on students' understanding to understand historical concepts. Similar to strategies that emphasize the importance of building upon students' existing understanding and skills, a reverse chronology approach can help teachers leverage their students' strengths and connect background knowledge to the development of new content understanding and skills. Social studies teachers can structure curriculum and instruction to build upon ELL students' existing experiences and interests with active inquiry into antecedents, causes, and explanations for social studies understanding (Misco & Castañeda, 2009).

Additional Considerations

As states, districts, and schools consider instructional supports and resources for their ELLs, there are contextual considerations that can impact how well ELLs can access academic content. Instruction should address the context in which education occurs, identifying the impact that ELL students' cultural and linguistic backgrounds have on their learning. These instructional resources and supports should identify and address the different learning needs ELLs have and how students' backgrounds might influence those learning needs. For example, the experiences of ELLs who come from a refugee background can be vastly different from those of their peers, requiring school staff to understand the different social emotional needs that might impact their learning. Teachers and school staff should also be supported to understand how students' backgrounds can be leveraged as a resource.

Furthermore, as states and districts look to implement instructional supports for ELLs, attention may be directed to the professional learning that teachers receive and/or need. To fully support teachers to meet ELL learning needs and continuously improve their professional practice, teachers need professional learning that bolsters their understanding of ELLs and of classroom practices that promote ELL students' content understanding and linguistic progress. Professional learning should focus on supporting teachers to implement pedagogical practices in their specific discipline areas that are effective for ELL learning. States and districts should continuously evaluate the effectiveness of existing teacher professional learning and examine whether available learning opportunities provide adequate focus on ELL learning needs.

States may also want to consider the preparation and continuing education that teachers and school leaders receive to support their capacity for working with ELLs. These considerations might be incorporated into conversations with teacher preparation programs, working to ensure that teachers enter the field with the tools and knowledge needed to properly support ELLs in the classroom. States might work with teacher education programs to review curricula and ensure that ELL instruction strategies and principles are included. The same considerations can be applied to continuing education for both teachers and school administrators. Continuing professional development for educators can continue to bolster instructional practices and activities that support ELL students' learning needs. Professional development can also provide teachers and school leaders with emerging promising practices that can be incorporated into ELL instruction. With continued professional learning that focuses on supports for ELLs, teachers and school leaders will be better positioned to create a learning environment that is responsive to ELL learning needs.

A teacher workforce that is well-prepared to teach ELLs benefits all students. The instructional practices described in this brief have been found in the research literature as effective practices for ELLs, but they are also robust practices for any student demonstrating the need for additional and deeper language and content support. Teachers who understand and can apply scaffolding strategies, have knowledge of academic language and ways to instruct it within a lesson, and can translate disciplinary language knowledge into daily instruction will be well-equipped to work with a diverse group of students.

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