

Negotiating Shared Understandings of Our Work Through a Collaborative Curriculum: Exploring the Experience of Creativity in Cross Discipline Visual Arts Projects

Wayne Tousignant, Darren Stanley, Geri Salinitri, & Kara Smith
University of Windsor

In 1994, the National Arts Education Association created a research agenda to address major research issues in the field of visual arts education for the purpose of examining, negotiating, and modifying commonly held beliefs in the field of art education. Research by arts educators has done much to inform visual arts education theory and practice, but largely through studies by individuals with few collaborative efforts. In 1991, Neil Owen Houser proposed a collaborative processing model for arts education, which reflects the experiential or constructivist nature of instruction. In this paper, we present our reflections on our shared work where we explored the benefits of interdisciplinary collaboration, the role of play in the process of problem solving, and how experiential learning strategies and techniques could be applied to the teaching of various subjects through visually-mediated arts projects.

Institutional Context

We are a faculty of education, a group of creators who teach teachers how to teach. We are also a multi-disciplinary faculty. Within our walls are artists, writers, scientists, counsellors, mathematicians, pastors, historians, sociologists, dramatists, psychologists, musicians, and civil engineers. How do we work together, given our diverse fields? We do

not – until four years ago, that is, when three of us embarked upon collaboration.

As educators and scholars, we view teaching and learning as an act of “excited discovery.” And yet, many of the students we observed in the field were still locked into a lecture approach. We were producing teaching clones. We wanted to spark innovative

teachers instilling a love of discovery in their students. To do so, we decided we would have to model and live the “journey of learning” with our students.

As teacher-educators in Visual Arts, English, Science, and Mathematics, we have met, planned, and recycled over the past four years a new teaching approach for our student teachers. We have discovered, however, that this is more about us as instructors. In any event, four collaboration projects were invented over the past four years: “The Stick Project,” “The Suitcase Project,” “The Car-Science Project,” and “The Tetrahedron Project.”

Goals of the Projects

Four collaboration projects have enabled our team to reflect upon and refine our central goal of enabling student teachers to view learning as an act of “responsive discovery.” This was accomplished through modelling and collaboration between Visual Arts, English, Science, and Mathematics. Our goal was to have student teachers create – to create diverse projects of their own, rather than carbon copies downloaded from *a priori* and secondary sources. We wanted the teachers to begin conceptualizing each learning experience as a unique, one-of-a-kind journey involving a myriad of disciplines along the way. In short, the goal was to provoke innovation.

The Stick Project

The stick project was created by Rod Strickland, School of Visual Arts, University of Windsor, and was taught in a first-year Art Fundamentals course as a team cross over project by Rod (sculpture), Dennis Knight (drawing), and Wayne (multimedia). The stick project was designed to provide a learning situation where the students would work through the relationships between concept material and process. The project prompted the students to think about the work as an ongoing process and not as products for grading purposes only. The project started with the word “stick.”

Each student was provided with the following information to begin their visual literacy journey



through concepts, materials, and process:

Find a “stick” based on the following:

- What is a “stick”?
- What do you already know about this word?
- What is the definition?
- How is it used in sentences?
- Where do we find objects by this name?
- What cultural significance do objects by this name have?

Each student was then responsible to make one change to the stick for each class of the semester. The following year, Faculty of Education students were then added to the project and Kara Smith, Education, who taught Language Arts came on board. The Visual Arts students communicated with the Education students through a threaded discussion. The “sticks” were exhibited at the end of the year at the Lebel Gallery with print outs of the discussion threads. Some of the sticks were even performance work!

When Wayne and Rod first talked to me (Kara) about doing the “stick” project, I couldn’t see how it would work. As a creative writer, I am constantly viewing perspectives from other disciplines, but the one word, “stick,” seemed too restrictive to take students through the pedagogical process-based



teaching approach we were proposing. Would students understand the relationship between literature and the visual? The interesting thing is that, although I work with words all the time, I had never considered this one word as having so many unique connotations, and the thought of combining my course with that of Wayne and Rod's was invigorating. Cross-disciplinary teaching can result in very innovative learning, and I trusted both Rod and Wayne because of their credibility as teachers, so I was eager to participate in the approach.

One of my foremost problems teaching creative writing teachers is illustrating how to inter-link language and "create" through visual literacy an integration of various disciplines. The Stick Project had the potential to do that, and I was excited to test it.

A single word can have ample connotations for both English and second-language users. In literary criticism, it can have multiple and diverse interpretations. It was up to the English and Visual Arts teachers to create a visual journey of their created "stick" and to document this journey and its evolving collaborations through the students' threaded discus-

sion in their on-line class site. The students had to begin with a "stick" of their choosing. Each week, much like the Visual Arts and Writing processes themselves, students would add or edit the stick so that its form altered throughout the journey. Thus, they were not simply "doing a piece of art and finishing it;" the art and text was an on-going process of change and learning over time.

The Suitcase Project

Over 200 students were asked to critically reflect upon their journeys as teachers; they were expected to refine and mold their "suitcases" to visually illustrate their reflective practices. In this way, traditional critical writing was represented visually.

Through the process, the students learned that representation is rarely static. Their "suitcases" were highly transformed over time. What we are today is not what we will be tomorrow. The pedagogical process of continually coming into new ideas and skills, and being able to critically connect discipline-specific ideas and skills to create a new, fused idea was learned. The culminating activity was a gallery showing – a kind of public assessment – of all of the suitcases. As a metaphor, the "suitcase" represented the journey of our students through Education – from one place and approach to teaching to another.

From: Lee Bird - Section 4 on 09/29 at 12:12 PM

Title: The life history of my stick

I just wanted to tell everyone a little bit about my stick. My stick was given to me from David Makkituq, an Inuit artist. You see, I used to live in Nanavut for about 2 1/2 years. The stick began as a hockey stick that David cut up and made into a kakivak. This fish spear sat in my house for a while. When this project started I could not find a stick that I thought would be neat or interesting to use. Then I came across the kakivak. So, now this kakivak has changed considerably already. It has been painted blue and has buttons glued to it. I am just wondering how else I could change it's present state.

** Special thanks to Lee Bird for allowing her work to be shared*

Response

From: Kara Smith - 06/14/07 at 10:32 AM
RE: Suitcase Project

The idea for 'the suitcase project' was born from the children's book, *Hana's Suitcase*, by Karen Levine. The story, taught by our Language Arts students, details the journey that one class makes researching and discovering the history of a suitcase owned by a girl sent to a Nazi concentration camp during WWII. Wayne and I saw the "suit case" as a metaphor for our students' learning, and for our own process-based approach to teaching. The journey that Hana's suitcase made from its beginning in Hana's home, to its end in the [Japanese] museum, is a wonderful symbol of the journeys each of our lives makes in education.

Throughout their learning journey as teachers, they were literally and symbolically discovering their own diverse and unique, innovative approaches to teaching and learning. In the English methodology class, students were studying the novel and text, and in Visual Arts, techniques to apply to the process of visual literacy. Together, they composed the cross-collaboration of active discovery learning.

The Car-Science Project

Following the success of the stick project and the suitcase project, Wayne, Kara and Geri discussed the possibilities of furthering the collaboration by integrating science. During this time the Windsor Endowment for the Arts, “CarTunes on Parade,” public art project was on display in Windsor and Detroit. Wayne was chairperson for the Education committee of the project and was actively involved in developing educational material for the project.

We decided to incorporate the CarTunes educational material into a “CarScience” themed project. The CarScience project brought pre-service teachers together to create an interactive display involving an



interpretive representation of nature and technology. The students in Wayne’s art classes created maquettes based on the elementary science curriculum. The science students organized the maquettes to represent a scientific phenomenon, theory, and/or natural occurrence. The project is now a permanent exhibit at the Canada South Science City and developed into an



interactive science pursuit. When K-8 students visited the science centre, they are given the challenge of exploring the features of the display and making connections between the maquettes as representations of a particular phenomenon.

The Science Methodology class chose a design from the Art class, addressing the curriculum expectations that related to the display and created a full size model for K-8 student interaction. An Open House, inviting members of the Canada South Science Centre, the local schools, and community, was the culminating activity organized by the Science and Art students combined. The students displayed a full size car that would be autographed by all the visitors using some visual representation.

I (Geri) found that this project had the Science Methodology students excited about the nature of science and how it can be displayed through a visual medium. The students worked with the cars created by the art students and developed a system of classification that mimics nature.

Interestingly, the groups did not meet; however, the art class worked on individual science phenomena, while the science class created an integrated theme from the work of the art class. I was so impressed by the way the students represented their understanding of science through collaboration and creativity. With this, I hoped the students would reflect on ways of teaching in science that are integrative and innovative to motivate young minds.



This was a great learning experience for the concurrent education science students. They began to realize the connection between the disciplines and the way to develop creative curriculum based on fundamental concepts. These students are reflecting on intuitive learning rather than structured instruction for visual literacy. As Fry (1963) notes, “we are given our eyes to see things, not to look at them. Life takes care that we all learn the lesson thoroughly, so that at a very early age we have acquired a very considerable ignorance of visual appearances. We have learned the meaning-for-life appearances so well that we understand them, as it were, in shorthand” (p.47). One of the concurrent students reflected on the experience by saying:

I am very much a science student and have never really liked doing art work for fun. At first thought I saw the CarTunes as simply that, art work that some people did for fun. I first heard about the CarTunes in my art teachable class. They also reappeared in my biology teachable class. I found that incorporating the CarTunes across the field of education gave me an important lesson as a teacher. Art work is an important way for some students to learn, and incorporating it in different subjects, such as science, is a key element of teaching.

The Tetrahedron Project

Like the other projects already discussed, the tetrahedron project, which is still emerging, has also gone

through its own share of iterations. To be sure, “math,” “fun,” and “interesting” are not usually words I (Darren) hear in a sentence from our students. So when I have introduced mathematical engagements like the fractal tetrahedron, it almost seems quite incredulous to them! This can’t be math – it is too much fun! That much may be true.

In my mind, the fractal tetrahedron (made from plastic straw) represents an example of aesthetics and beautiful mathematics. It is also “complex,” in the mathematical sense; it is self-organizing and exhibits self-similar fractal forms. The challenge, however, is getting the students I work with to understand what this object might *say* to them in terms of a variety of mathematical ideas: there are patterns, various things to count, 2D and 3D shapes, notions about similarity, proportion, scaling, and much more. The object actually can *say* a lot!

To be honest, I had not quite known how complex a mathematical object this was until Wayne I started to talk about this strange object hanging from the ceiling in my office. To make a very long story short, Wayne and I have continued to “play” with this idea of math and art. So much so, in the Fall of 2006, we built a similar structure as part of a fire sculpture festival. In spite of a rainy Saturday, we returned the next day to erect a 15-foot high fractal tetrahedron from straw – and then at night we burned it! In the process of putting together this wonderful structure, I learned some very interesting things – about myself! Learning is messy. I am not surprised to hear such a thing; it does, however, seem to be something that I don’t always get to experience! Even more, the problem solving that we used throughout the planning and constructing stages of the sculpture was hardly a straight forward process. To be sure, the aesthetic dimension of mathematics can communicate some very complex ideas all-at-once.

We are far from done with this project: in fact, we are just beginning. This project has “ignited” a great deal more for me than just how I could teach others *mere* mathematical concepts from one of the most disliked of subjects areas. The project has prompted me to think about how mathematical ideas can be communicated in ways that go far beyond the usual pen-and-paper expressions of abstract math-



ematical ideas. When I look at the tetrahedron in my office, I can't help but look at it with new eyes – it is something now even more beautiful than it ever was.

Some Final Thoughts

For us, this series of collaborations has brought to the fore a number of important notions and gentle reminders. Life in our local learning ecologies is all about learning and, sometimes, it is quite messy.



What started with seemingly simple ideas was transformed across and within various projects. Learning, in this fashion, has not been so much a sequence of moments and events, but an on-going iteration of ideas, conversations, interactions, and possibilities that could never have been pre-scribed in advance. In other words, learning could only be said to be emergent (Davis, Sumara, & Luce-Kapler, 2008).

But learning possibilities require certain things. They require diversity, interaction, a certain amount of redundancy, and a kind of non-linear network of interaction (Davis & Sumara, 2006). As a Faculty of Education, we are *de facto* a multi-disciplinary faculty of education, a group of creators who teach teachers how to teach. Thus, the diversity we bring to this place is exactly what healthy learning organizations and communities need (Stanley, 2006). At the same time, we are all educators and our similarity creates a necessary excess or redundancy. We are highly interactive in that we talk with one another about ourselves and our work, and we collaborate with one another. And, the highly engaging surprising results of our work could only suggest that we are always and already in a complex network of non-linear possibilities.

This particular picture of how we work and who we are, in fact, was validated by an exciting moment a couple of days before the STLHE conference as we were putting the finishing touches on this paper. That morning, Wayne came into Darren's office and handed him a short article by Charles Reigeluth (2006) from a recent special issue of *TechTrends* on systemic change in education. In it, Reigeluth addresses exactly what we have just described and experienced over the past few years. That is, we have co-evolved through periods of disequilibrium, transforming ourselves through a set of "strange attractions" in a self-organizing fashion.

With rich learning engagements, those connective possibilities are able to take flight. We are not machines; therefore, we are not entirely predictable nor can learning be clearly directed nor controlled—although we might try or think that we can. Of course, truly simple, machine-like phenomenon can be known—like a clock. But we don't deal with machines. It's a Faculty of Education, not a Factory of

Education. The notion of a predictable and controllable world is one well-rooted and sedimented into our collectively shared world. Moreover, the attendant aesthetic has changed, too. However, as these examples might suggest, learning and life can and do look quite differently.

To end, we would like to respond to one comment in particular that was raised by one of the reviewers on the “methodology” of our reflection on our projects. It seems to us that if we are honest about our work, we must conclude that any “methods” we used could only be described as follows: The notion of a “methodology” very much reflects a “wider intellectual tradition” (Stacey & Griffin, 2005). Much of the literature on qualitative methods, as Stacey and Griffin suggest, still “preserve something of the stance of the objective observer, where the researcher’s emotions and fantasies are to be kept out of the research as much as possible” (p. 2). Of course, this idea is seldom questioned today and is generally recognized as an ideal. We are not involved in a detached manner – a false paradox. Our research method is, therefore, quite subjective, iterative, and reflective in nature.

Our work together is necessarily on-going and our reflection on our experiences is always the felt experiences that we have with one another which give rise to particular narratives of relating to and with ourselves. That is, it is the narrative experiences and themes that arise in our interactions that constitute the research reported here. Thus, not only is our work inherently a social participative process, but our research is as well. As a report on the experiential nature of our collaborative instruction with one another, we can only conclude that when we engage in research, we do so to transform ourselves – individually and collectively. Herein lies the benefits of our interdisciplinary research and the inherent playfulness of our work which demands our on-going interactions and conversations. Our methodology is, as Stacey and Griffin write, “essentially exploratory and emergent” (p. 10).

References

Education: Inquiries into learning, teaching, and research. Mahwah, NJ: Lawrence Erlbaum.

- Davis, B., Sumara, D., & Luce-Kapler, R. (2008). *Engaging minds: Changing teaching in complex times* (2nd ed.). New York: Routledge.
- Fry, R. (1963). *Vision and design* (5th ed.). Cleveland, OH: The World Publishing Company.
- Houser, O. (1991). A collaborative processing model for art education. *Art Education*, 44(2): 33-37.
- National Art Education Association. (1994). *Creating a visual arts education research agenda towards the 21st century*. Retrieved March 8, 2007, from <http://www.naea-reston.org/recommendations.html>
- Reigeluth, C. M. (2006). A chaos theory approach to systemic change. *TechTrends*, 50(2): 45-46.
- Stacey, R., & Griffin, D. (2005). *A complexity perspective on researching organizations: Taking experience seriously*. New York: Routledge.
- Stanley, D. (2006). Comparative dynamics: Healthy collectivities and the pattern which connects. *Complicity: An International Journal of Complexity and Education*, 3(1), 73-82.

Davis, B., & Sumara, D. (2006). *Complexity and ed-*