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Scaffolding for Independence: Writing-as-Problem-Solving Pedagogy

In southern Alberta, Canada, a university researcher and a team of teachers collaborated to develop a project designed to foster student independence on writing tasks.

Thirty sixth graders mill around the freshly landscaped dog park waiting for the ceremony to begin. Adults trickle in, most of them "friends" the class has made in the past few months: staff from the town's parks and recreation division, local arborists, Kinsmen, Kinnettes, a university researcher, and the executive director of a regional community foundation. Among them, a gaggle of reporters. Some students sit on newly installed benches. Small groups run in the open space, their dogs yipping behind them. Others take in newly planted trees, wondering aloud how much shade they'll provide when fully grown. The students are excited. Their writing made these park upgrades possible.

These sixth graders were part of the Horizon Writing Project (HWP), a collaborative research project that emerged from a mentorship program implemented for language arts teachers in southern Alberta, Canada. Seven English teachers participated in the project: Rita, Sean, Jaimie, Taylor, and Kacie, who teach senior high, and Keith and Lindsey, who teach middle school. Since 2014, we have worked together as co-researchers on the HWP to design the pedagogical model, the writing tasks students would be assigned, and the project's data collection processes.

The goal of the HWP was to develop a writing pedagogy that fosters student independence on writing tasks they might face outside of the classroom. In our early conversations, we determined that to achieve this goal, a writing task required three features: it must (1) be authentic, serving a real-life purpose; (2) require an audience outside of the classroom; and (3) be in a genre that students had never written in before. Applying these criteria, we eventually decided that the participating classes would write grant proposals to fund a project within their communities. Each class would devise a project to address a community need, select a funding agency that might support the project, and then complete and submit a grant proposal to the selected agency. As students collaborated on these tasks, they would also develop individual writing portfolios, visual analogies, and class graffiti walls.

Over the last four years, projects have included upgrades to a dog park, development of a roadside rest stop, purchase of stage equipment, acquisition of amenities for a community pool, development of a sports equipment library, and the launch of a pop-up theater. Though not every grant application has been successful, students in the HWP have been awarded more than $16,000 to implement their projects.

RETHINKING WRITING PEDAGOGY

Students often struggle to apply writing skills developed in school to writing tasks required in the university, college, and the workplace (Beaufort; Dennihy; Sommers and Saltz). Research that examines writing instruction in North American schools demonstrates progress in the adoption of process-oriented writing pedagogy (Applebee and Langer; Kiuhara et al.; Peterson et al.). In spite of that progress, however, Arthur N. Applebee and Judith A. Langer observe that "the actual writing that goes

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on in typical classrooms . . . remains dominated by tasks in which the teacher does all the composing, and students are left only to fill in missing information" (26). This approach to writing instruction creates cultures of dependence in our classrooms where students learn to rely on teachers to break down writing tasks, provide explicit instructions and templates, and do the deep thinking for them.

In response to Applebee and Langer's findings, Nicole Boudreau Smith proposes a principled writing pedagogy. Drawing on a review of sixty years of research, she identifies six pedagogical design features that should guide writing instruction. Teachers should (1) provide students an opportunity to experience the full writing process; (2) employ heuristic-based strategies that develop independent capacity to solve novel problems; (3) tailor instruction to specific writing tasks; (4) position students to take the lead on solving and completing writing tasks; (5) provide students opportunities to engage with, write for, and receive feedback from authentic audiences; and (6) require students to reflect on their learning. Since 2014, HWP collaborators have been developing a writing-as-problem-solving pedagogy that aligns with these six principles.

WRITING-AS-PROBLEM-SOLVING

Our evolving pedagogy draws on insights gained from Linda Flower and John R. Hayes's investigations into the writing processes of expert and novice writers. They defined writing as a problem-solving activity in which authors identify their intentions for the text they are crafting; develop a plan to achieve that intention; and execute, monitor, and revise that plan. In his more recent research, however, Hayes observed that weak writers often have trouble defining the rhetorical problem they need to solve, or they assign themselves the wrong rhetorical problem in response to a new writing task. This observation compelled us to focus on developing teaching strategies that would help students assign themselves correct rhetorical problems in response to new writing tasks.

To guide us in this work, we drew on Anne Beaufort's model of writing expertise, which highlights five domains of metacognitive knowledge expert writers draw on to define, analyze, and respond to the socially situated rhetorical problem: discourse community knowledge, rhetorical knowledge, genre knowledge, writing process knowledge, and subject matter knowledge (see Table 1). Our writing-as-problem-solving

TABLE 1.
Description of Knowledge Domains Employed by Expert Writers

Knowledge Domain	Knowledge
Discourse community	■ Ability to identify and respond to the unique constellation of values and expectations of the communities within which or for which one is writing
Rhetorical	■ Ability to understand and employ the tools or choices available to writers as they deliver on the intention that motivates their writing ■ Ability to understand that the effectiveness of rhetorical devices or tools differs by discourse community.
Genre	■ Ability to understand that genres are context specific, complex, and recurring tools used to accomplish work central to a discourse community ■ Ability to analyze the functioning of various discourse communities, the range of genres employed within those communities, the purposes each of those genres (and their features) serve.
Writing process	■ Ability to understand and employ the skills and strategies involved in the composition of text ■ Ability to recognize the range of strategies and process tools that will enable them to create texts ■ Ability to recognize and employ the skills and dispositions needed to function effectively within the communities within which they are writing
Subject matter	■ Ability to determine, collect, and use the content one is writing about ■ Ability to understand how the discourse community for which one is writing understands that subject matter ■ Ability to apply that understanding to the crafting of text.

pedagogy is designed to teach students how to acquire and apply knowledge and skills across these domains when completing new writing tasks.

DEVELOPING WRITING ABILITY THROUGH GRANT WRITING

We designed a unit core—focused on grant writing—that mapped to Beaufort's five knowledge domains (see Table 2) and then modified the core as classroom contexts demanded. As students worked through the unit activities, they were introduced to processes for solving rhetorical problems. They learned to analyze the task of writing a grant proposal and to use that analysis to develop and execute a plan for completing the task. When criteria were needed to guide the process, the students developed them. Teachers guided the discussion as the students learned both how to investigate a procedure, a discourse community, or sample documents and how to extrapolate criteria from their investigation. This engagement with analysis was key to developing independence in our students.

DETERMINING NEED AND DEFINING PROJECT

Students began the project by conducting a community walk focused on identifying ways their communities could be improved (see Figure 1). Taylor's tenth-grade class, for example, made the distinction between needs and wants and then generated seven questions for assessing the value and viability of each potential improvement they identified during their walk (see Figure 2). As they whittled down the possibilities, the class decided to privilege projects that they deemed would benefit the most people and have the longest-term impact on the community.

ANALYZING THE DISCOURSE COMMUNITY

Having defined a project, classes then learned about grant agencies: what they are, why they exist, and how they function. Keith's seventh graders explored these questions as they participated in a virtual scavenger hunt. Combing grant agencies' websites, they collected information that would help them determine the alignment between their community

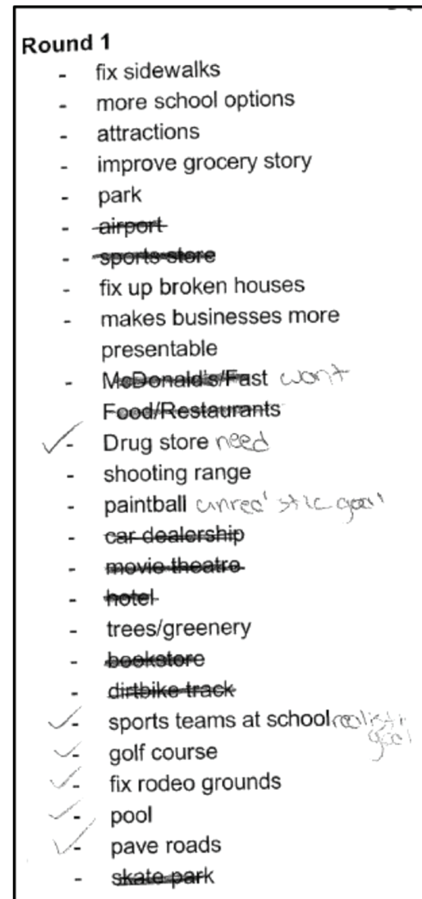
Round 1
- fix sidewalks
- more school options
- attractions
- improve grocery story
- park
- ~~airport~~
- ~~sports store~~
- fix up broken houses
- makes businesses more presentable
- ~~McDonald's/Fast Food/Restaurants~~ want
- ✓ Drug store need
- shooting range
- paintball
- ~~car dealership~~
- ~~movie theatre~~
- ~~hotel~~
- trees/greenery
- ~~bookstore~~
- ~~dirtbike track~~
- ✓ sports teams at school
- ✓ golf course
- ✓ fix rodeo grounds
- ✓ pool
- ✓ pave roads
- ~~skate park~~

FIGURE 1.
Students generated lists of possible community projects after conducting a community walk.

Seven Questions for Analyzing Community Improvement Projects

1. How big a need is this in our community?
2. How many people could benefit from this project?
3. For the people this project benefits, how big a difference would this project make?
4. How likely is this project to have a long-term benefit on our community?
5. What is our chance of success in completing this project?
6. Who will we need help from for completing this project?
7. What problems do we see with this project?

FIGURE 2.
Taylor's tenth graders asked a set of questions to help them assess the viability of projects.

TABLE 2.

Core Unit Activities Mapped to Beaufort's Knowledge Domains
Discourse Community (DCK), Rhetorical (RK), Genre (GK), Writing Process (WPK), and Subject Matter (SMK)

	DCK	RK	GK	WPK	SMK
1. Engage students in discussion of how we determine what the school/ community needs are. Develop a democratic process for identifying and agreeing on a community improvement project the class will pursue.				✓	
2. Discuss grant programs: What they are; why they exist; who funds and manages them. Bring in someone from a granting agency/program to discuss this with students.	✓		✓		
3. Keeping in mind the community improvement project agreed on by the class, codevelop criteria for deciding on the grant program to apply to.	✓			✓	
4. Review grant programs class could apply to and using the selection criteria developed by the class determine which one to pursue.	✓			✓	
5. As a class establish criteria/principles for how effective groups of writers function. Collaboratively build a checklist for peer and self-evaluation to be used throughout the project.				✓	
6. Create a snapshot of the funding organization the class has chosen to apply to: its values, goals and objectives, members/partnerships, and motivations (of both organization and its partners). Drawing on this analysis, develop conclusions about the potential biases/perspectives on the proposed project, potential compatibility between community project and grant program, and implications of this information for writing the grant proposal.	✓				
7. Develop a proposal to be presented to community members (e.g., principal; parent council, town council, library board member; Rotary club; Kinsmen club; Lion's club; athletic director; legion member; school administration) for feedback. Use feedback to clarify thinking before transition to grant proposal writing.	✓		✓		✓
8. Compare and contrast sample grant proposals: a. What features do they share (typical subject matter content—examples, rationales, level of specificity; typical organizational structures—salutations, formal moves, length, organizational structures, use of headings; typical linguistic features—voice, diction, sentence length/ complexity)? b. How are they different from one another? c. What do the differences tell us about the granting agency or grant program? d. Can we correlate differences to anything (recipients, amount asked for, type of agency)? e. What does this analysis reveal about the values of the granting agencies? f. What implications do you draw from this analysis for completing the assigned task?	✓		✓		
9. Conduct a Says/Does analysis that examines each paragraph in the sample grant proposals reviewed previously. For each paragraph answer two questions: (1) What is being said in this paragraph? (2) How is this paragraph building the argument for funding this proposal? After completing this analysis, answer the following question: What does this analysis tell us about the grant organization's values and about the rhetorical moves that could help you craft a successful proposal?	✓	✓			✓
10. Brainstorm types of information needed to complete the proposal (list generated through a review of the documents listed above). Develop research plan needed to collect that information. Enact that plan.					✓
11. Draft, revise, polish, and submit proposal.	✓	✓	✓	✓	✓

Scavenger Hunt Questions for Audience Analysis

1. Who from the board of directors is on the grant committee?
2. What from the website can you learn about who they are and what they would be interested in (values)?
3. List three to four projects that are most similar to ours that have been funded. What similarities do they share with our project?
4. What have you learned from the scavenger hunt that will help us decide what will help us in getting our grant funded?
5. How will this information make our grant application stronger?

FIGURE 3.
Keith's seventh graders conducted an online scavenger hunt to collect information about funding agencies.

improvement projects and the values and expectations of potential funders (see Figure 3).

Reflecting on what she learned from her scavenger hunt, Erica (all student names are pseudonyms) wrote, "I think that this was important in deciding which grant to apply for because it allowed us to see the differences between all of the grants and which one was the most accurate for our project. We know who to angle the grant towards now and why." Jessica's reflection looked beyond this project to its implications for her future writing. She observed, "If we know where to find resources on their websites we will be successful. I learned we need to compare which website to use and to see who we should ask. I learned to research a lot and to pay close attention."

Teachers did not provide criteria for students; instead, they engaged students in a dialogue about effective group processes.

Often, the scavenger hunt activities were followed by interviews with representatives from the grant agencies. Ainsley, a student in Rita's ninth-grade class, prepared for her interview through an inductive process. Thinking about the requirements she saw on the agency's website, she brainstormed questions that would help her understand the reasons for those requirements. She then workshopped her questions with a small group of her peers.

Two days later, an executive director from a granting agency visited Ainsley's class. She asked the first question: "What are the most common flaws in the proposals you receive and reject?"

"Some do not give us detailed budgets that explain how the money will be used; others don't explain very clearly why the project is needed. The most common problem, though, is that they don't provide enough detail about what applicants want to do, why they want to do it, and how they are going to get it done." From that answer, Ainsley learned about the necessity of details, budget precision, and clear justifications for each budget item.

After defining the project and analyzing grant agencies, students presented their ideas to community leaders for feedback. Most classes involved in the project held poster fairs for community leaders. Taylor's class hosted their hamlet's entire town council for a morning of presentations and discussion. Councilors listened to students' PowerPoint presentations, asked probing questions, and then helped the class refine their ideas. The councilors' enthusiasm was evident. With their encouragement, the roadside pullout proposed by the students morphed into a small park equipped with running water, flush toilets, and electrical hookups. These research processes helped the students refine their analysis before writing the grant proposals.

ESTABLISHING AND REFLECTING ON GROUP PROCESSES

Because much of the writing we do in academic, personal, or professional contexts is collaborative in nature, students were asked to develop criteria for effective collaboration and to reflect on their group's adherence to those criteria. As with other aspects of this process, teachers did not provide criteria for students; instead, they engaged students in a dialogue about effective group processes.

A week into the project, Taylor's tenth graders came to class to find a set of questions posted on the walls. Next to the graffiti wall, Andrea read the question, "How can you show respect to your classmates during group discussions?" Thinking about the previous day's groupwork when she was frustrated with Henry for interrupting as she explained her idea, she wrote, "Wait for others to finish speaking before you jump in with your ideas." After spending a few minutes with that question, she headed to the poster by the window where she read, "What should you do if you disagree with a peer as you work in a small group?" She thought about how she didn't say anything to Henry, and how she felt resentful of him the rest of that class. She wrote, "Don't be silent, politely explain why you disagree or are frustrated."

Later, she worked with two friends to create a list of elements of effective collaboration based on answers to the first question. Other groups worked on the other questions. Together they developed a rating scale that they could use to evaluate how well their groups were collaborating (see Figure 4).

The next day, Andrea and her classmates completed an evaluation of how their groups had been doing so far. She rated her group high on most criteria but rated it at a low level for "sharing ideas." When her group met to discuss their evaluations, she discovered that two group members agreed with her but that three members felt the group was sharing ideas very well. Discussing the scores, the group noticed a pattern: the students who gave the group high marks for sharing ideas were happy with how well they shared their own ideas, while the students who gave the group low marks for sharing ideas wished that they had been listened to better. The discussion helped the group set new goals for sharing ideas. Being aware of the problem encouraged everyone to try harder.

Group Process Peer Evaluation

Criteria	Scale: 1–5 1 (didn't do this at all)– 5 (did this very successfully)	Evidence of Achievement
Efficiency/dividing up tasks	5	We figured it out quick and easy together at the beginning.
Staying on task	4	I felt focused and got my slide done during the first class.
Compromising	4	We only compromised on what color the slides should be and it worked out fine.
Sharing ideas	2	My group didn't listen to my ideas so I gave up telling them.
Listening to ideas of others	4	The boys made the majority of the decisions and we all agreed they were good.
Equal contribution to work	5	We all did our share and completed the task.
Showing leadership	3	No one really took "leadership"; we all just worked together.
Willingness to follow group's direction	4	If I was asked to look over a slide or find info I would do it.

FIGURE 4.
The students developed a rating scale to assist them in evaluating their group work.

ANALYZING GENRE

The students were also taught to analyze samples of successful grant proposals so that they could extrapolate characteristics of the genre from the examples. Jaimie gave her students a heuristic comprised of thirteen questions aligned with Beaufort's knowledge domains (see Figure 5). She also gave them samples of three successful grant proposals. Dividing the class into three groups, each tasked with reviewing a different proposal, Jaimie reminded them to read closely and make inferences based on what they were reading. Completing their analysis, Mark's group identified a number of features of the genre: (1) the intention for a grant proposal is to get some kind of help for a big project; (2) most proposals have a maximum word count and are also straight to the point; (3) applicants use types of evidence like graphs to show how the plan will work; and (4) agencies have different structures that they want you to use.

Later the three groups compared notes, identifying patterns and determining what to include in their proposal: who the applicants are; why they want the money they are applying for; a detailed, specific project description; a project budget; a description of how the project will benefit the community; a discussion of why the agency should care about the project; and a project timeline. They also agreed that it was important to be both thorough and concise in their application.

ANALYZING RHETORIC

In Taylor's classroom, students were increasingly surprised at how much reading and research they had to do before they could start writing. One day they found a T-chart on their desks. On the left side of the chart was the word *Says*, on the right, *Does*. After settling in, Taylor explained to them that often when we read we focus on content, on what each paragraph in a document says. She then explained that when trying to solve a rhetorical problem we can also read to see what each paragraph does: Is it introducing an idea, explaining a concept, providing evidence to support a claim? The list of possible functions is extensive. Ultimately, the goal of a Says/Does analysis (Elbow),

Heuristic for Genre Analysis

Use the following questions to analyze the sample grant proposals provided to you.

Discourse Community

1. Who are the authors of the grant? What in the document helps you to identify who they are?
2. How do the authors signal their credibility? (How do we know to take them seriously?)
3. How does the design, look, and polish tell us about the authors and the audience for whom they are writing? What sense do these features give us of the values held by the authors and the grant agency to which they are applying?

Genre Structure

4. What are the major structural sections? Outline them (headings, etc.).
5. What is the logic in the organization of the piece? Why is it ordered the way it is ordered?
6. How long and how complex is it? As a whole and individual parts?

Rhetorical Features

7. What is the level of formality in the genre? Think language, construction, usage, etc.
8. How formal is evidence citation? Level of detail in regards to the claims?
9. How are visuals used? This includes headers and other visual cues to contribute to the piece. What kind of visual material?

Subject Matter Knowledge

10. What do you see as core content?

Metacognition

11. Based on what you see in the grant proposal, what values do the authors demonstrate? What values does the grant agency reward/hold?
12, What purpose does the genre of a grant proposal serve for grant agencies? How does the sample grant proposal deliver on that purpose? Evidence?
13. What have you learned from this analysis that will help you write your grant proposal?

FIGURE 5.
Jaimie's class used a set of questions to analyze examples of successful grant proposals.

she explained, is to determine how an author achieves his or her intention for a particular text.

To complete the analysis, students read each paragraph in the sample grant proposal and then wrote a summary of the paragraph in the left column. In the right column they noted how the paragraph is building the argument for funding the proposed project. The completed T-charts provided students with two outlines of the proposal: one outline showed the sequence of content while the second outline showed the sequence of rhetorical moves used to build the argument for funding.

Once the T-charts were completed, Taylor asked her students to compare outlines for the three sample grants they had reviewed. The students determined that grant proposals needed to address four major questions: (1) What is in need of funding? (2) Why is funding the proposed project worthwhile? (3) Why fund you/your organization to do this project? and (4) What is the project's feasibility? They also discovered that grant proposals answered these questions in different sequences; some answered each question separately, and others wove integrated answers to these questions through multiple paragraphs. Before setting out to write their proposals, the students understood the core questions they had to address, and they had examples of ways they could structure the answers.

DETERMINING CORE CONTENT

Analyses of discourse communities, genre features, and rhetorical moves all provide information about the core content required for a successful grant application. Lindsey had her sixth graders prepare for this next step by reviewing their notes from the previous sets of analyses they had completed. They identified questions that would help them determine core content for their proposal to upgrade a dog park:

- What is the goal of your project? What need are you addressing?
- Describe how you came up with the idea and how you and other youth will be involved.
- What do you see as the benefits [of your project] to the community?
- What activities are you planning? When will they take place?

Returning to class after recess, Lindsey's students found their desks pushed to the center of the room. On the floor in each corner were large sheets of chart paper. A basket of markers sat on the edge of each sheet, and beneath them was written one of the questions. Lindsey instructed the students to pick a corner of the room to start in. When they got to their corners, they were told to grab a marker and jot down the three most important pieces of information needed to answer the question on their chart paper. After five minutes, the timer on Lindsey's phone sounded and students moved to a new poster, read the comments already written there, and then added their own ideas.

After twenty minutes, the students put the desks back into rows and reviewed each sheet of chart paper, making a list of the content to include in their proposals. In response to the first question, for example, they developed the following core content: the upgrades would help dogs and people get more exercise; make the dog park more enjoyable, thereby increasing usage; make the park more fun for dogs and more exciting for their owners; and provide people with shaded sitting areas. When they started drafting, these lists helped them stay focused on what to say in their proposal (see Figure 6).

DRAFTING, REVISING, POLISHING, AND PUBLISHING

The drafting and revising stage of this unit also focused on fostering independence. Rita broke her class's proposal into sections. She assigned several groups to draft each section. Later, Rita projected each draft section onto a screen in the front of the room. The class read drafts of the same sections, identified the strengths and weaknesses of each submission, then determined what the final polished sections should include. Discussion complete, each group went back to the drafting table and made the

Our goal is to help dogs and humans get healthy and happy. We want to make the dog park more enjoyable and more used by both dogs and people. We feel that by adding trees to the space as well as benches people will be more likely to go to the park. If more people are using the space it will give them a chance to meet others in their community. There is only one Dog Park in [town] so it is important that it is well developed and used by the community.

If we are successful in getting this grant we will be planting trees for shade. [A local] Nursery is willing to donate Laurel Leaf Willows which cost $150 per tree and we will be paying for the planting costs of $100 per tree. We will also be constructing benches that we would like to put in the shade of the trees so that the owners can relax and enjoy the park. Each bench costs $500–$800 depending on the material that it is made of. The Town [office] provided us with that quote. We will be talking to the arborist to determine when it is best to plant the trees. We hope to be planting the trees and completing the work which we will be doing with the help of our partners in the spring of 2016. We are also hoping to advertise this event so that we can encourage more volunteers to come and help us as well as share with them our journey in this project. We are also pursuing a grant from the Town [office] and will be contacting the Kinsmen Club as well. We hope that these partners will help us to get a water line ready for a person and dog water fountain. If all goes well, we are hoping to invite everyone to a grand re-opening celebration in May.

There are many reasons why upgrading the dog park will benefit [our town]. Dogs and their owners will be more encouraged to go out to the dog park to exercise and socialize. It will help the community to be healthier because of better air quality healthy dogs and happy citizens and adding more opportunities for physical activity to [our community]. The reason why we think the dog park needs benches and trees is because after we run around we want a place there is shade and you can relax. This encourages people to spend more time outside.

FIGURE 6.
The discussion of questions about core content of grant proposals guided Lindsey's sixth graders as they wrote their first draft.

required revisions. Final drafts were bundled into one coherent proposal and sent off to the grant agency.

BUILDING AND ARTICULATING METACOGNITIVE KNOWLEDGE

The act of reflecting on learning and of thinking about how to apply that learning in future situations is a critical foundation for developing independence. After completing their grant proposals, each student was tasked with individually creating a visual analogy that captured what each student had learned from the grant writing project (see Figure 7 for the assignment guidelines). These visuals and the reflections that accompanied them provided key insights into what students had learned about writing.

In their reflections, most students reported learning that research was important to every stage of the writing process because it helped them understand the values and expectations of their audience, how the genres they were working with were organized, which rhetorical moves would be most effective in achieving their intentions, and what content would help them be successful. Many students also highlighted the importance of knowing their audience's expectations for the text they were creating. They observed that writing for an audience other than their teacher compelled them to think more clearly about how to achieve their intentions for their text.

Anita combined these two insights, observing that a key to her future success was learning to develop her own criteria for a successful composition. She wrote, "the main skill I learned through this project was learning to build my own criteria . . . . I can adapt this skill to any English piece, [because] building your own criteria will help you clarify your ideas and recognize what you hope to achieve with the project."

The theme of resilience was also clearly articulated in a number of reflections on the process. Students made a distinction between being successful on their grant application (receiving funding) and developing the skills they need to be successful in the future. For several classes involved in the HWP, this notion of resilience was tested by their failure

Visual Analogy

For this task, you are required to create and present an integrated image that reflects the things you learned about writing during this unit that you would use the next time you were asked to write something you'd never been taught before how to write.

Questions your visual should help you address include the following:

- **What processes and strategies did you learn that would help you in future writing tasks?**
- **What did you learn about understanding and working with audience that would help you in future writing tasks?**
- **What did you learn about understanding genres that would help you in future writing tasks?**
- **What did you learn about rhetoric (how to achieve your intentions for a piece of writing) that would help you in future writing tasks?**
- **What did you learn about working with subject matter that would help you in future writing tasks?**

FIGURE 7.
The students reflected on a set of questions about the process as they developed visual analogies to symbolize their learning.

to receive the funding they had applied for. Alice, a ninth grader, reflected on her visual analogy describing what she learned from her class's unsuccessful proposal (see Figure 8):

> Everything started to fit together and "smooth out" as we progressed through the unit; this is my glass window. We had things figured out until [the grant program director] sent his email which put a bullet through our smooth glass window . . . . The bullet . . . drew out the small imperfections in the glass, issues we had forgotten or overlooked . . . . The shards of glass will all be different sizes and will represent the more or less important things we have learned. The pieces all came together in the end only to be blown apart, but if need be we still have the pieces (things we have learned) to make a new one.

This remarkable insight links the understanding that failure resulted from not fully unpacking the rhetorical context with the recognition that future success will come from picking up the pieces, taking what has been learned, and trying again.

FIGURE 8.
Alice's visual analogy depicted a bullet shattering a pane of glass.

WRITING FOR LIFE

The ultimate goal of any writing teacher is to prepare students for life beyond the classroom. In our digital age, in the world outside of our schools, writing has become more multimodal, the audiences for our writing have become more immediate and more diverse, and the range of genres through which we communicate has proliferated exponentially. If our goal is to provide students with a strong foundation for writing throughout their personal, professional, or academic lives, we need to envision new writing pedagogies designed to foster independence, resilience, and breadth of experience. We need to teach students how to do the deep thinking, the task analysis, and the problem-solving work that fosters independence. We need to envision a new scaffolding: rather than providing templates, formulas, or process guides—the products of our analyses of writing tasks—we need to equip our students with heuristics, analytic techniques, and flexible collaborative processes—the tools needed to independently solve complex writing tasks. Traditional scaffolding prepares students to replicate the same writing tasks over and over again; the metacognitive scaffolding

we are developing prepares them, instead, to thrive when faced with novel writing tasks throughout their writing lives. EJ

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READWRITETHINKCONNECTION

Lisa Storm Fink, RWT

In this lesson, students analyze their schooling experiences by imagining what their education would be like if service learning was a requirement for graduation. They engage in a preliminary classroom debate—either agreeing with the proposed change in curriculum, opposing it, or taking a middle-ground stance—before they have all of the facts. From here, students research service learning and work in groups to prepare informed debates. At the end of this lesson, students reflect on the implications of making uninformed vs. informed arguments as well as what it takes to build a strong, successful argument. https://bit.ly/2PMKQfX

EDWYNA WHEADON POSTGRADUATE TRAINING SCHOLARSHIP FOR PUBLIC SCHOOL TEACHERS

English/language arts teachers working in public educational institutions are eligible to apply for an Edwyna Wheadon Postgraduate Training Scholarship. This $500 award supports postgraduate training to enhance teaching skills and/or career development in teaching. To qualify, the recipient's degree or nondegree course must be provided by an accredited, degree-granting public or private two-year junior or community college, four-year college or university, or graduate or professional school. Recipients must be NCTE members at the time of award. The application deadline is **January 31, 2019**. For more information, see http://www2.ncte.org/awards/edwyna-wheadon-postgraduate-scholarship/.