Integrating academic language, thinking, and content: Learning scaffolds for non-native speakers in the middle grades

Jeff Zwiers*

592 Hobart St., Menlo Park, CA 94025, USA

Abstract

The purpose of this action research study was to explore possibilities for scaffolding academic language and historical thinking for non-native English speaking students in two middle school classrooms. The teaching approach focused on six dimensions of historical thinking: background knowledge, cause, effect, bias, empathy, and application. The following questions guided the observations and conclusions: (1) What types of instructional activities appear to develop historical thinking skills and related academic language among English Language Learners (ELLs)? (2) How can teaching for a writing assessment help to shape this thinking and language development? Results suggested that multi-modal scaffolds for both thinking and language, designed to help students succeed on a motivating assessment task, developed cognitive and communication skills.

Keywords: English for academic purposes; Scaffolding; Action research; Middle school; Historical thinking

1. Introduction

The middle grades pose important opportunities for closing the academic achievement gaps in content, cognition, language, and literacy between English Language Learners (ELLs) and proficient speakers of the school language. One of the primary reasons for these gaps is the second language students’ lack of academic language proficiency in English (Scarcella, 2003). Much more complex than a list of words and phrases to
memorize, academic language embodies the cognitive, linguistic, cultural, and discipline-specific features of discourse found in school and beyond—in scientific, business, and other technical arenas. This is a double challenge for many students who are learning not only another language but also an academic dialect of that language. Closely related to issues of language are the dimensions of academic thinking: the ways in which experts from various disciplines approach their research and argumentation. This is the second focus for the action research reported here. While this study of academic language and thinking focuses on English learners in the U.S., the implications extend to the education of many adolescent students in international settings who are attending classes taught in a second or foreign language.

The goal of my action research was to better understand how to integrate and scaffold the development of academic language, thinking, and content (history) in classes for non-native English speakers in the middle grade years. So far, much of the research literature on academic language has been theoretical or focused on post-secondary settings. However, a few researchers have argued that academic language can—and must—be taught in middle and high school (Dutro & Moran, 2003; Scarcella, 2003; Short, 1991, 2002). Their work has provided the foundation for practices in the current study.

To observe classroom language and thinking in a systematic way, I taught in a 5-week history-based English language development program during a summer term. This class focused on the period leading up to the American Civil War (pre-1860s) and was housed at a middle school (grades 7–9, ages 12–15) in Northern California. The 60 English learners attending my two classes had performed poorly in more than one class during the previous school year. Half of the students spoke Spanish at home; the other half spoke Amharic, Vietnamese, Korean, or Mandarin. Students were at early–intermediate and intermediate levels of reading and writing in English, as indicated by the California English Language Development Test (CELDT).

In order to frame my observations and reflect on my teaching and on student learning, I posed the following questions:

(1) What types of instructional activities appear to develop historical thinking skills and related academic language among ELLs?
(2) How can teaching for a writing assessment help to shape this thinking and language development?

2. Academic language and historical thinking

Academic language is used to describe thinking processes, complex ideas, and abstract concepts (Bailey & Butler, 2002; Cummins, 1989; Scarcella, 2003; Solomon & Rhodes, 1995) in the content areas. This umbrella term includes the highly visible and discipline-specific terms such as photosynthesis, hegemony, imagery, formula, words and phrases that Dutro and Moran (2003) call “brick” terms. A second category, “mortar” terms, refers to more universal words and phrases that occur across disciplines, often involving textual (first, second, third) and interpersonal (as you can see) metadiscourse (Hyland, 1999). Mortar words tend to be more abstract and linguistically complex than the bricks; thus brick words can often be taught with drawing, acting, synonym, and example activities.
By contrast, mortar terms such as led to, however, in spite of, influenced, considered to be, and therefore often require many exposures in a variety of contexts before they are acquired.

In addition to being concerned with brick and mortar words in academic vocabulary, I was also interested in the various types of thinking used in different content areas. Because students were studying history, I investigated resources on historiography to identify teachable thinking skills that historians use. I also consulted the California standards for history teaching in the middle grades (California Department of Education, 1998). Six dimensions of historical thinking emerged as I analyzed these resources.

Cause and effect were the first dimension that appeared in my literature review. Carr (1961) noted that a historian asks the question, “Why?” Of course, the companion question is “What resulted?” The third dimension relates to the levels of bias in reporting of historical events. In discussing bias, Holt (1990) pointed out that we must ask about the reasons why historical documents were produced and also what the documents excluded and why. Discussing bias with students leads to a discussion of who wrote particular historical documents and what they were thinking and feeling as they produced these texts. This brings up the dimension of empathy. Holt concluded that “part of the historian’s discipline is to tread carefully between empathy and a respect for the otherness of past lives” (p. 12).

Another dimension of thinking about history is interpretation. Sam Wineberg (2001), in his book Historical Thinking and Other Unnatural Acts, analyzed the thinking processes of historians as they read historical documents and found that historians needed to interpret the past in counterintuitive ways: to understand the limitations of seeing through the eyes of people in the past and to overcome present-centered perspectives. The final historical dimension is understanding facts, events, and people: expert historians use their extensive knowledge to provide a backdrop for their interpretations, questions, assertions, and other thinking (Wineberg, 2001).

After completing this review of the historiography literature, I put the six historical thinking dimensions into a graphic organizer, called “The Lens of Historical Thinking,” shown in Fig. 1, and I used these dimensions to design the assessments and teaching activities.

A symbiotic relationship between academic terms and cognitive skills became increasingly clear during the 5-week term, so for students to authentically use academic language, the teaching of thinking skills was needed. But thinking skills could not be taught separately—in a vacuum, so to speak. Students needed to think about something. This “something” was history and, more specifically, the events leading into the American Civil War, which began in 1860.

3. Assessment and historical thinking

I also considered the types of summative assessment that would allow students to show evidence of their learning of content, the development of the six thinking dimensions, and their academic language, and I decided to assign a persuasive essay for this purpose. In an effective essay, a historian usually includes comments about the basic facts and events, considers the potential bias of an account, and makes inferences about the thoughts, feelings, intentions, causes, and effects of the topic in question—all of which need to be supported by evidence (Marius & Page, 2005). In many cases, historians then argue for the topic’s importance and/or application to current events.
Writing this text was a challenge for my ELL students. In their ELL content classes, they had taken tests and quizzes about history, but they had not been asked to consider historical issue, think deeply about it, take a side, consider opposing views, and then put all these ideas into a coherent composition. For most, their experience with writing in their ELL classes was limited. A few had written short pieces, generally on over-used persuasive topics such as lockers, school uniforms, and junk food. Because of their fear of writing in English, I assured the students that I would design the lessons and homework in order to help them succeed.

4. Language and thinking: instructional scaffolds

During the first week of class, I asked the question, “What is history?” Because of their past experiences with the subject, students thought of history as a static set of names and dates to memorize for tests. They did not think that history was still evolving or that interesting controversies and applications to their lives and futures existed. When the question was posed, however, students generated some more authentic reasons for studying history. Their suggestions included: “to not make the same mistakes again,” “to think,” “to learn English,” “to learn about the world,” and “to understand where we all came from.”

I used their answers to create a chant for remembering the key points when studying history. In the chant, I introduced key content expressions such as see through their eyes, primary source evidence, evaluate, and arguments.

History helps us see how people lived
And see their world through their eyes.
History helps us see our big mistakes
To avoid making them twice.

We must ask good questions like: What happened?
Why did it happen? and So what?
We must also question: Who recorded it?
Why? and Were they biased?

Since books can be wrong and boring, too
We look at primary source evidence.
We evaluate it to help us understand
different sides of the arguments.

From this chant, as well as from texts, quotations, and videos, we mined history vocabulary (e.g., brick words like secede, self-govern, formed, free, abolitionists, preserve, emancipate) and more general academic expressions for abstract concepts (e.g., mortar words like outcome, worth the price, even if it meant). The students also helped me create hand motions for many of the brick words like secede, justice, emancipate, and declaration.

We recorded terms on three wall spaces: the History Vocabulary Bank (for the brick terms), the Academic Language Bank (for the mortar terms), and the Figuratives Chart (for figurative expressions). The Academic Language Bank included those words that students thought could be used outside of history. For the Figuratives Chart, a figurative expression that emerged in the text (e.g., see through their eyes, walk in their shoes, worth the price, ignite an uprising) was put in one column next to its definition. Figuratives
discussions helped students to understand commonly used academic idioms used in school and beyond.

The students already had some knowledge of the Civil War; so during the first week, we held a pre-American Civil War simulation in which half the students sat at three blue tables, representing the North, and the other half at the gray tables, representing the South. The gray table students had a teacher’s assistant bring them cotton balls that they then traded for candy, since the South was famous for producing cotton. The blue table students had to ‘make’ shirts and pants by gluing cotton onto paper cutouts, since the North was the more industrial part of the country. Students paid for the cotton with candy and then traded their products back for candy. When I announced that a second blue table would be added and all tables would vote to decide if gray tables should pay for their cotton, the gray tables decided to secede, after referring to an abridged version of the Declaration of Independence, written in 1776 when the U.S. was founded.

During this first week and throughout the term, we worked on the dimensions of historical thinking. Of course, these dimensions were not entirely new to students; they used them in their daily lives. But students needed scaffolding to provide bridges between the ways in which they commonly used this thinking to ways in which historians think. Scaffolding refers to providing extensive educational support early on and then gradually taking it away as a learner builds independence in a skill or area of knowledge (Wood, Bruner, & Ross, 1976). A scaffold provides temporary assistance in reaching the next level of learning. I borrowed ideas for multi-modal scaffolds from ELL teaching practice, and they included visual aids, hand motions, simulations, group tasks, sentence frames, songs, and one-on-one support.

As can be seen from this discussion, my primary goal was not to teach the facts of history, but rather to encourage students to think, talk, and eventually write about history as historians. We discussed how great historians ask great questions and discussed what made questions great. When I showed a brief video about the American Civil War (1860–65), the bloodiest war in American history, it prompted students to ask questions about the period. I modeled several questions as historians would ask them, and then we discussed some events in recent history. Students generated questions such as: “Did the event really happen like that?” “How do they know all that?” “Could it happen again?” “Why didn’t she run away?” and “Who started the war?” We then categorized the questions into the six dimensions for the “Lens of Historical Thinking Chart,” shown in Fig. 1. Students continued to generate questions, and we categorized them on the large lens poster that remained on the wall.

![Fig. 1. Lens of historical thinking chart.](image-url)
To encourage student understanding of the six dimensions, I used a kinesthetic strategy for scaffolding, asking students to help me create the hand motions that were associated with each dimension: bias was leaning over like a one-sided scale, causes was a pushing motion, effects was lunging forward as if pushed from behind, empathy was pointing to one’s heart, interpret, apply, and connect was the action of plugging an imaginary chord into one’s head, and understanding basic facts, events, and people was counting fingers on one hand with the index finger of the other hand.

The lens chart was also used to record academic mortar words. Outside the lens’s oval for questions was a space for the terms used in questions and in their answers. Once the language was up on the wall, it conveniently became a corpus of terms to use during learning activities. These terms include expressions such as, played a role in, this relates to, led to, some people say, one-sided argument, and cultivated feelings of. Of course, this vocabulary was not confined to history, so I encouraged students to use their new words in other classes—and even outside of classes. (For an extensive list of mortar-like words, see the work by Coxhead (2000).

In the language banks, I also recorded the academic language that we used during the simulations and other activities. Words and phrases included way of life, nowhere is there any mention of, right to self-govern, peaceably withdraw, establish, and will of the people. The first blue and gray table simulation became an experiential foundation to which we often referred in the following weeks to remember, in particular, concepts and vocabulary from the period in history being studied. Several times I asked questions such as, “Remember how the gray tables felt when their way of life was going to change?” and “Remember when the tables seceded after they declared their right to self-govern?” These words would have had much less meaning if students had not “lived” them. The simulation scaffolded students’ abilities to see different perspectives and built up their background knowledge of the several causal issues of the American Civil War. It also seemed to lead several students (members of the gray tables) to argue for the Southern point of view in their final persuasive essays.

5. Mini-lessons leading to the essay

I also taught a series of mini-lessons in which I modeled the use of thinking skills while reading or viewing texts. The purpose of the mini-lessons was to build the dimensions of historical thinking and academic language that eventually would help students with the assessment, the persuasive essay. Strategies for teaching these dimensions are included below.

For identifying and inferring causes and effects, I asked students to build their own “cause and effect timelines.” Each timeline had a horizontal line with years on it. Important events were put above the line, often with a drawing or symbol. Below the line students wrote what they believed to be the causes of the events above the line, usually answering the simple question, ‘Why?’ I modeled the process initially with the example of Columbus and the beginnings of the slave trade. Then, in pairs, students worked on pre-Civil War events, thinking and talking about questions asking why slavery started; why John Brown, a famous anti-slavery leader, raided Harper’s Ferry; why Abraham Lincoln emancipated the slaves, and so on.
To scaffold the skills and language of empathy and perspective, I used a combination of video excerpts of the Underground Railroad, diary entries of men and women of the time period, and quickwrite responses to questions such as: “If you were a slave, would you try to escape?” “What was the soldier’s wife thinking?” “Would you give up your wealth (or life) to end slavery?” We discussed the difficulty of understanding how others thought and felt, especially when the others were in the past or in different parts of the world (Wineberg, 2001). We also talked about how our own backgrounds and cultures influence how we think and how seeing multiple perspectives helps us to make better decisions and persuade others to see our point of view. I explained to students that they would need to empathize and consider opposing perspectives in their own essays. The empathy terms that made it to the Academic Language Bank were: heavily influence, if you were, and I would... because. These terms appeared again in many student essays.

To introduce the skill of recognizing bias, we analyzed the saying, “History is written by the winners.” During this discussion, I created three columns titled History, Written, and Winners. I modeled with an example of the Spanish conquest of the Americas. The ideas and events as many Americans know them went in the first column (e.g., Columbus was brave, discovered the New World, proved the earth was round, etc.). In the Written column I listed the primary sources (as genres) that originally gave us the information in the first column, such as logbooks, diaries, and government documents. Finally, we discussed who wrote these texts and how these writers might have biased their texts for self-serving reasons or because they were biased by their own life-experiences and cultures. We then watched several movie clips based on historical events and discussed where the writers might have obtained their information or what their biases were—and why we drew these conclusions about the writers. Students enthusiastically discussed the biases of the many historical movies and animated films that they had seen, and even whether producers had the right to bend the facts in order to increase profits. This led into a discussion of the differences between primary and secondary sources. During the discussions, students generated bias-related questions to place on the lens chart (Fig. 1). They even questioned who wrote our history textbooks and where the authors got their information. One student asked, “How did the authors know this stuff if they weren’t even there?”

Another scaffold for developing student abilities to interpret, connect, and apply history was the History Iceberg. I began by asking students why people write stories, TV shows, and movies. One of the students’ answers was “to teach readers and viewers life lessons.” Other students said, “To teach us to not fight, to work hard in life, to respect older people, to not think bad about people because of their looks.” We then discussed how most stories in history could teach some kind of lesson and help us to understand the present. We used the “iceberg” visual organizer in Fig. 2 to show surface events in the stories of history and their deeper historical lessons for the present. For example, one student pointed out the message of sacrifice in the story of John Brown, who was executed after his raid, and another student pointed out how greed (of slave owners) hurt people back then and even in the present day.

In our discussions, deeper questions emerged that were placed on the lens poster. Examples included, “Was John Brown good or bad?” “Is violence necessary to change history?” “Was Abraham Lincoln more interested in preserving the Union than ending

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1An organized system of hiding and transporting slaves who were escaping from the South to the North before the American Civil War.
slavery?” “Was the American Civil War worth the many lives that were lost?” “Was the Underground Railroad a cause of the American Civil War?” “Should we go into other countries to stop slavery?” After two weeks, we had a wide range of questions up on the lens poster. I then marked the questions that would best lend themselves to writing persuasive essays. Students were surprised that most of the questions they had asked were still being debated by historians and understood that this was their chance, as junior historians to take a position in their essays and persuade other students of their views.

Throughout these activities, students recorded their thoughts and information in their historical logbooks. In these logbooks, they answered daily warm-up questions, responded to quickwrite prompts, brainstormed and organized writing ideas, and generated timelines. The logbooks also provided a chance to experiment with the new brick and mortar terms that were being used by me, the texts, and other students. These terms were put on the walls during discussions and practice activities. Every other day, at the end of the period I pointed to terms on the wall as students told a partner what they meant and why they were important. This form of self-assessment gave yet another chance to use new language in an authentic, yet “un-test-like” format.

6. Scaffolding the writing of the persuasive essay

Because most students had been in English as a Second Language tracks which emphasize grammar and oral language, this was the first time they had written an academic text of more than one paragraph, so they needed considerable modeling and scaffolding in writing the persuasive essay. As a history thinking warm-up, students practiced perspective-taking orally with an activity called Pro-Con (adapted from Duffala, 1987) in which paired partners directed each other to quickly come up with pros and cons of chosen issues. The director in the group selects a topic (e.g., cell phones, fast food, video games), then cues the “actor,” who must monolog about the topic’s positives and negatives, using the following transitions: however, on the other hand, then again, or yet. After practicing with familiar, everyday topics, they were given history topics such as John Brown, Abraham Lincoln, cotton gin, and war. This activity provided an opportunity to hear and use academic transitions even before they were used in writing, providing a stronger oral foundation for improving academic writing. Gibbons (2002) writes, “This more written-like spoken language serves as a language bridge between the talk associated with experiential activities and the more formal—and often written—registers of the curriculum” (p. 42).
From the lens chart, students chose a controversial question for their essays. They cut out a fulcrum and crossbar (a “Persuasion Scale”) and then stacked up reasons and evidence on both sides for their question. One of the three cards on each side of the fulcrum was larger, showing the ‘heaviest,’ or most influential, reason in support of their side. They then placed the information onto a visual organizer, shown in Fig. 3.

With their persuasion scales filled, we began to examine professional models of persuasive essays in history adapted (by me) on topics such as the assassinations of President John F. Kennedy and Julius Caesar, the conquest of Columbus, and the ideas of Malcom X. Using the essay structure elements from the guide produced by the district, the students underlined the persuasive features of the model essays with different colors: yellow for the hook (bringing the reader into the text), blue for the background, red for the thesis, and green for the supporting evidence. The opposing arguments were orange, and the conclusion was gray. Students also identified from the wall posters the brick and mortar language in the professional essays. We then created a list (which would become the scoring rubric) of the important features to include in the essay. To understand their importance, students analyzed the samples with—and without—the features. One formerly recalcitrant student commented, “That paper is so one-sided. He needs some orange.” These were not exactly the technical terms, but they still were music to my ears from this particular student who had shown little interest in writing.

We then explored the common language (mortar words and phrases) from the model essays and compared them with the content of the wall posters. Terms included on the other hand, others believe, according to, and the reason why. Finally, we used the model essays to create posters of sample language commonly used in each element of the essays. Each column of Table 1 was a separate “features” poster that I used in the mini-lessons to demonstrate how language had been scaffolded in the class. I also posted the “starter phrases” chart (Fig. 4) to show students how they might indicate the essential elements of their essays.

![Persuasion scale](image-url)
Students then drafted their own essays, taking information from their graphic organizers, borrowing language from the walls, and responding to comments in peer editing sessions. I also gave feedback on content, language, and organization as I checked the students’ work. This was my first chance to gather information about how much language (bricks, mortar, sentence structure) and historical thinking students had transferred from what we had done in class to their writing.

<table>
<thead>
<tr>
<th>Language in persuasive essay</th>
<th>Number of times used in 48 essays</th>
<th>Thinking skill</th>
<th>Feature of persuasive genre</th>
<th>Type of scaffold with language</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Because</strong></td>
<td>98</td>
<td>Cause/effect</td>
<td>Support a point</td>
<td></td>
</tr>
<tr>
<td><strong>On the other hand</strong></td>
<td>25</td>
<td>Compare, perspective</td>
<td>Contradict a point</td>
<td>Poster &amp; hand motion</td>
</tr>
<tr>
<td><strong>But</strong></td>
<td>24</td>
<td>Compare, perspective</td>
<td>Contradict a point</td>
<td></td>
</tr>
<tr>
<td><strong>However</strong></td>
<td>22</td>
<td>Compare, perspective</td>
<td>Contradict a point</td>
<td>Poster &amp; hand motion</td>
</tr>
<tr>
<td><strong>Some people say/others believe</strong></td>
<td>21</td>
<td>Compare, perspective</td>
<td>Oppose point of view</td>
<td>Poster</td>
</tr>
<tr>
<td><strong>A reason why/that is why</strong></td>
<td>14</td>
<td>Cause/effect</td>
<td>Support a point</td>
<td>Song</td>
</tr>
<tr>
<td><strong>If….then</strong></td>
<td>12</td>
<td>Cause/effect</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Give/have the right to…</strong></td>
<td>11</td>
<td>Basics, evaluate</td>
<td></td>
<td>Song</td>
</tr>
<tr>
<td><strong>Even though</strong></td>
<td>10</td>
<td>Compare</td>
<td>Contradict a point, concede</td>
<td>Poster &amp; hand motion</td>
</tr>
<tr>
<td><strong>For example</strong></td>
<td>10</td>
<td>Basics, categorize</td>
<td>Support with evidence</td>
<td>Word bank</td>
</tr>
<tr>
<td><strong>Yet</strong></td>
<td>9</td>
<td>Compare</td>
<td>Contradict a point</td>
<td>Poster</td>
</tr>
<tr>
<td><strong>More….than….</strong></td>
<td>9</td>
<td>Evaluate abstract ideas</td>
<td></td>
<td>Hand motion</td>
</tr>
<tr>
<td><strong>According to</strong></td>
<td>8</td>
<td>Basics, categorize</td>
<td>Support with evidence</td>
<td>Word bank</td>
</tr>
<tr>
<td><strong>If….would…</strong></td>
<td>8</td>
<td>Hypothesize alternatives</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Should/shouldn’t</strong></td>
<td>7</td>
<td>Apply, evaluate</td>
<td>Conclusion</td>
<td></td>
</tr>
<tr>
<td><strong>So</strong></td>
<td>7</td>
<td>Cause/effect</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>This evidence shows that</strong></td>
<td>3</td>
<td></td>
<td>Explain evidence</td>
<td>Poster</td>
</tr>
<tr>
<td><strong>In their eyes</strong></td>
<td>3</td>
<td>Perspective</td>
<td>Fig chart, song</td>
<td></td>
</tr>
<tr>
<td><strong>Since</strong></td>
<td>3</td>
<td>Cause/effect</td>
<td>Word bank</td>
<td></td>
</tr>
<tr>
<td><strong>He said, “….....”</strong></td>
<td>3</td>
<td>Cause/empathy</td>
<td>Quotation as evidence</td>
<td>Poster</td>
</tr>
<tr>
<td><strong>It is true that</strong></td>
<td>3</td>
<td></td>
<td>Concession</td>
<td></td>
</tr>
<tr>
<td><strong>Worth the risk</strong></td>
<td>3</td>
<td>Evaluate</td>
<td>Fig chart</td>
<td></td>
</tr>
<tr>
<td><strong>Or like</strong></td>
<td>2</td>
<td>Compare, categorize</td>
<td>Support with evidence</td>
<td>Poster</td>
</tr>
<tr>
<td><strong>Despite</strong></td>
<td>2</td>
<td>Compare</td>
<td>Concession</td>
<td>Word bank, hand motion</td>
</tr>
<tr>
<td><strong>Therefore</strong></td>
<td>1</td>
<td>Cause/effect</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>In order to</strong></td>
<td>1</td>
<td></td>
<td>Interpret</td>
<td></td>
</tr>
<tr>
<td><strong>That means that</strong></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
7. Conducting action research

I used proactive action research methods of inquiry to record and reflect upon the instructional practices and interactions of the classrooms (Creswell, 2003). Action research is typically aimed at discovering and developing practices in a given context (Wallace, 2000). It is defined by Mills (2003) as

Any systematic inquiry conducted by teacher researchers to gather information about the ways that their particular school operates, how they teach, and how well their students learn. The information is gathered with the goals of gaining insight, developing reflective practice, effecting positive changes in the school environment and on educational practices in general, and improving student outcomes (p. 4).

I knew that many of the scaffolds that I employed were popular in books and teacher professional development workshops, but I wanted to test their effectiveness with this particular ELL program and students. Of course, the process of reflecting upon what constitutes evidence for student thinking and academic language was also of great benefit to me and my colleagues. I gathered classroom data from multiple sources: the persuasive essays, audio recordings of lessons, and student logbooks. I then analyzed the data for evidence of academic thinking skills and academic language acquisition. I analyzed my notes, transcriptions of audio data from the classroom, and student work for common language, thinking, and content themes.

Digital audio recordings of group and pair activities revealed a variety of subtle yet powerful communications between students that I missed when directing the lessons. Even though I focused primarily on the language of the six historical thinking dimensions in the lens, other interesting questions and issues arose, including these:

- “Why can’t the President of the seceded tables be a girl?!” [In the simulation.]
- “Why couldn’t the blue and the gray tables work it out to avoid war?”
- “It says right here in this declaration thing that if the government is bad, we can create a new one!”
- “I learned that sometimes people are good and bad. Some do bad things for good reasons.”
Much of the evidence of student thinking came from their historical logbooks. Each day, students responded to a question that related to the previous day’s work. These included: “Is all history biased? Why or why not?” “What makes someone a hero?” “What historical character would you like to meet?” “What would have happened if the Civil War had never happened? Or if the South had won?” “What happened in the simulation and how did you feel?” “Why do we need to know history?” After the questions were posed, students talked with partners before writing. One student, responding to the question about the need to know history, wrote, “We need to know history because we make history too. We change the lives of people around us. And we can make the future better, I hope.”

In the logbooks, students had opportunities to look back on the previous weeks’ activities. For example, this student talked about the simulation:

So then the gray tables were trying to secede from the blue table because they were lazy and they just wanted to rest and snap their fingers. I thought it not fair just cuz they had money they thought they can do what they feel like doing.

She used the new word *secede* without being prompted to do so, and she also began to think about the fairness of the scenario, as well. She later wrote in her logbook, “I still want to know why black people were slaves and not white. Every person have free rights.”

As students worked in their logbooks, they produced questions that the class categorized (yet another thinking skill) on the lens chart, such as “What did the author get from writing this?” “What if Lincoln was shot in 1861?” “How was the Underground Railroad important?” Students also discussed their feelings about the class. On the final day, a student wrote, “History is cooler than I thought. It made me think about good and bad and how people lie about it.”

I learned a great deal from the logs and other data that I analyzed. I noticed that the more commonly used academic brick and mortar words in the student essays had been presented in more than one scaffold. The word *secede*, for example, was in the simulation, on the wall, and in a rap song. The word *however* was used with a hand motion, on a wall, and in a sample essay poster. Words and phrases need to appear in different ways in the classroom if they are to become integral to students’ productive vocabulary.

Evidence also came from students’ essays. Because they were able to choose both the topic and their position on that topic, most students seemed to be more motivated to produce high quality work. They organized their ideas beforehand, generated first drafts, checked for clarity with peers and with me, and then edited and revised their papers. As apprentice historians, they began to value their thinking and arguments and became more motivated to get their ideas across to others. One student said to me, “It wasn’t so boring cuz I really wanted to change other minds with my writing.” Below is a first draft of one student essay, the longest text the student had ever written in English:

Do we need fanatics to change history? Fanatic people have changed history a lot. Some people say that we don’t need crazy people. However we do need fanatics in history change history.

For example John Brown he was so crazy that he started an uprizes. He gave the slave wepones and told them to fight there masters. Abraham Lincoln was a fanatic because he was fanatic about keeping the union together he would go to war.
Some people say we don't need fanatics like Marten Luther King didn't use vililence and he still change history. firefighters change history by putting out fire and dieing and there not fanatics. Harriet tubman wasn't fanatic but still changed history. I still think that these people are still fanatics because there putting there life on the line like Luther King was a fanatic he put if life on the line and got shot.

We need fanatics to change the world.

This student used several academic mortar phrases such as some people say, I still think, however, and putting one's life on the line. He also included the features of the persuasive genre: hook, background, and thesis—and supporting examples in the second paragraph, opposing arguments in the third, and a response to opposing arguments in the last paragraph before the short conclusion.

In the following excerpt on John Brown, another student uses on the other hand to introduce opposing points and although this is true to respond to the opposition. Both of these mortar expressions had been scaffolded with hand motions to make their meanings more kinesthetic and memorable. At the end, the student evaluates two abstract concepts in her expression “more good than bad,” suggesting that she believes that the freedom of many outweighs the death of a few:

On the other hand, he was bad because he kill five people in 1856. This happen in Kansas. The five people he kill were proslavery. Also some people say he was bad because he stole weapons from the government.

Although this is true, John Brown was good because he did this to free slaves. He cared much about them that He died for them. Maybe he helped start the Civil War.

I think he was more good than bad, because everyone should have freedom.

The other 46-student essays exhibited similar thinking processes and academic expressions, most of which were mortar terms. Apart from the word because, most of the language came from the posters with the sample language written in different colors or from the academic language banks. Some language was borrowed from chants and songs, but fewer terms came from the readings. Table 1 shows the academic mortar terms used by 48 students in their persuasive essays, along with the overall number of times used and associated thinking skills. Also included are persuasive essay features that related to the terms and any scaffolds that contained the language.

Table 1 provides data that shows weak and strong areas of student writing which helped me plan for future instruction. For example, the language of identifying cause and effect, taking other perspectives, and comparison was evident. Yet the language of bias and application of history to the present was rare. Thus, in future units, I will improve my means of both assessing and teaching these dimensions and the academic language required. I will also teach key terms with low frequencies, such as therefore, despite, and in order to. And lastly, I will teach (and post) other ways to say because, given its overabundance in most essays.

8. Conclusions and implications

When teaching ELL students, it is important to focus on thinking dimensions, the language that accompanies the dimensions, and their integration with the content goals.
Rather than just being add-ons, the six dimensions of history provided a framework on which to hang the academic language used in history, particularly the target mortar terms that described thinking and abstract relationships.

Teacher modeling and scaffolding plays an important role in achieving these ends. Because historical thinking—as opposed to historical memorization—was new to almost all of my students, my own thinking about history needed to be visible, and historical language needed to be modeled, scaffolded, and practiced in the ways that historians think about history. Students often listened to me think aloud about historical events and issues as I read, wrote, and viewed images. I modeled many of the mortar terms for writing in my individual conferences with students, and I provided sentence starters and expressions such as however, for this reason, therefore, have the right to, and outweigh, and then added different hand motions for these terms. A personal motto became, If I want to hear it from students or see it in their writing, I need to model it.

Emphasizing thinking skills also had several other positive effects: it helped me to develop a more authentic and comprehensive performance assessment, thus prompting me to create more engaging activities that would help students succeed. If an activity did not get students to think, or if it did not sufficiently emphasize the language being studied, I rejected it.

Another implication relates to the role of authentic communication, with language as a tool, in learning. Students were given a culminating goal: the production of a persuasive essay based on a question of their choice. Then, they had to be introduced to the tools needed for writing: the thinking skills involved in persuasion, the language and organization of persuasive essays, and the content facts and concepts. Through a series of scaffolds and information gap activities (e.g., pro-con, pair-shares, jigsaws), students acquired the language and features of the genre (persuasive essay) that they would use to communicate their thoughts. The need and desire to communicate appeared to be a powerful motivator for using more academic features of language. Some of the best ideas for communicatively integrating content and language in multi-modal ways come from foreign/second language teachers: information gap activities, jigsaws, simulations, debates, songs, posters, and dramas.

The third implication was the power of using assessment to shape the teaching of language and thinking. I monitored academic language growth and gaps by analyzing student quickwrites and by listening to group and pair activities. Throughout, I had one eye on the content and one eye on the thinking and language. I looked for gaps in the skills and language that students needed to succeed on their persuasive essays. I saw the importance of modeling and scaffolding the skills and their language through mini-lessons that were needed by students to succeed. I realized that everything students did (and did not do) could be used as an assessment window into their thinking and language. However, the final persuasive essays were not really final products. Instead, they were considered evidence for my research and learning stimuli for both students and teacher.

Finally, this study, while conducted in North America, has implications for teaching in international contexts. I work with teachers in Eastern Europe and Africa to make learning more active in classrooms with limited resources. In these settings, large numbers of students are learning academic English. In Ethiopia, for example, starting in the middle grades, students begin to take content classes in English. This “jump” to a science or history class in a non-native language is a challenge for many students,
especially in classes of 60 or 70 students. Students need more than lecture-based instruction, and they need intense academic English development to be able to access the grade level texts that they must read. Fortunately, the integration of thinking and academic language through the use of visuals and active strategies mentioned in this article has been well-received by many Ethiopian schools. In Europe, many countries are using an approach called Content and Language Integrated Learning (CLIL), which focuses on language, skills, communication, and learning strategies as content is taught in English or another second or third language. Teachers in such settings can benefit from a heightened awareness of the thinking and language demands of texts and tasks in upper grades.

Appendix A. Downloadable items

The following activities can be downloaded from www.jeffzwiers.com/JEAP

- Cause Effect Timeline
- Persuasion Scale
- Pro-Con Description
- Historical Thinking Lens Poster
- Persuasive Essay Rubric

References


Jeff Zwiers was recently awarded a doctorate in international multicultural education from the University of San Francisco. He has published two books on reading and academic thinking (Grades 6–12) with The International Reading Association. Currently, he is involved in teacher training projects in Ethiopia and Macedonia focusing on active teaching strategies, performance-based assessment and academic language development.