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Scaffolding Student Research in a Digital Age: An Invitation to Inquiry

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Abstract

The digital age provides an overwhelming amount of information and an array of modes, including text, images, and sound, for presenting student learning. Without a comprehensive strategy for teaching information processing and presentation, student reports can be overwhelming for both students and teachers. The authors present *research platforms* as explicit instruction with potential to scaffold students toward multimodal literacy and purposeful independent inquiry presented with a confident voice. In research platforms, teachers create multimodal text sets on topics of interest and guide students to collect information, make sense of it, and present it to peers in engaging formats. Rather than advocate the research platform strategy as tested and true, the authors invite readers to join an electronic network, a virtual community of practice, to share text sets and reflect collaboratively on student responses. The authors expect to report development and evaluation of the strategy and of the network in subsequent articles.

Introduction

The overwhelming amount of information available in a digital world makes it more crucial than ever to teach students how to select, synthesize, and make meaning of relevant details accurately. In a time when “entertainment” and “news” are combined in the media and student reports may contain graphics and sound as well as text, the lines between fiction and non-fiction have become blurred. With increasing frequency, teachers supplement written reports with a variety of creative projects to engage students in learning, including dramatizations, letters, diaries, posters, and slide show presentations. Literacy experts (Booth, 2001; Keene &

Zimmerman, 2007) recommend that teachers look for more than an accurate synthesis of information: rather than merely summarizing, or worse – plagiarizing, students need opportunities to represent their learning in a variety of formats that demonstrate understanding, engagement, and creativity. The cultural shifts of the digital age have caused some dissatisfaction with the invisible, objective, non-fiction narrator: a quest for the author’s purpose and voice has come to informational genres.

However, in spite of computers, familiar problems with student research persist, as we witnessed recently in a classroom in a technologically progressive middle school.

Grade eight students with laptops worked in pairs to draft a persuasive information-based argument about adjusting the school day to address teen sleep deficits. In some pairs, each student gathered information independently from websites. One student found interesting facts on websites and read them aloud to her partner, who added them to the report. Some students manoeuvred competently between windows to read and record information by cutting and pasting text into a draft. When questioned about how they chose the information to record, students were unclear – “whatever is interesting” was a typical response. In some cases, sentences were copied word for word from a website without quotation marks or references. In this early stage of the students’ projects, drafts were unorganized and much of the information they were gathering appeared irrelevant for building a persuasive argument. Although the assignment was engaging and the students were on task, we saw potential for more powerful learning if the students had begun the project equipped with a foundation of research skills. Further, we believe that with such a foundation, the assignment would have been more efficient in leading to increased proficiency in purposeful writing or presenting.

An Explicit Strategy to Scaffold Independence

Suggestions for teaching non-fiction comprehension strategies and information processing are peppered throughout literacy texts, and teachers are largely left alone to integrate them into a developmental sequence of lessons that scaffold student independence. Klein’s (1989, 1990) controlled research was an instructional strategy for teaching students research skills with a question grid and predetermined sets of encyclopedia articles. Having applied this strategy productively in our elementary and teacher education classrooms and to support our own informational reading and writing at the graduate level, we propose that it can be updated and adapted to teach information processing with multimodal texts. Revised and connected to current thinking about literacy, we refer to it as the *research platform* strategy

and recognize the potential of this approach to support student learning through inquiry, increasing the likelihood that deep understanding will be demonstrated by integrating accurate information with a purposeful author’s voice.

However, the explosive growth of the digital world impacts educational research and the role of university-based researchers as well. Rather than present the strategy as a tried and true *fait accompli*, we seek to respect teachers as full partners in knowledge creation with an invitation to join a research network to develop the strategy collaboratively. This paper presents the possibilities that occur to us as we explore the problem of scaffolding student research through the memories of our own classrooms, our current work with pre-service teachers and graduate students, and our theoretical understanding of new literacies (Jewitt & Kress, 2003; New London Group, 2000). We invite readers who share this sense of possibility to implement, question, refine, and adapt the strategy and share their inquiry online with a network of colleagues. The results may include an archive of multimodal text sets and recommendations, based on real student responses, for how these resources can be used to build informational literacy across subjects and in various kinds of classrooms. However, we also anticipate that adaptations made by teachers may be quite different from what we have in mind. Far from being “teacher proof” and prescriptive, we propose the research platform strategy as an opportunity for teachers, as well as students, to learn from each other. We are looking for teaching partners to help us understand how to adapt literacy instruction to better suit the demands of a dynamic digital world and the lived reality of their classrooms.

Our vision for the Learners’ Platform Network (Brown & Lapadat, 2008) follows the example of Caro-Bruce, Flessner, Klehr and Zeichner (2007) for inquiry partnerships among teachers and university researchers and applies the principles of “the wiki workplace” (Tapscott & Williams, 2008) to the co-construction of educational knowledge. With the emergence of

an interactive world wide web, or Web 2.0, widely accessible authorship ushers society “toward a world where knowledge, power, and productive capability will be more dispersed than at any time in our history” (p. 12). Tapscott and Williams have documented changes in the global economy that “are giving rise to powerful new models of production based on community, collaboration, and self-organization rather than on hierarchy and control” (p. 1). We see a network in which authentic examples of teachers’ work, such as unit plans and lesson materials, are made available for collegial critique and for creative adaptation in other classrooms, as a form of “peer production”, or *peering*. We are curious about how peering multimodal novel and genre studies and research platforms on our Learners’ Platform Network website might build professional communities across distances and enhance confidence for scaffolding student literacy.

In this paper, we discuss multimodal literacy and our view of its relationship to the arts and digital tools. Next, we describe the research platform strategy and outline possibilities for explicit skill instruction that corresponds with recommendations for struggling students and for developing higher order thinking, differentiation, and multimodal literacy for all students. Finally, we invite readers to join a virtual community of practice by compiling or adapting research platforms for their students and sharing reflections and revisions with colleagues in an online network. We suggest a number of questions to guide teacher inquiry and to fuel discussion on the network. Drawing on the network dialogue as data, we expect to report development and evaluation of the strategy and of the network itself in subsequent articles.

Teaching for Multimodal Literacy

A position paper on multimodal literacies drafted by the National Council of Teachers of English (2005) has stated that “The techniques of acquiring, organizing, evaluating and creatively using multimodal information should become an increasingly important component of the English/Language Arts

classroom (p. 2). Jewitt and Kress (2003) define multimodal literacy as the ability to communicate and make meaning through a variety of modes, including image, gaze, movement, music, speech, and sound effect (p. 1). As human meaning-making systems, modes are shaped by cultural values and traditions. In North American culture, an emphasis on communication through written text is being reshaped by new media, particularly digital technology. Students can now access information and become authors via a wider array of presentation media, including photo displays, blogs, fan fiction, and digital video. Although the creation of images and dramatic presentations, like text itself, do not depend on computers, the new media allow for art work, photographs, dramatizations and written documents to be more easily manipulated, combined, recorded, and shared with a wider audience. The screen is replacing the page as the dominant medium: “even now, multimodality is more readily achieved with the screen of new communication and information technologies than it is with the book” (Jewitt & Kress, 2003, p. 16). Multimodal literacy researchers anticipate far reaching effects on the mode of writing, with the conventions of image and layout on the screen “spilling back onto the organization of the page” (Jewitt & Kress, 2003, p. 16). Teachers who have loved books as they were may be tempted to resist a shift toward multimodality in the classroom; however, today’s students deserve an education that is engaging and relevant in a digital world, where new tools and communication styles are not fads but cultural fixtures.

Our classroom-based and theoretical investigations (Brown, McGregor & Lapadat, 2006; Lapadat, 2008) led us to believe that key aspects of teaching for multimodal literacy foster a heightened sense of student authorship and a wider range of receptive and expressive communication. Accessing a range of modes for meaning making is certainly enhanced by the availability of digital technologies in the classroom. However, in our view, the essence of multimodal teaching does not depend on digital cameras and software but on the

teacher's willingness and ability to integrate a wider range of human expression into lesson delivery and student assignments. Multimodal teaching begins when information is presented with visuals, sound, and drama as well as text and when students are invited to express their learning in artistic forms as well as traditional expository writing. Representing learning through the arts – including selecting, recombining, or producing still and moving images, music, and dramatic performance, is fundamental to human meaning making (Cornett & Smithrim, 2000), although production and performance are enhanced, recorded, and more widely shared with digital tools.

The impetus for multimodal teaching is not the availability of digital tools, but a student population whose expectations, abilities, and understandings have been affected by prevalent media outside of school. In a fast-paced visually-oriented and dramatic world, students are likely to engage more readily in assignments congruent with that world, whether or not they are produced and shared electronically. However, for all kinds of informational presentations, students need strategies for navigating a sea of information with purpose: They need support to develop a voice that expresses the selections and meanings they make and to explain what is important and why.

The Research Platform Strategy

The research platform strategy is designed to scaffold students toward independent inquiry with purpose and voice. By providing students with a common topic and a set of resources, opportunities for explicit instruction, modeled “think alouds” (Keene & Zimmerman, 2008) of comprehension strategies, and specific feedback, students learn to select, paraphrase, and synthesize relevant information from multiple sources in response to guiding questions. Over time, they learn to draft guiding questions themselves. Students acquire information processing skills without the additional challenge of having to find relevant information at an appropriate reading level. In fact, Klein (1989, 1990) suggested that search

strategies be taught separately and integrated once reading, note-taking, and drafting skills were well established.

A research platform text set we developed recently as a model for pre-service teachers in a Fine Arts course consisted of six visual and written texts. The first, a brief video clip available online, introduced students to Emily Carr, an important local and international artist. Other texts included a timeline of her life, an instructor-prepared slide show of her paintings with quotes from her books, and excerpts from biographical works written for young readers. The last reading, more lengthy and detailed, but now more accessible even to those with little prior knowledge before viewing or reading the earlier texts, was a Wikipedia entry. Students access information from these texts in sequence, from simplest to more complex, in order to build understanding. They search for information and *take notes* on information pertinent to guiding questions, but also *make notes* on connections with their own thoughts and experiences, other texts, and the world (BC Ministry of Education, 2007). The guiding questions we chose for this multimodal text set focus attention on Emily Carr as a person and as an artist and on important aspects of her legacy. Having all students investigate the same topic allows for instructors to model comprehension strategies and note taking and making, and provide clarification and feedback to boost confidence with the process. Subsequently, pre-service teachers will prepare a platform package about a visual or performing artist of their choice, to share with their future students. Ultimately, we expect that these novice teachers will scaffold their students toward independence with a wider range of topics as well, and possibly share their questions and insights on the network.

Collecting information in response to guiding questions provides a ready-made organizational structure for an expository report; each question becomes a paragraph or a section marked by a heading or caption. However, the chart on which information is recorded in students' own words also becomes

a resource or platform from which they can prepare a variety of creative visual, dramatic, or text-based presentations after websites and reference books are closed. Once strategies and basic skills for accessing and integrating information are established, we expect that students will be better able to apply these skills in independent work with a greater choice of topics and presentation formats. For example, a student may choose to stage an interview with Emily Carr to discuss the life choices that led to her loneliness and personal hardship but also brought her legacy of visual treasures and concern for preserving Northwest coast cultural artifacts. The kinds of questions asked and how they are answered in a mock interview will feature the information that seemed poignant to the individual reader and thus reveal the student's voice. This kind of creative interpretation goes beyond a voiceless presentation of facts, allowing readers to engage attentively and imaginatively with texts. We expect that the result will be deeper understanding and more memorable learning experiences.

The Research Platform Chart

In our current approach to research platforms, eighth grade students read or view the articles in the prepared text set sequentially and record information in brief, paraphrased points on a desk-size chart – 11 x 17 inch photocopy paper or larger drawing sheets work well. With digital research in computer labs or with mobile laptop labs, there is potential for students to construct a table within a word processing document to hold and organize their information. Either way, the research platform chart consists of a grid with a row for each guiding question or search key and a column for the student's notes from each article. References for articles are recorded at the tops of the columns. In each box on the grid, students answer the research question for that row with information found in the source for that column. As students complete each column of questions and move on to the next article, they record only new information. That is, students do not record information that is repeated from earlier sources. Students use a second colour for note making, writing

personal comments in response to the factual information, either as they gather information for each box or column or when all information has been collected. Finally, references are put aside and students refer only to their chart or table as they write a report or prepare a presentation on the topic. Another option for presenting learning from the Emily Carr platform would be for a student to draw on information in a completed chart to paint a series of images, in the style of Emily Carr, to depict the timeline of the artist's life. Assignments are differentiated when the charts students have prepared are used as the basis for different kinds of products and presentations.

Distinguishing Fact and Opinion

With students' notes from sources and their own commentary recorded in different colours, teachers can help students learn to distinguish fact from opinion. From there, they can practice making this distinction when reading nonfiction sources and in their own writing. Students will need nonfiction examples and guidance to recognize when opinion can be included appropriately in nonfiction writing as an expression of the author's voice, such as for illustrative comparisons to familiar information, for adding narrative descriptions to enliven an expository piece, or for shaping a thesis about the significance of the topic (Beaver, 1998). Blank spaces on a completed research platform chart leave room for further research or for fact-based fictional writing in which students may imagine and create the missing information.

From Shared Exploration to Writing for an Audience

The guiding questions in the research platform strategy can be natural organizers for oral exploration as students talk about specific aspects of the topic in preparation for writing. Later, the search keys clearly define paragraph topics or section headings for expository reports or presentations. Students may also draw on their charts to present information in a narrative style, such as in creative letters, diaries, historical fiction, dramatizations, or

travelogues. It is a natural progression from exploratory talk and shared writing to sharing drafts and providing peer feedback. Given the expectation that their writing has an audience other than the teacher, our students have been more motivated to revise to publication quality in response to feedback. With a variety of audiences and venues for presentation and publication, including classroom peers, other classrooms, school newsletters, parent nights, and community events and newspapers, students have found purpose in their writing that has contributed to the development of their voices.

Research Platforms as Direct Instruction

In the research platform strategy, the teacher chooses a topic of interest to the students and selects and sequences non-fiction articles according to difficulty. When students read and take notes on the articles in sequence, their knowledge of the topic for more complex readings is supported by information they have gathered from the shorter, more accessible articles. This may be an ideal time to support struggling readers by teaching students to monitor their own comprehension (Keene & Zimmerman, 2007): students “must be able to ‘listen to’ what the words say while they read, checking their understanding, noting when it has been lost, and applying appropriate ‘fix-up strategies’ as necessary” (Tankersley, 2005, p. 109). In our experience, students who have used research platforms learn to support their own comprehension by reading shorter or simpler articles first for topics they choose for themselves.

Instructional emphasis on the essential skill of note-taking in response to search keys gives students a clear purpose for reading and encourages them to select the most pertinent information. Monitoring comprehension and identifying relevant information are two reading behaviours identified as characteristic of proficient readers but sometimes underemphasized when students work with fictional texts (Gear, 2006). Both are developed in the research platform strategy. Meltzer, Smith, and Clark (as cited in Tankersley, 2005)

also identified strategies that should be taught to all students. Among them, “rehearsing” involves underlining and taking notes, and “elaborating” is “taking notes” involves paraphrasing text, forming a mental image, creating an analogy, and summarizing” (Tankersley, 2005, p. 111). In a grade seven class, our students used “rehearsing” strategies by numbering the guiding questions and using that number to identify the underlined text in the platform texts used to answer each question. Reviewing the note taking process as a class helped struggling students to see and learn from the ways that others accessed information. In terms of “elaborating” strategies, these students learned to paraphrase text well, which gave their writing a sense that student authors had written it themselves, rather than patching it together with poorly understood words and phrases from other sources (Beaver, 1998, p. 91). However, an aspect of the research platform that was missed with this group was student responses to the text, written in a different colour than the notes they took directly from the texts. This is a part of the “elaborating” strategy that encourages students to make and express their own comparisons and analogies as they read. We now believe that this aspect of the strategy can strengthen students’ content understanding and later “enliven” their written or presented products (Lindblom, 2008). For example, in a slide show presentation about one of the planets, a student presented a measurement of the planet’s circumference, followed by the comment “That’s a lot!” in parentheses. Through this simple phrase, readers are given a sense of the student’s voice and lively engagement: The student understands the relevance of the figure as compared to that of other planets and wants to share it with the audience.

When students have completed a research platform chart, a glance across the columns will show them that one source is insufficient for answering their questions. Unanswered questions that remain after reviewing several sources help students understand that there is always more to learn. However, they will see that, to be effective, each report or presentation

must focus on one specific main idea and a limited set of related questions. Rather than creating reports that are a lengthy jumble of everything anyone might ever want to know about a topic, student reports or presentations are shorter but more focused and informative for a target audience. With shorter reports, teachers can repeat the research cycle more frequently, providing specific feedback to support revisions. In each cycle, students are less likely to be overwhelmed with information and teachers can provide more timely feedback and grades than for extensive projects (Klein, 1989).

Feedback, Assessment, and Grading

We believe that the research platform strategy as presented is manageable because teachers can focus on providing feedback and assistance, a more productive use of time than checking reports on a variety of topics for accuracy and plagiarism. Teachers become familiar with the reference articles selected for a research platform package in advance. Thus, they can review student work diagnostically to pinpoint student problems with discrete skills in reading comprehension, selecting relevant information, taking brief but accurate factual notes, or paraphrasing information and making personally relevant comments and comparisons. When charts are complete, students' familiarity with the common topic facilitates instruction through shared writing routines and modeled conferences. Teacher feedback to individuals is likely to be helpful to other students as well. Teacher feedback becomes a model for the feedback that students learn to provide for each other and for the self-monitoring skills that will support independent topic choices in subsequent projects.

To guide the research process and provide feedback at every stage, we suggest that teachers assess three aspects of the project: (a) the research platform texts in which students have underlined or highlighted pertinent information on photocopied articles from the text set; (b) the platform chart completed with brief, paraphrased notes from each source as well as student commentary in another colour;

and (c) the resulting drafts, publishable works, or presentations. Because this strategy is used to introduce research processes, feedback and grading should focus on skill development as well as presentation of content information, thus aligning assessment *for* learning and assessment *of* learning closely with the purpose of instruction (Earl & Katz, 2005).

Higher Order Thinking

Tankersley (2005) emphasized a continued need for teachers to address thinking skills beyond knowledge and comprehension (p. 148). For this purpose, cognitive psychologists Anderson and Krathwohl (2001) have updated the ascending categories of Bloom's taxonomy – *Knowledge, Comprehension, Application, Analysis, Synthesis, and Evaluation* – and “changed the nouns to verbs to reflect thinking as an active process. The updated version leaves the first four categories – *Remember, Understand, Apply, and Analyze*, largely unchanged. However, the original sixth category – *Evaluation* – is reduced to the fifth level and renamed *Design*, because critical thinking, in terms of accepting or rejecting ideas, is seen as a necessary part of the creative process. In the revised version, Bloom's fifth category, *Synthesis*, is elevated to sixth place as *Create*, the highest form of thinking. A description of this new category makes its relevance to literacy instruction clear:

Synthesizing text involves linking new information with prior knowledge or with multiple texts to develop a new idea, establish a new way of thinking, or create a new product of some type. An example of synthesis would be rewriting ‘Little Red Riding Hood’ from the perspective of the wolf...The following verbs signal the ‘Create’ level of thinking: *choose, combine, compose, construct, create, design, develop, formulate, hypothesize, invent, make, make up, originate, organize, plan, produce, and role play*. (Tankersley, 2005, p. 151).

The research platform strategy has the potential to scaffold the higher order, multimodal thinking that leads to creative

expression by establishing a firm foundation of “remember” and “understand” strategies. When students select and record information relevant to questions, they are analyzing, and when they select from a variety of ways to present information, they are beginning to apply what they have learned. A contemporary emphasis on designing and creating as the highest levels of thinking emphasizes the value of student projects that access under-represented or multiple modes. In addition to expository essays and reports, students may exhibit learning in their ability to translate information across modes, for posters or photo essays, or in a combination of modes, such as in a docudrama. When classroom technology enables digital recording and sharing, multimodal authorship accessible to other learners enhances authorship and the sense of purpose with which students create products.

Differentiation

The research platform strategy lends itself to what Hume (2008) calls *proactive differentiation*. Rather than differentiating instruction only after students begin to have trouble, we believe that teachers will be able to use this strategy to lead all students, with clear instructions and feedback, to the skills they need for independent research. A plan for differentiation can be built into instruction in three ways. First, students who have completed their controlled research chart on a common topic may choose projects from a limited range of presentation options for which criteria and a grading scale have been determined. Second, research platform packages may include a wider range of levels on the same topic than each student requires. For example, students might choose their own comfortable reading level for three consecutive articles in a series of five or more, and for special needs students as well as others, the first “articles” could consist of information presented visually (Erin Pedersen, personal communication, April, 2008). Finally, students may move to independent projects and self-selected topics at differential rates, with students who need more practice benefiting from teacher feedback on additional platform packages. Independence and choice in topics and sources can be offered

when teachers are confident that students are able to read with understanding and write with purpose and voice. A suggested developmental sequence for teaching nonfiction genres might be to begin with personal narratives, move into two or three short controlled research text sets on common topics, and have students branch into a choice of levelled text sets in which they demonstrate readiness for independent research. However, classroom inquiry is needed to test and adapt this sequence and to provide other examples of successful progression from platforms to independent research for various grade levels.

Preparing a Research Platform Package

The topic chosen for a research platform package is a means to an end, a vehicle for skill development. As a coaching system, the research platform strategy works best with less. Students, like basketball players, can benefit from targeted skill development in preparation for the big game. For example, Klein (1989) proposed that selecting a marginally famous person with an entry in several encyclopaedias would be more likely to provide a manageable amount of information than focusing on a highly famous person such as John F. Kennedy. Short turnaround time between information gathering and feedback is a key consideration when selecting topics. Thus, the articles themselves must be short to provide the least range between the fastest and the slowest reader, the optimal group lesson pace, and the greatest instructional value.

Although Klein (1990) recommended estimating difficulty with the Fry Readability Scale, we have also found that students worked productively with materials sequenced with a teacher’s eye for difficulty. In addition, we found that excerpts of less than a single page from trade books and children’s encyclopaedias made controlled research viable even for primary students. When preparing packages, we have sometimes edited articles for length to present information most pertinent to the research questions.

Research Platforms in a Digital Age

Controlled research, the forerunner to research platforms, was developed to support library research and the recommended sources for articles were encyclopedias (Klein, 1989). In the digital age, encyclopedia articles may still be ideal for inclusion in a research platform package because of their brevity and the accuracy of their information. However, when students have opportunities to work in computer labs or with laptops, it makes sense to adapt controlled research to facilitate independent application of skills to that environment. Thus, the articles that teachers select, create, or have students create for use in subsequent research platform packages may begin with visuals made available on a network or accessible via the internet, such as a video clip, slide show, or web of images relevant to the topic. Additional articles may include visual or text-based web pages bookmarked for students or included as links in the teacher's instructions. Students may collect, paraphrase, and organize information using a table within a word processor, either pre-constructed by the teacher and distributed electronically or constructed by each student as part of the assignment. Students can store and share their completed charts electronically for peer and instructor feedback and as the basis for collaborative projects, for example, a wiki that synthesizes knowledge from several student grids. Finally, students can draw information from their research platform charts to create and share presentations using slide show and mind mapping software and digital technology such as edited video.

Depending on the tools and resources available and the teachers' comfort with technology, research platforms in a digital age may be enhanced in ways that have not yet been explored or imagined. However, the essence of multimodal literacy is higher order thinking related to a broad array of texts read, viewed, and authored, and the essence of the research platform strategy is each student's developing ability to respond to and author a variety of texts. Even with minimal access to digital

technology, we believe that teachers can use research platforms to establish sound research skills. With an awareness of multimodal literacy, teachers can help students express their developing understandings with purpose and in their own voices. Even without the diverse information and opportunities for student publishing that web access affords, focused, well-organized expository writing is a worthwhile goal. Without digital recording, creative narrative presentations based on accurate information may still improve student engagement.

Invitation to Teacher Inquiry

We concur with Klein's (1989) recommendation that the best way for teachers to learn to teach the research platform process is to experience it for themselves, from choosing a topic, finding articles or texts, identifying guiding questions or search keys and filling in the grid to preparing sample written pieces or presentations and identifying interesting questions for further investigation. Through this process, teachers prepare materials they can use with students and they anticipate problems students may encounter. We invite readers to accept the challenge of preparing a research platform package and walking students through the preparation of the chart and subsequent projects or papers. Teachers who document and share their decision points and student responses on the Learners' Platform Network website will contribute to a collective understanding of the power and versatility of research platforms across subjects and grade levels.

Guiding questions are as helpful for teacher inquiry as for student research. For example, what topics are appropriate and engaging for your students and how do you find or create useful text sets? Where do students of differing abilities need support and how do you know when students are ready to progress to choosing their own topics and choices? What developmental teaching sequence is most effective? How do your students respond to opportunities for differentiation? Will you adapt the strategy to address unforeseen problems? What have you learned by

participating in this inquiry and what questions remain to be addressed? Finally, we hope you will consider whether the rationale we have provided for the research platform strategy resonates with you or if there are connections to other literature and other literacy strategies that may be more meaningful for scaffolding student research.

When conducting teacher inquiry, two powerful ways to collect data are the teacher's reflective journal and student work samples. Quotes from both can validate and illustrate findings and add credibility and interest to narrative accounts of the research process and results. For busy teachers who accept our invitation, we suggest a 5-minute journal (Phillips, 1996) closely focused on your implementation of research platforms to document your reflective action briefly but frequently. In a small designated notebook or on your own computer, you might lay out each page with three prompts: "I tried..."; "I noticed..." and "Now I want to...". Each day during your inquiry, you may consider one or two of the suggested questions, the steps you have taken so far, the student responses that are prompting your instructional decisions, and your next steps. In our experience, it is more important to make brief, ongoing notes than to write lengthy observations each day. In fact, the purpose of the 5-minute journal is to build the habit of frequent observations that are not a daunting task but a welcome, reflective interlude that supports sound instructional decisions.

Our invitation to teacher inquiry comes with an offer of support as a member of the Learners' Platform Network at www.learnersplatform.ca. The virtual community of practice created through acceptance of this invitation will help to realize the potential of research platforms to scaffold multimodal literacy. We believe that together we can learn to help students write non-fiction with purpose and voice and see themselves as authors who read and write fluently in the digital world.

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