WIDA FOCUS ON Group Work for Content Learning

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Introduction

Lisa: OK. Where did they say aurora borealis? Like I remember when they read that, but how did that relate to the story?

Veronica: I remember it was at the top of the...

Sofia: Oh, like, they were looking up at the sky, I think it was in chapter 3. They were looking up at the, the sky and they, um -

Lisa: I guess it's not really like a plot point then, I guess, so...

Sofia: It's a vocab.

Lisa: Wait. Here's aurora borealis: "With the aurora borealis flaming coldly overhead, the stars gleaming in the frost sky." OK. I guess that's not really a plot, but...

The above conversation among three students was recorded in an 8th grade English language arts classroom where students worked in small groups during a unit on Jack London's Call of the Wild. At four points during the unit, students were asked to create a group presentation that reviewed the setting, key plot points, main characters, themes, and vocabulary words. The teacher provided the students with a list of vocabulary words and themes, but the remaining literary elements were left to the students to derive from the text. The above dialogue illustrates how group work interactions can afford students important opportunities to build academic knowledge with peers. Even in the relatively close-ended assignment in the above example, students productively built on each other's understandings of academic topics using academic language.

KEY TERMS

Teacher-fronted, whole-class instruction – The teacher is positioned at the front of the classroom, and students' desks face the teacher.

Group work – A general term used to describe learning that takes place through communicative interactions between two or more individuals.

Collaborative learning – ${\sf A}$

conceptual approach to learning in interaction that has roots in social psychological and sociocultural theories. Collaborative learning occurs when learners create new knowledge through joint productive activity (Lee & Smagorinsky, 2000).

Cooperative learning – A longstanding tradition of structuring group work by manipulating tasks and incentives so as to promote positive social interdependence, individual accountability, and cooperation (Slavin, 1995).

Peer-assisted learning –

Pedagogical methods in which students help each other acquire knowledge and skills (Topping & Ehly, 1998). Typically, a stronger student is paired with a weaker student in a tutor-tutee relationship.

Do your students have opportunities to engage in this type of academic conversation? How might such collaborative interactions help students meet the U.S. college- and career- readiness standards? How might they help English language learners (ELLs) master the language of the disciplines? What are some promising ways to support group-based learning among students?

This Focus Bulletin aims to answer these questions by exploring the potential of **group work for ELLs in content classes.**

The college- and career- readiness standards expect students to learn together

The U.S. college- and career-readiness standards expect all students, including ELLs, to communicate about and work collaboratively on academic topics. These new expectations reflect two important insights. First, learning is primarily a social rather than an individual process (Haynes, 2012). Second, skills in communication and collaboration are indispensable for participating in 21st century workplaces and in civic life. The new standards have important implications for instruction, given that students in U.S. classrooms traditionally spend most of their school day in teacher-fronted, whole-class instructional environments, where the teacher is positioned at the front of the classroom, and students' desks face the teacher. Classroom discourse tends to follow a sequence referred to as 'initiation-reply-evaluation' (Meehan, 1979; Cazden, 2001). In this discourse pattern, the teacher asks a close-ended question, a single student is selected to respond, the student responds, and the teacher evaluates the student's response for correctness.

To prepare students for the communicative and collaborative demands of college, career, and adult life, educators should be encouraged to replace a portion of traditional teacher-fronted, whole-class instruction with group learning opportunities. However, careful thought must be put into designing group learning activities for all students, especially for ELLs, who can meet the new standards if teachers adequately support their language development.

ENGLISH LANGUAGE ARTS STANDARDS

In English language arts, the Common Core State Standards (CCSS) designate effective collaboration as a College and Career Readiness Anchor Standard. Specifically, K-12 students are expected to "prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively" as well as "evaluate a speaker's point of view, reasoning, and use of evidence and rhetoric" (NGA Center, 2010a, pp. 22 and 48)." Partner and small group work are promoted as important methods for building these communicative and collaborative skills. At each grade level, expectations regarding collaboration in English language arts are detailed (see Figure 1).



FIGURE 1.

Collaboration in the Common Core State Standards for English Language Arts

Participate in collaborative conversations with diverse partners about *[kindergarten, grade 1, 2]* topics and texts with peers and adults in small and larger groups (p. 23).

Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade [3, 4, 5] topics and texts, building on others' ideas and expressing their own clearly (p. 24).

Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade [6, 7, 8] topics, texts, and issues, building on other's ideas and expressing their own clearly (p. 49).

Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grades [9-10, 11-12] topics, texts, and issues, building on others' ideas and expressing their own clearly and persuasively (p. 50).

NGA Center, CCSSO, 2010a

MATHEMATICS STANDARDS

The CCSS and the National Council of Teachers of Mathematics (NCTM) place importance on students' ability to communicate with others, including peers, about mathematical content. The CCSS mathematics standards expect students to "construct viable arguments and critique the reasoning of others" (NGA Center, 2010b, p. 6). Furthermore, the National Council of Teachers of Mathematics (NCTM, 2000) has set "communication" as one of its ten Standards for School Mathematics (see Figure 2). The NCTM views communication about mathematics as a way of enhancing students' mathematical thinking.

> "By working on problems with classmates, students also have opportunities to see the perspectives and methods of others. They can learn to understand and evaluate the thinking of others and to build on those ideas."

> > —NCTM, 2000 Available at www.nctm.org

FIGURE 2.

Communication in the National Council of Teachers of Mathematics Standards For School Mathematics

Instructional programs from prekindergarten through Grade 12 should enable all students to:

- organize and consolidate their mathematical thinking through communication;
- communicate their mathematical thinking coherently and clearly to peers, teachers, and others;
- analyze and evaluate the mathematical thinking and strategies of others; and
- use the language of mathematics to express mathematical ideas precisely.

As students are asked to communicate about the mathematics they are studying—to justify their reasoning to a classmate or to formulate a question about something that is puzzling—they gain insights into their thinking. In order to communicate their thinking to others, students naturally reflect on their learning and organize and consolidate their thinking about mathematics.

NCTM, 2000

FIGURE 3.

Expectations for student communication and collaboration in the Next Generation Science Standards

"NGSS defines what it means to learn science by moving away from prior approaches of detailed facts or looselydefined inquiry to a three dimensional view of science and engineering practices, crosscutting concepts, and disciplinary core ideas. Particularly, scientific and engineering practices are language intensive and require students to engage in classroom science discourse. Students must read, write, view, and visually represent as they develop their models and explanations. They speak and listen as they present their ideas or engage in reasoned argumentation with others to refine their ideas and reach shared conclusions."

NGSS, May 2012 Draft

SCIENCE STANDARDS

The Next Generation Science Standards (NGSS) are still being finalized, but there is every indication that they too will expect students to effectively communicate and collaborate with others about scientific topics. The Diversity and Equity Group that is tasked with making the making the NGSS accessible to all, including ELLs, characterizes science and engineering practices as "language intensive" and requiring that students "engage in classroom science discourse" (NGSS, May 2012 Draft, p. 3).

What do the major perspectives on second language acquisition tell us about group work with ELLs?

The major theoretical approaches to second language acquisition offer insight into how group work can be used to help ELLs strengthen their abilities to communicate and learn in the languages of the disciplines.

1. The Input Hypothesis

According to this hypothesis, second language acquisition is driven by learners' exposure to the target language in a form that is just a bit beyond the learner's present level of proficiency. In the 1970s, Stephen Krashen termed this form of language "comprehensible input" or "i + 1." An implication of this hypothesis is that ELLs will benefit from group work in which their group members produce language that is just slightly above the ELLs' proficiency levels. Accordingly, grouping students who have different language needs and strengths together or grouping ELLs with native speakers will be advantageous. However, if the more English proficient group members produce language that is beyond the "i+1" threshold, then the less proficient ELLs will not benefit from this exposure to peer 'input.' More proficient students need to be coached on how to modify their output so that less proficient students can benefit from their interactions. Native-speaking and more English proficient peers can rephrase, repeat, and visually represent their utterances to make themselves understood by less proficient ELLs.

2. The Output Hypothesis

This hypothesis maintains that exposure to comprehensible input is necessary but not sufficient for second language development (Swain, 1985). The second language learner must also produce language (speak and write) and receive timely feedback on their use of the second language. Meta-analyses of studies on corrective feedback (feedback that provides second language learners with information about how well the form of their production matches that in the target language) have shown moderate effects across a variety of contexts (Li, 2010) and durable positive effects even in classroom-based studies (Lyster & Saito, 2010).

Group work arguably offers ELLs opportunities to produce more language than teacher-fronted, whole-class designs. At the same time, if the output hypothesis holds true, then for ELLs to develop language through group work, they need to be held accountable for producing language and **they need timely feedback from teachers and peers. Teachers need to offer ELLs formative feedback on their use of academic language.** More proficient English-speaking peers should also be encouraged to foster ELLs' language development.



Coaching Peer Feedback

Peer feedback can serve as a wonderful resource for students' language development. However, not all peer feedback is productive without deliberate coaching.

One possible way to foster peer feedback skills would be to hold a series of mini lessons in which you and a small group of students model effective conversational skills for the entire class on topics such as:

- Asking for clarification or elaboration
- Checking for comprehension
- Repeating, rephrasing, or summarizing the main points
- Handling disagreements
- Taking turns

It can also be an entertaining and educational activity to model ineffective conversational skills in this format as well (such as gossiping, boredom, or a distracted listener).

Zwiers and Crawford provide additional activities that aim to build productive academic conversation in Academic Conversations (2011).

3. The Interaction Hypothesis and Negotiation

This hypothesis, formalized by Michael Long in the early 1980s, views interaction as the driving force of second language acquisition. Long proposed that when native speakers and non-native speakers encounter communication difficulties, the native speaker makes "interactional adjustments" in an effort to "negotiate meaning." In other words, the native speaker will say and do things to build mutual understanding with the non-native speaker. A significant body of research demonstrates the value of interactions with native (or more competent) speakers for second language acquisition (see Mackey & Gass, 2006, for a selection of 29 such studies).

"Negotiation for meaning, and especially negotiation work that triggers interactional adjustments by the NS [native speaker] or more competent interlocutor, facilitates acquisition because it connects input, internal learner capacities, particularly selective attention, and output in productive ways."

-Long, 1996, pp. 441-452, original emphasis



From the interactionist's perspective, ELLs will benefit most from group work that is open-ended and encourages the exchange of ideas as compared to close-ended tasks, such as memorizing facts. Furthermore, group work that allows for communication challenges between ELLs and their more proficient group members will encourage greater language development because overcoming communication challenges entails negotiating meaning.

4. Sociocultural Theory and Group-Based Learning

Sociocultural perspectives emphasize language acquisition as a socially, culturally, and historically conditioned human practice. This perspective distinguishes collaborative learning from other kinds of learning that takes place in group contexts. According to sociocultural theory, during collaborative learning, collaborators use language, graphs, charts, gestures, or other carriers of meaning to create new, shared knowledge. The students' social relations, the cultural and historical conditions that exist, and the carriers of meaning available to students all matter for collaborative learning (Donato, 2004; Lee & Smagorinsky, 2000).

From this perspective, group work that **allows students the latitude to create new meaning together** will best facilitate their language acquisition. The students in the sample dialogue on p. 1 collaboratively refined their understanding of how "aurora borealis" functioned in a literary text. When planning a lesson, ask yourself whether you are providing students opportunities to exchange ideas and create something new together. If the learning activities are overwhelmingly individual and fact-focused, then consider replacing some of those activities with group-based work and open-ended questions. As the classroom dialogue in the introduction illustrated, even in a relatively structured assignment, students productively built on each other's understandings of academic topics using and further developing their academic language.

Questions for self-reflection

How much academic language do your students hear in the classroom?

How much academic language do your ELLs produce (by speaking and writing)?

How much do your ELLs and non-ELLs interact about academic topics?

When your students engage in group work, do they create something new, such as an original interpretation of an historical event, a creative representation of a biological process, or an alternative ending to a short story?

How should students be grouped?

Empirical research on group work with ELLs in content classrooms is still emerging. A challenge in this line of research is that no one grouping method can possibly optimize group work for every classroom mix of students or every teacher's learning objectives for every lesson. Each classroom contains a unique mix of students with different home languages, prior educational experiences, language and content proficiency levels, and other individual qualities that can impact which grouping arrangements are optimal. Nonetheless, several general recommendations based on theoretical approaches to second language acquisition (see page 4) and studies of group work in diverse settings can be offered.

Grouping variables are qualities of the students that are anticipated to affect how they will learn in a group. Typical grouping variables include: home language, English language strengths and needs, prior academic performance, friendship, gender, and self-identified race/ethnicity. However, depending on the learning objectives, other variables may matter, such as learning styles, personality, or interest.

1. Teacher assignment to groups is preferable to student self-selection or random assignment.

When students self-select, they tend to choose their friends. Research shows that friendship-based groups can learn more than groups of non-friends (see Lee & Ewing, in press). However, friends can also perform worse than non-friends, particularly when the friends are boys (Kutnick & Kington, 2005). Perhaps more importantly, when students self-select, the resulting groups tend to reinforce existing status hierarchies along racial/ethnic, language, and socioeconomic lines (Tharp et al., 2000). Such patterns can create inequitable divisions between ELLs and non-ELLs. Random assignment can result in uneven distributions of low or high achieving students such that some groups are chronically behind while others are far ahead of the class.

Remember: Know your ELLs and provide them with the language supports they need to access content. Even when students are placed into groups with ELLs representing mixed levels of English language proficiency, teachers need to provide each ELL with the specific kind of language support he or she needs.

2. When creating groups with ELLs, teachers should at minimum know the ELLs' home language, English language strengths and needs, content knowledge in the home language, and prior academic performance.

Teachers should analyze how these factors might impact an ELL's ability to meet the objectives of the lesson.

3. Groups should be heterogeneous with respect to students' English language strengths and needs.

This manner of grouping provides opportunities for less proficient ELLs to negotiate meaning with and receive feedback from more proficient ELLs as well as native speakers. However, teachers must provide each ELL student with the language supports he or she needs to access content. One way to support language is to structure assignments such that early work provides a foundation, in terms of academic language, for later work. More English proficient ELLs should also be challenged to advance in their development of academic language.

"Academic conversations are sustained and purposeful conversations about school topics."

-Zwiers & Crawford, 2011, p. 1

Designing tasks that allow for such conversations needs to be a conscious act on the part of the educators. For guidance on how to design effective conversational tasks and how to support the development of the skills needed for academic conversations, Zwiers and Crawford offer tips in Academic Conversations: Classroom Talk That Fosters Critical Thinking and Content Understanding (2011). However, depending on the learning objectives, other variables may matter, such as learning styles, personality, or interest.

4. Groups should be heterogeneous with respect to students' prior academic performance.

Bringing together students with varied knowledge and skills helps to prevent division of classmates into winners and losers.

5. Groups should be as heterogeneous as possible with respect to other grouping variables that are anticipated to affect group learning.

The teacher is best positioned to determine which additional grouping variables matter for the particular learning objectives that are set. Students' interest levels, background knowledge, and social networks, for instance, may be worth considering.

6. On occasion, beginner ELLs may benefit from being grouped together.

Lower proficient ELLs who speak the same home language may benefit from being grouped together and allowed to work in their home language. Kagan and McGroarty (1993) have also suggested that ELLs with beginning English proficiency be grouped together when the content is especially demanding or unfamiliar, the range of English proficiency in a class is great, or there is a large number of ELLs with beginning proficiency. In those cases, Kagan and McGroarty propose that some (but not exclusive) use of homogeneous grouping according to proficiency level can help ensure that less English-proficient students receive adequate language supports to access content and that heterogeneous grouping is more heavily relied on to help prevent segregation of students by language and language-based status. 7. On occasion, highly English proficient ELLs may benefit from being grouped together and challenged to advance their facility in academic language.

Group work for beginning ELL students

Creating meaningful group work for beginning ELLs that supports their language development and allows for engagement with the content can pose a challenge for educators.

Pauline Gibbons offers activity ideas for this population of students that can be done in partners or adapted for group work that "can build up confidence and language knowledge" (see chapter 7, "Planning Talk for Learning and Literacy," in English Learners, Academic Literacy, and Thinking: Learning in the Challenge Zone, Gibbons, 2009).

8. A variety of grouping arrangements can be used over the course of a unit, depending on the language demands and objectives of each lesson.

There is also a place for teacher-fronted, whole-class instruction and individual learning.

Native language as an interactive language support

Students with a common language of origin can communicate with each other to clarify, recap, or extend meaning of ideas and concepts presented in English. In this way, native language may serve to facilitate and enrich the students' process of acquiring an additional language.

(WIDA English Language Proficiency Standards and Resource Guide, 2007 Edition, p. RG-24)

Native Language Support

The following partial strand of MPIs suggests the use of native language (L1) support.

Level 1	Level 2	Level 3	Level 4
Entering	Beginning	Developing	Expanding
Identify environmental print related to hygiene or safety around school (e.g., boys/ girls washroom, fire extinguisher) in L1 or L2	Find real-life objects or pictures related to hygiene or safety that match environmental print around classroom or school (e.g., labels for soap, sink) in L1 or L2	Identify icons, symbols and words related to hygiene or safety found in environmental print or pictures around classroom or school in L1 or L2	Connect environmental print or pictures related to hygiene or safety to teacher reading of illustrated books in L1 or L2

Framework: Formative Standard: 1- Social and Instructional language Grade level cluster: PreK-K Language domain: Reading Example Topic: Hygiene and safety

Key elements of effective group work for all students

Aside from the particular composition of groups, teachers can take steps to design group work that promotes the following four elements. These elements have been identified in classroom-based research as crucial for effective group work in diverse student populations.

Enacting the key elements:

- Assign group grades based on the sum of individual group members' grades.
- Have students take on specific roles within their group.
- Assign group work tasks that encourage students to discuss, debate, and create rather than memorize or reproduce facts.
- Allow time for the class to reflect on their group work experiences and the social skills needed to successfully collaborate.



1. SOCIOL Skills that are important for group work include listening to and valuing the perspectives of others, communicating one's own views clearly and respectfully, negotiating the group's goals and steps to meet those goals, and resolving conflicts (Zwiers, 2008; Johnson & Johnson, 2009). Teachers can help students develop these social skills prior to and during group work through discussion and group-building exercises. Providing students time to reflect on the group work experience is also valuable.

2. Joint productive activity exists when students create new knowledge together (Tharp et al., 2000). Assignments should be designed such that they can not be divided into components that students complete individually. Teachers can also promote joint productive activity by creating group work tasks that are open-ended and welcome diverse perspectives and by teaching students the peer feedback skills discussed in the box on page 4.

3. Individual accountability exists when each student in the group contributes in some way to meeting the group's goal. Teachers can promote individual accountability by assigning students unique roles within their groups. ELLs in particular should be held accountable for producing language.

4. Positive social interdependence exists

when students depend on each other and help each other to accomplish the group's shared goal. A commonly used method of promoting positive social interdependence is to assign students individual grades that are based on the average of their group members' grades. This kind of reward structure makes the success of any individual student dependent on the success of their group members.

PLAN FOR SUCCESSFUL GROUP WORK

Learning is a social practice. An essential component of instruction for English language learners is opportunities for students to learn together. Today's content standards reflect the importance of collaborative learning for school and beyond. Group work is a way to enhance the social practice of learning academic content and language simultaneously. However, not all student group work leads to productive academic conversations and content learning. Effective group work requires deliberate planning by the educator with respect to the learning task, the supports used, and how students are grouped. Students also need to be coached in the interactional skills needed for group work. This Focus Bulletin explored the potential of group work with ELLs in content classrooms and provided rationale for why this is an advantageous approach to take with all students as a way to achieve both college- and career-readiness standards and mastery in the language of the disciplines.

Teacher Self Reflection or Professional Learning Community Discussion Questions on Group Work for All Students

- 1. Who are your ELLs?
 - a. What are the students' language strengths and needs in each domain of English (reading, writing, speaking, and listening)?
 - b. What are their home languages?
 - c. What preparation have they had in your subject in their home language?
- 2. What language supports have you found to be effective for your ELLs? Which supports work well for which students? Which of these supports are effective in group work? (For more information on supports, please see WIDA ELP Standards and Resource Guide, 2007 Edition, pp. RG-20-24)
- 3. What percent of your classroom time is devoted to teacher-fronted, whole-class instruction versus small group work? Have you measured this?
- 4. How much do your ELLs participate in whole-class instruction versus in group work settings? Have you measured this?
- 5. How do you structure group work for your students?
 - a. How do you prepare students for working in groups?
 - b. How does the group activity you assign welcome student discussion, exchange of ideas, peerpeer feedback, and the creation of something new?
 - c. How do you hold all students, including ELLs, responsible for contributing to the group assignment?
 - d. What kind of feedback are your ELLs receiving? Who is providing the feedback? When do the ELLs receive feedback?
 - e. How do you encourage and coach students to provide feedback to each other on their understanding of academic material and their use of academic language?
 - f. What kinds of opportunities do students have to discuss ways to improve their group work experience?
 - g. Who forms the groups (students select, teacher selects, random assignment)?
 - h. How homogeneous or heterogeneous are the groups in terms of ELL status, prior academic performance, language strengths and needs, and home languages?
 - i. What is your experience with grouping ELLs together in more homogenous groups (same home language, similar ELP levels)?
 - j. What experiences have you had using group work with beginning ELLs?

Get Involved! FURTHER RESEARCH IS URGENTLY NEEDED

Are you a content-area teacher who has used group work with ELLs? We are conducting a study in 2013-2014 of content teachers' experiences using group work with ELLs in 6th, 7th, and 8th-grade mathematics, science, and English language arts classrooms. Please contact the Principal Investigator, Naomi Lee, Ph.D. at parkerlee@wisc.edu if you would like to learn more about participating in this study.

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WIDA is a consortium of states dedicated to the design and implementation of high standards and equitable educational opportunities for English language learners. To this end, WIDA has developed English language proficiency standards and tests aligned with those standards, such as ACCESS for ELLs[®]. Research and professional development activities importantly complement the WIDA standards and assessment products.



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