
A Win-Win Situation: Developing a System of Reflection and Documentation for a Grade 4 Arts-Infused Inquiry

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Ask the Grade 4 students at Elizabeth Rummel School in Canmore, Alberta, for a highlight of their year, and they would automatically respond, “Arts-infused learning!” Under the inspiration and leadership of former Canadian Rockies Public Schools music teacher Kathleen Matheson, local artists from the community came to the school to give a series of workshops to small groups of children on their art form. The workshops ranged from drawing to sculpture to photography to songwriting.

Description of the 2012 Project

In the winter of 2012, Matheson and fellow staff members Sue Bjorge and Sandra Becker embarked on a project with teachers Jody Keon and Brenda Cooke from Exshaw School. The population of this neighbouring school is approximately 96 per cent First Nations. Not only was the project seen as an opportunity for teachers to collaborate but also to build connections between two disparate communities. Using the social studies curriculum as a starting point, a focal question was developed, “How do artists tell stories?” Teachers involved in the project met on several occasions to plan and make the experience as meaningful as possible for all. A research question the

teachers focused their work on was, “How can we authentically assess a performance?” They planned six opportunities for the children to come together—three at Elizabeth Rummel School and three at Exshaw School. The first three sessions involved attempts to form a community of learners. Typically, the children from Exshaw School are quiet and reserved. Teachers engaged all the children in a group art project, a teleconference with the Glenbow Museum in Calgary, singing and dancing. The museum presentation entitled “Telling Stories Through Portraiture” involved studying particular pieces of art from the museum collection to see the stories within them. All students involved in the project read and discussed the picture book, *Finding the Green Stone*, by Alice Walker (1991), which became the starting point for their research question. For the final three sessions, children worked in small groups on one art form under the direction of a local artist. While students worked with the artists, teachers circulated with cameras, iPads and iPods to record processes and performances. After each session, they debriefed their own class. As a final wrap-up, they interviewed students using video and asked them to talk about their artwork. As well, they asked students to complete a self-assessment, created collaboratively by the teachers (Figure 1), on the process.

How Do Artists Tell Stories?		Performance Assessment	
Name	Artist		
Did I	Yes	Not Yet	Evidence I learned
Did I tell a story?			
Did I follow the techniques presented by the artist?			
Did I contribute to the group's learning?			
Did my thinking change about how to tell a story?			

Based on a template provided by the Alberta Assessment Consortium (www.aac.ab.ca).

Figure 1

Though the project was seen as a good first step, the assessment process appeared superficial. Teachers had some idea of how and what the children learned, but they were left feeling that while the children enjoyed the experience, they had not made the connection to art as a way to engage in critical thinking. A frequent student comment was, “I cannot believe there are so many different ways to tell stories.” For many of them, that seemed to be as far as their thinking went.

The teachers spent a good deal of time discussing assessment, but they lacked ideas about how to meaningfully get at the children’s deeper learning. They created a website to showcase student work, but it became a simple repository of information—photos, videos and print. In retrospect, for both students and teachers, the focus was on the creation of a product, rather than the research process. There was no evidence that as a result of the project, all learners, both

children and adults, had made important connections that they could carry forward and apply in future teaching and learning situations. This became abundantly clear with a second look at the research question, “How can we authentically assess a performance?” The teachers realized that by focusing on the final product or performance, they were limiting what might be gleaned about student learning throughout their arts-infused sessions.

As part of a master’s-level course on inquiry, I decided to take what was learned during the 2012 experience to further research and develop assessment tools that would enhance arts-infused learning, as process, in the future. This paper will present the research that helped guide the development of assessment tools for the 2013 arts-infused learning project, as well as some of the assessment results using those tools.

Using the Arts as a Tool for Research

Originally, the 2012 team looked at the arts as a way of including all students and of furthering collaboration, especially with First Nations students. Teachers also saw the arts as a way of reaching every type of learner. Students chose the art form they wanted to work in, which included sculpture, painting, performance art, creative dance, hip hop, print-making, collage and video game construction. It was felt that in choosing an expressive medium, the students would have an opportunity to make their voices heard.

In surveying the literature, the evidence exists that there is a more substantive reason for using the arts. Gandini (2012) suggests that the arts allow for the development of multidisciplinary critical-thinking and problem-solving skills that are inherent in the concept of 21st-century learning:

The connections and interweavings among different disciplines with the languages of the atelier often produce, in our projects, a shift in established points of view and favor a more complex approach to problems, revealing the expressive, empathic, and aesthetic elements that are inherent in any discipline or specific problem. (pp 306–07)

I realized that not only could the arts allow thinking to happen, the artistic process could help children develop strategies for research, including posing questions, extending ideas and building knowledge that could be applied in future learning situations. Clyde et al (2006) further these ideas. They suggest that the arts provide a mechanism for thinking:

Through the use of visual and dramatic arts, the children began to search for detailed explanations for their theories. The acts of drawing, sculpting, and dramatizing moved the children from documenting to questioning to research to altering hypotheses. Multiple sign systems were invaluable as children communicated ideas and responded to feedback, prompting them to add details to clarify theories for their audience. They also inspired kids to question more deeply. (p 224)

Baker (2011) from Ochoa Community Magnet School in Tucson, Arizona, at a recent conference clarified that it is not art for art's sake:

We are inventing languages for learning... We are not doing art, but researching a question that needs to be answered... The studio allows you to "see" their questions. We see materials as tools to invent ideas with. Materials are just as important as letters and numbers as symbols of communication.

This was important for the team at Elizabeth Rummel to understand, because it moved them past seeing the arts as production, to seeing the arts as a process of researching, questioning and thinking. I felt that assessing the understanding that comes when using an "expressive language," or any language for that matter, is both challenging and important, because it guides teachers and students into thinking what's next, instead of thinking I'm finished. But how does one assess in a way that moves learning forward? Most teachers involved in the project at Elizabeth Rummel felt it had to be more than the gathering of comments and products, the completion of a checklist or a test, or even a written reflection. Further reading and research led to documentation.

Documentation as a Way of Learning

In conducting research, not only did I question, what is documentation? It also became important to ask, how can we use documentation effectively in an arts-infused learning project? As Susan Fraser (1999) states, much of the knowledge from documentation comes when it is revisited.

Documentation is like a system of gears that sets the curriculum in motion. Making visible the children's ideas and experiences in some form of documentation provides the teachers with a means of revisiting them with children, discussing them with colleagues and parents, and making hypotheses and flexible plans for future action. When children and adults review the earlier experiences together through representations such as children's drawings or recorded comments, the children are moved to a higher level of mental functioning. (p 78)

I knew from our previous experience that it had to be more than the simple act of recording students' comments and actions. More than that, the teachers had to train themselves to listen and interpret what the children were saying when it came to their understanding of ideas. They had to know when to ask questions, when to prompt thinking and when to sit back and simply listen. I felt that this careful listening, when practised, could lead to rich discussion between teachers, students and parents, which could, in turn, lead to deep learning.

Pedagogical documentation is a research story, built upon a question, or inquiry "owned" by the teachers, children, or others, about the learning of children. It reflects a disposition of not presuming to know and of asking how the learning occurs, rather than assuming—as in transmission models

of learning—that learning occurred because teaching occurred . . . pedagogical documentation is a counterfoil to the positioning of the teacher as all-knowing judge of learning. (Wien 2011, Documentation as Teacher Research section, para 3)

I also came to realize while conducting research for the 2013 project that this move from teachers as evaluators to teachers as learners and inquirers, especially for those not practised at it, would require perseverance and time, would probably need to happen in incremental steps and would involve a complete shift in thinking. This shift in thinking was made clear by Krechevsky (2011), from Project Zero, Harvard University, when she spoke at a conference: “It is not about learning to document, it is about documenting to learn.”

However, the notion of learning to document for learning can be problematic, especially if educators are not steeped in the practice of teacher as inquirer. Teachers may often not see purpose in documentation until they learn to document well, and they may not learn to document well if they do not see its purpose. Teachers may have to give up other methods of assessment, which to some, are intellectually less demanding and less time-consuming.

Documentation can initially feel like an “add-on,” and teachers may feel like they cannot find time to do it. Understanding the intellectual purposes of documentation is difficult for teachers when they have not yet developed habits of documenting and are still frustrated by not remembering to document. (Wien 2011, Habits of Documenting, para 3)

I felt that once teachers embedded documentation into their practice, continual self-assessment and growth would be unavoidable, because not only would they come to know their students more clearly as learners, they would also come to be more thoughtful about their own teaching role, as one of mentor and guide, rather than all-knowing directors. “Clearly, documentation plays an important role in nurturing improved practice for all involved by making teaching practice visible at a distance” (Hetland, Cajolet and Music 2010, 63). It seemed that documentation as a rich form of assessment, though challenging, was a worthwhile endeavour to undertake as part of the arts-infused learning program.

2013 Project Details

Because of funding constraints, the 2013 arts-infused learning program was only conducted with students at Elizabeth Rummel School. There were four sessions over the course of six weeks. Students

could choose from drama, dance, guitar, drawing, painting, photography, puppetry and working with clay. That session was held in a potter’s studio, off-campus. Prior to the artists beginning work with the children, teachers viewed and discussed with their classes specific art forms created by Alberta artists and what they told us about our community and province. This connected to General Outcome 4.3: “Students will demonstrate an understanding and appreciation of how Alberta has grown and changed culturally, economically, and socially since 1905,” and specifically to 4.3.3: “In what ways have music, art, narratives and literature contributed to the vitality of the culture, language and identity of diverse Alberta communities over time?” (Alberta Education 2005). This led to our big question, How do the arts show that we are proud Albertans?

As part of the 2013 project, I offered to locate tools that would scaffold more meaningful assessment. Wien (2011) suggests starting slowly: “1. Choose one tool for documenting.... 2. Watch for and document ordinary moments of learning.... 3. Choose from several such documentation moments one occasion that you will try to make more intelligible to others via polished documentation....” (Concluding Remarks section, para 4).

I knew from previous experience that it was important to focus the documentation. “The sharper the teacher’s thinking about the data, and her purposes in sharing it, the clearer the message in sharing the documentation” (Wien 2011, Concluding Remarks section, para 2).

This was an obvious flaw in the “documentation” attempted by the team from Canadian Rockies in 2012. Teachers collected a great deal of data to place on the website, which included student quotes, photos and short video interviews, but there was no purpose or message in sharing it.

As well, the teachers lacked strategies for extending and building on student comments, whether orally or in writing. Often, it felt as if teachers were putting words in the students’ mouths in order to get the “answers” they were looking for. It was thought that a structured document that could scaffold teachers in learning to document would be beneficial.

A “Kidwatching Form” (Gee 2000, 105) could be useful in guiding the work (Figure 2). The key words in the document instruct teachers in what to look for while documenting. This was one tool presented to teachers for use in 2013. It was suggested that teachers focus on one or two students throughout the project, giving them an opportunity to practise so that their documentation was rich and detailed.

Student Name				
Coming to Know the Process of Learning				
Date	Learning Event	Engagement -pleasure and involvement -perseverance -risk-taking -responsibility	Collaboration -thoughts expressed -openness to feedback -use of input -group work	Flexibility -modalities used -problem-solving strategies -revision strategies

Student Name				
Showing You Know the Products of Learning				
Date	Learning Event	Understanding Content -verbal and nonverbal expression of main idea	Conventions and Forms -first uses of conventions -practised use of conventions	Presentation -clarity -detail -focus -purpose -voice

Figure 2

A second tool was developed for student reflection. Project Zero, an educational research group at the Graduate School of Education at Harvard University, provides structured ways to guide the documentation process, using its Visible Thinking and Artful Thinking routines (Artful Thinking Palette www.pzartfulthinking.org/atp_palette.php).

Not only do the thinking routines provide an approach that will scaffold teachers as they learn how to document, the routines are configured in such a way that they scaffold student learning as well.

ERS teachers used a Creativity Routine called Creative Hunt from the Visible Thinking website as a starting point to create a self-assessment document that was used with each arts-infused learning session. In creating the routine, and with input from the team, I wanted the children to pay attention to what skills they were developing, what habits of mind they used and how their thinking changed over the course of the project. The teachers at Elizabeth Rummel wanted to help children think more deeply, but they often lacked ideas for how to help them successfully do it. “Often, we found, children (and adults) think in

shallow ways not for lack of ability to think more deeply but because they simply do not notice the opportunity...” (Palmer et al nd).

In discussion with teachers, the reflection document focused on three areas—the artistic process, the habits of mind used while in the process of creating art and thinking about the big question, How do the arts show we are proud Albertans?

2013 Results

Results using the tools for documentation of learning were mixed.

Kidwatching

In retrospect, it is difficult to know if the kidwatching form could provide the scaffolding needed for teachers to become better at documenting, because it was not used as thoughtfully as it might have been. Three issues need to be addressed in future. In past iterations of arts-infused learning, teachers travelled from session to session, observing all the students in action. This meant that they observed all the children

Arts-Infused Learning 2013

Name _____ Date _____

Session No _____

What was the main purpose today?	
What were the skills learned and what is their purpose?	
What did you do that was especially smart or creative?	
Who was your audience today?	

Source: <http://tinyurl.com/lj9c4j6>

Figure 3

Big Question: How do the arts show we are proud Albertans?

What new ideas do you have about the big question that you didn't have before?	
How has your thinking changed?	
What habits of mind did you use?	

Source: www.pzartfulthinking.org/creative_questions.php

Figure 4

for five to ten minutes, at most. Zeroing in on two students for all the sessions, as suggested, meant teachers would stay in one session for longer periods of time. Logistically, planning did not occur for this to happen. Teachers were needed to troubleshoot in various sessions, and all teachers expressed a desire to attend the potter's studio, which required them travelling off-campus for one of the four sessions. Built into the arts-infused planning process in the future must be strategic teacher observation periods, as well as preconference, observation and post-conference sessions.

Second, it became clear that one of the things missing was teacher discussion beforehand, which may have helped to focus teacher attention during observation periods. Because this was not established ahead of time, in most cases, it did not happen. Assuming that classroom teachers would do this in their busy day-to-day lives was not enough.

Third, only two teachers on the team were familiar, through reading and research, with documentation. More study and buy-in on the merits of documentation by all members were needed by all teachers.

Student Reflection

As part of arts-infused learning each week, the students were given time to complete a reflection

of their learning for that session. Several teachers gave the students immediate feedback on their reflections, both oral and written, if they felt the students' thinking lacked detail or information. The feedback helped the students improve the quality of their reflection and provided the teachers with information and a lead-in to further discussion about student learning.

Students often did not include enough detail in their reflection, and needed guidance in the form of questions and suggestions to help them be more specific in their sharing, as evidenced in the teachers' questions in Figure 5.

With my own class, sometimes the reflections were a starting point for me to initiate class discussions with students about their thinking. In Figure 6, a class discussion was held around how artists show emotion in their work, why it is important and if it connected to the big question. Figure 7 led to a further discussion about Canadian weather, the feelings it evokes in people who live here, and what it says about our identity. In Figure 8, the student, when questioned about his reflections on technique, expressed orally why it was important to him to make the grass look sharp and thin. This led to a discussion about details in an artist's work and what it tells us about their connections to the land.

<p>What new ideas do you have about the big question that you didn't have before? How do Albertans show they are proud without words?</p>	<p>Body language, eg show how special Albertans feel eg. The faces on people when they sing Oh Canada.</p>
<p>How has your thinking changed? Why didn't you do that before?</p>	<p>I now face the audience more often. I didn't before cause I didn't know I had to.</p>
<p>What habits of mind did you use? Specific Examples, please...</p>	<p>- Listening - Good risks - Thinking together - Thinking flexibly eg. I used good risks cause Joe gave us starter ideas and then we had to expand on them.</p>

Figure 5

Figure 6

<p>What new ideas do you have about the big question that you didn't have before?</p>	<p>Well I didn't know that drawing mountains and wild animals could show emotion and confidence.</p>
<p>How has your thinking changed?</p>	<p>I thought we wouldn't add water to the paints but when we did it made it pop.</p>
<p>What habits of mind did you use?</p>	<p>listening because we had to listen how much water to add and what way to stroke</p>

What new ideas do you have about the big question that you didn't have before?	Pictures show weather and that tells us we're proud of our weather. Why? cause it represents our activities and how much we like nature. It also represents perseverance.
How has your thinking changed?	I didn't know that photographs have to go out in this weather.
What habits of mind did you use?	I used persistence because I was cold and wet.

Figure 7

Figure 8

What was the main purpose today?	Learning how to show Light and Shadows
What were the skills learned and what is their purpose?	Mixing colours to show light and shadows.
What did you do that was especially smart or creative?	I used a thin brush to make my grass look sharp and thin.
Who was your audience today?	Our group and teacher.

Attempting Polished Documentation

After four sessions of arts-infused learning, a culminating event was held in the school gymnasium. Students involved in drama, hip hop, puppetry and guitar presented their works to the audience as a whole. Then audience members were free to roam and view the paintings, pottery, photography and drawings the students completed. Student artists, participating artist teachers and classroom teachers were available for questions and discussion.

Student quotes about the process were displayed around the gym for audience members to read. Figure 9 includes some of the student comments. Though many of the comments relate to the research question and the artistic skills acquired through the project, what was most unanticipated was the students' attention to the habits of mind they used, their growth in confidence and their ability to take risks in front of their peers and adults. This confidence factor was expressed by students of all achievement and ability levels.

Student Comments as They Relate to Content, Skills and Habits of Mind

Student Comments	Artistic skills and knowledge	Attempts to understand research question	Confidence	Habit of Mind	Risk Taking
"I improvised when something didn't work."	X		X	X	X
"I'm proud to paint Alberta's huge mountains."		X	X		X
"I think the most important thing in acting is purpose. When you do something, it has to have a purpose."	X		X		
"I thought flexibly. Joe gave us an umbrella and we had to work with it."	X		X	X	X
"I know that we are creative and that we can do something."		X	X	X	X
"The most important habit of mind in dance is taking good risks ..."	X		X	X	X
"I was frustrated when I was on the pottery wheel. I had to slow it down, and I kept turning it off, but I stuck to it."	X		X	X	X
"We had to listen and think together to make the beat the same."	X	X	X	X	X
"Your body is an instrument and a tool."	X	X	X		X
"If I got stuck, I would stop, and then join in."	X		X	X	X
"I didn't know that painting buildings can show we're proud Albertans."		X	X		X

Figure 9

The student reflection tool was the most successful part of the assessment. The teachers realized that by having students focus on specific ideas, skills and habits, they were more clearly able to articulate their own learning. Having said that, feedback was necessary to guide the children's reflection process. Without it, many student reflections would have remained superficial.

There was no follow-up plan on the part of the teachers for discussion about student learning and how this learning might be extended. Reflecting on this, part of the sharing and celebration time in the school gymnasium might have included written documentation from teachers regarding the learning process. This could have sparked further discussion between teachers, students and parents.

Next Steps

What has been learned thus far about the successful assessment of arts-infused learning? We know that thoughtful documentation must be clear, purposeful and focused. There must be planned time for scheduling, discussion and debriefing. Simply providing a kidwatching form to guide teachers and a reflection sheet for students is not enough.

The teachers at Elizabeth Rummel know that their work in documenting to learn has really only just begun. Recommendations for future growth exist in the form of questions for further inquiry:

How can we involve students more deeply and genuinely in the discussion of their learning?

- How can we make the presentation of documentation more polished and thoughtful so that it truly moves learning forward for all?
- How can we build into the process more meaningful discussion time with colleagues and students so that our question always becomes, what next? As Wien (2011) states,

Pedagogical documentation is a route for teaching teachers, for professional development. Whose learning is made visible in documentation? The

children's, of course. Yet in the spaces at the edges of pedagogical documentation is evidence of the teachers' thinking. (Making Learning Visible: From Recounting Activity to Reconceptualizing Purpose section, para 2)

Though we are just beginning to use documentation and deep student reflection as a tool for assessment, it is evident that it can lead children and teachers to thinking more critically about their ideas. As the result of this work, we are thinking, what next? It truly is a win-win situation.

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