Creativity as a 21st Century Skill: Training Teachers to Take it Beyond the Arts

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A Project in
Creative Studies

by

Linda Salna

Submitted in Partial Fulfillment
of the Requirements
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Master of Science
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ABSTRACT OF PROJECT

Creative Thinking is a critical life skill needed for success in the 21st Century. The next generation will be working in jobs that may not even exist today. It is education’s responsibility to prepare students by teaching them how to think not what to think. Given my commitment to bringing creativity to education, this project focused on working with a small group of public school teachers to find effective methods and materials to assist teachers in using creativity tools. Given that teachers are busy people who work within time constraints and the demands of a large set of curriculum objectives continual adjustment based on teacher’s preferences was key to this project. This led me to a Mystery Box exercise that unexpectedly captured the interest and heart of both teachers and students. The Mystery Box provided a focus that was a fun and effective way to stimulate creative thinking while simultaneously connecting to classroom lessons and units.

Keywords: Creative thinking, 21st Century Skills, Creativity in the classroom

_________________________________________
Linda Salna

_________________________________________
Date
DEDICATION

I am dedicating this project to my two girls, Kendra and Alison. It was because of their struggles and challenges in school that I became passionate about making a difference in education and for youth. My hope is that one day school will be more engaging and stimulating for them and others like them.

My eldest, Kendra, is the reason I developed my after-school kids program “The Challenge Club” over 10 years ago to foster creative thinking. A bright child but she had reading and academics difficulties that played havoc on her self-esteem. The club gave her an opportunity to see her strengths. My experiences with the club led me the highlight of the project, the Mystery Box.

My youngest daughter, Alison, was an important reason I pursued this initiative in our local school. During my two years in this program I have sought opportunities that brought me closer to her instead of farther away. Being in her school allowed her to see what all mom’s many hours locked in her office was all for. During this project she was my process buddy and gave me useful feedback, which gave her an important role. Her understanding, assistance and support throughout is very much appreciated.

The saying “it takes a village to raise a child” resonates with me because I truly believe that community is an integral part life. It took a community of people from different areas for the success of this project. There were so many people who directly helped me with this master’s project that I acknowledged throughout this paper as well as others that gave me unconditional and caring support, you know who you are.

Thank-you
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Section One: Background to the Project

Purpose and Description of Project

The aim of this project is to examine the extent to which support materials and training for public school teachers to foster creative thinking and problem solving in their classrooms is useful to the teacher. A one-day (two part) training workshop will a) provide a background and promote awareness of the concepts of creativity and b) train teachers in Creative Problem Solving (CPS) methods, the Foursight framework and tools to enhance teaching practices. This is followed by an eight-week consultation to provide information and materials to assist teachers in incorporating and implementing CPS tools into existing lesson plans and current curriculum. The purpose is to provide research-based methods to stimulate and engage creative thinking in students. The teacher training was developed and will be delivered by fellow Creative Studies Masters student Ismet (Izzy) Mamnoon. A workbook was created specifically to guide teachers through the training. The workbook is to be kept as a reference and practical source of tool worksheets the teacher can copy and use freely.

Creative thinking can be deliberately taught and that is what I plan to do with a group of teachers in an urban Canadian public school system. A goal of this project is to assess the effectiveness and efficiency of methods used with teachers to promote creative thinking in their classrooms with their students. As part of this initiative I will identify areas that need improvement for further development based on the teacher feedback and input. I will use this information to continuously assess and tailor support material and products based on their needs and requests. I also plan to use a Wordpress format to highlight a focus of the week that teachers will practice and
provide feedback on. It also provides a format for the teachers to communicate and share ideas with each other. I will use this platform as the main communication and will build content weekly providing videos, links, and other resources teachers request. The main objective is to provide teachers with the kind of support they prefer to use.

Before the training I will meet once or twice with each of the teachers to have a conversation about their thoughts on creativity. After the eight-week implementation period we will revisit their perspectives. Comparing the responses will allow me to find shifts in thinking or perception about creativity as a result of implementation. This informs my thinking about the types of materials and information I provide to teachers for use in their classroom. Feedback about the training will be solicited immediately afterwards. This way, I will be able to reflect on the training and materials used in the workshop separately from the rest of the project. If I was only to have formal conversations with the teachers before and after the project was completed, it would be difficult to determine how the training component influenced them. It will provide insight into what components of the training are useful.

**Rationale for Selection**

I selected this initiative for my Master's Project because I am passionate about empowering youth. I strongly believe that creative thinking skills are an essential life skill and that creativity can help humanity reach our highest potential. Creative thinking gives us the skills to adapt, innovate and change. The only way to prepare our youth for their uncertain future is to equip them with skills that help them effectively deal with unknown challenges in the 21<sup>st</sup> Century (Trilling and Fadel, 2009; Sternberg, 2010). The most recent PISA (Programme for International Student Assessment) rates
the Canadian education system high, the head of this school board is progressive and promotes higher order thinking, including creativity as vital life skills. Sir Ken Robinson has been a keynote speaker at recent board events. Yet, based on my observation, it seems that most school initiatives in creativity are related to the arts. With these factors in mind I feel it was an optimal time to present a proposal for a program in teaching creativity to teachers in this public school system. Although a Masters of Science gave me credibility I felt my lack of background in education would be an obstacle. I had a better chance of getting buy in and the chance to learn if I presented the proposal as the work for my Master’s Project; to further my education. It gives me the opportunity to develop, learn and even make mistakes without feeling the pressure to perform as an expert, which I am not. It was also important to me to have an experienced advisor from the faculty to mentor me so I can offer a quality experience for the teachers investing in the project. I appreciate the limited time teachers have and do not want to waste their time.

There are so many ways to foster creativity but few are deliberate, conscious or proven (Davis, 2004; Robinson, 2011). I felt that making teachers aware of deliberate creativity concepts and teaching the creative process and CPS tools would be a simple and effective way to get teachers to stimulate creative thinking in the classroom. The tools are easy to learn and simple to use once practiced or modeled in the classroom. It would be gratifying if this initiative with teachers made a difference in how they perceive creativity and influence the engagement of their students.

As a result of this project I see opportunities to develop materials and training frameworks to engage with more teachers and more schools. Based on the success
of my project, there are future opportunities to engage in the schools. The superintendent of this specific school may be interested in introducing it at the next principal meeting for her family of schools. It has been suggested to me that private schools would be interested in a program like this one of which there are many in this urban area.
Section Two: Pertinent Literature

There are good resources available on how to foster creativity in the classroom. My main reference, which I kept safely at my side, was the new 2012 edition of *Creativity in the Classroom* written by Starko, which links creativity research and theory to everyday classroom initiatives. *Nurturing Creativity in the Classroom*, edited by Beghetto and Kaufmann (2012), offered many useful papers grounded in theories and concepts written by some of the most prominent creativity scholars. *The 21st Century Skills: Learning for Life in our Times* gave me a comprehensive understanding of what is meant by 21st Century Skills in education. I used many other books with more practical applications of CPS tools backed by proven methods. I used the content in these to explore and expand my toolkit as well as use them as content for my Wordpress site. I found materials on specific ways to use CPS tools with children from experts like Sue Keller-Mathers, Bob Eberle, and Donald J. Treffinger. I used the information to help me train teachers to use CPS tools in their classrooms. Through this pertinent literature I was able to draw out key concepts and tools to highlight in my blog postings.

Pop culture creativity experts like Sir Ken Robinson and Daniel Pink who restate ideas also influenced my thinking and theories from many creativity scholars in thought provoking ways in everyday terms. Sir Ken’s passion and conviction about revamping education has also had a strong influence on the head of this school board. I have gained insights, advice and coaching from various people who have experience with
implementing CPS in the classroom such as my advisor, fellow students, alumni and other teachers and experts. I searched and found many Internet sites and blogs that relate to creativity in education that helped me widen my scope of influence. My intention is to extract information with the most impact to feature in my Wordpress site so I am providing interesting and useful resource to the teachers I am supporting.

Many of my assignments and projects for courses in this program have led me to learning about creativity in education. During the course of my studies, I gained more knowledge through course assignments; adopting scholars and article reviews. The works of Calvin Taylor, Bonnie Cramond and the major and many accomplishments by Paul E. Torrance inspired me. I learned through reviewing the paper, “Help us creativity researchers, you’re our only hope” by M.C. Markel, that education needs more support and studies relating to creativity to make an impact and influence educators; not enough is being done in this domain. I also gained an understanding of the main reasons why creativity was slow in being adopted by education. I capitalized on these reasons when I made my presentation to the Superintendent of my school district.

Creative Thinking is a Critical 21st Century Skill

Creativity is a higher order thinking skill (HOTS) and I strongly believe it is critical skill needed for the 21st Century. My big question paper assignment for CRS580, “Why is creative thinking important for the 21st Century?” required me to delve deep and find support for the importance of creative thinking defined by the domains of business, education, social and personal. The first paragraph of my paper entitled
“Why is creative thinking important for the 21st Century?” (Salna, 2011, p. 1) explains why creative thinking is a critical life skill:

The world is rapidly changing and pushing towards a global existence which is more competitive, demanding and unpredictable (Trilling & Fadel, 2009). The past no longer holds true for the future. We need a different approach and cannot be afraid of doing things differently, which will require creativity. In order to survive and thrive, major shifts need to occur. The only way to grow and prosper in the challenging times ahead is to cultivate a generation of entrepreneurs, change leaders, and social innovators that will create a positive impact. We need a generation who can solve problems and find new opportunities. We need creative thinkers. Creative thinking is an important life skill for the 21st Century that helps us cope, adapt and flourish in our personal lives, education, business, and for society as a whole (Carson, 2010).

The Partnership for 21st Century Skills is “a national organization that advocates for the integration of skills such as critical thinking, problem solving and communication into the teaching of core academic subjects such as English, reading or language arts, world languages, arts, mathematics, economics, science, geography, history, government, and civics” (2009, p.9).

- Critical Thinking and Problem Solving
- Communication and Collaboration
- Creativity and Innovation
Figure 1. The Framework for 21st Century Learning model.

(Framework for 21st, 2009, Permission of use granted for educational use)

The Partnership makes and supports the claim that the 4Cs are as important as the 3Rs (reading, writing, arithmetic), which have been the foundation of education for a decade. Higher order thinking is taking thinking to higher levels beyond just restating the facts.

**Connecting Bloom’s Taxonomy to CPS and Curriculum**

In 1956, by a committee of educators chaired by an American educational psychologist Benjamin Bloom, created Bloom’s Taxonomy. It was designed to assist educators to set instructional objectives and goals based on levels of learning. The taxonomy classifies the learning capabilities in order of difficulty. The lower level
thinking skills are at the bottom and as you work up they increase in difficulty and are known as higher order skills. The levels relate to required thinking skills defined in this system’s specific curriculum objectives. (see Figure. 2)

![Bloom's Revised Taxonomy of Learning](image)

Figure 2. Bloom’s Revised Taxonomy of Learning (graphic used with permission from Wendy Bloemink)

There are several learning taxonomies out there and that all vary, however they are all meant to help educators with the multifaceted nature of learning (Brookhart, 2010). I focused on the revised Bloom's taxonomy since it is the one used in the school system I was working with. This education system had a mandate to foster higher order thinking skills (top three) Analyze, Evaluate, and Create. In 2000, Bloom’s taxonomy was revised to put “Create” on the top of the pyramid (Figure 3). This verified the importance of creative thinking as a critical skill to be developed in
“Creating” can be defined as the skill to put unlike things together in a new way, or reorganize existing things to make something new. Teachers are to present students with a task to do or a problem to solve that includes generating multiple solutions, planning a procedure to accomplish a particular goal, or producing something new. This was the link I needed to relate my initiative to. These educators are very familiar with Bloom’s Taxonomy, higher order thinking and problem solving. My strategy is to target these when working with the teacher once I make clear connections to their requirements. Once I made the connections it was easier to understand the curriculum and I was able to match creative concepts and tools to
specific points. Initially, I had struggles in working with the teachers to use the tools and understand why the concepts were relevant to the classroom. It is my hope that once I connect to other familiar learning concepts and models they can use the CPS in more meaningful ways that help them meet curriculum requirements. With so many learning strategies and methods out there (project based, inquiry based, problem based, design based, collaborative, cooperative) it was difficult to define what I had to offer and differentiate from other higher order-thinking programs. Most seem to be professionally developed and very effective. I know from my conversations with the teachers that they did not want to learn another “system”.

My approach was to generate awareness of creativity concepts relating to education terms and teach simple tools that could be used within current lesson plans. It seemed like a good approach grounded in solid theories and methods but what it lacked was the hook into something they were being mandated to do; “creativity” is not but “create” is. The CPS concepts of Divergent and Convergent, as well as the tools associated with each of these, will have richer meaning and deepen teaching methods for the teachers and myself when connected to higher order thinking terms.

**Creativity Consciousness and Attitudes through 4Ps**

One of my goals was to increase the creative conscious and awareness of the important creative concept with educators. Davis states “creativity conscious is both the most important aspect of becoming creatively productive, yet also the easiest to teach” (p.328). There are many misconceptions about what creativity is apart from the arts. Mel Rhodes 4Ps, the most widely accepted theory and definition of creativity, was the framework used to create an overview of creativity for the teachers (Rhodes, 1961).
Person: List of traits to identify creativity in students

Product: Present the definition, Novel and Appropriate as assessment criteria.

Process: Foursight as the framework for Creative Process

Press: Ekvall ten element of a creative environment in classroom terms

Introducing the 4Ps helps teachers to recognize that creativity is more than the arts and/or not only about unconstrained originality (Beghetto and Kaufman, 2010). This understanding, in combination to with the CPS tools, allows the teachers to see the value in adopting creative practices into the classroom.

Teachers are required to assess outcomes of students and struggle with how to assess creativity. Teachers are held accountable by school boards to find ways to assess their students. The teachers in my training were very interested in how to assess the creative concepts we presented. The workbook used in the training provided a few tools to help teachers assess creativity. A creative students’ success could be measured using a Manifesto, written by students of our program. Using the checklist provided, “Creative” Ability Report Card, could identify the creative ability of a student. Although I did not make the report card, the list can be supported by Davis’ creative personality traits in his 2009 book Creativity is Forever.

When teachers learn the definition of a creative product as being novel and appropriate they have a way to measure outcomes of their students. Beghetto and Kaufmann connect curriculum constraints to assessing creative outcomes: “Indeed, curricular constraints provide necessary evaluative criteria for judging whether student original ideas, novel products, and unique accomplishments are appropriate (and therefore creative) within the constraints of particular curricular task, activity, or
A teacher can be seen as the manager of the classroom and therefore should see to it that the social climate of the classroom is beneficial, not only to learning, but also to generating effective thinkers who possess the ability and belief in themselves needed to solve problems, innovate novel ideas and solutions. In the classroom setting, the teacher has a lot to juggle to ensure that his or her students are acquiring these skills. Ekvall’s (1996) Creative Climate Dimensions introduced teachers to elements that influence creative environment in the classroom.

Dr. Goran Ekvall, an industrial psychologist and researcher, learned that there were certain factors that helped businesses succeed. Ekvall concludes that the climate is in large extent in the hands of the manager (Ekvall, 1996). The terms were not directly related to the classroom, teachers and students, however, as a result of a request from a teacher seeking ways to assess it, I created the Class Environment evaluation chart, which was designed in graphics by Melinda Walker. It gives the teacher a fun tool to rate the ten elements in their own classrooms (see Figure 6).

The Foursight four thinking preferences, based on Puccio’s work with the CPS process, were used as a framework for the creative process. The names of the four stages (Clarify, Ideate, Develop, Implement) are easy to understand and it is clear what thinking function is required at each stage. Foursight was also used to assist with a facilitative training approach that leads teachers through a creative process using various CPS tools. It was important to work through a framework in order to enrich, expand, understanding and context of what they were learning. It allowed teachers to
diagnose where they were in the process and choose an appropriate tool; many of the tools are meant to be used at certain stages. For these young students (K-4) it was simplified to the two core principles of thinking: divergent (ideas) and convergent (choices). The teachers would have an overall understanding of the whole process yet refer to the two core stages with their young students. 

(http://www.foursightonline.com)

**Why use CPS Tools in the Classroom?**

It occurred to me half way through this project that I was missing something. After reviewing many resources and having many conversations with teachers and experts, I realized the “what” I was missing was actually the “why”. Why should teachers be using CPS tools in the classroom? In terms of their direct needs and requirements put for by the school board. Simon Sinek (2009) author of *Why: How Great Leaders Inspire Everyone to Take Action*, supports my thinking. His book is based on “why” being the most important since it is the purpose or belief that underlies the “how” and “what.”

My reason would be reframed from one of increasing creative thinking to one of meeting curriculum requirements and mandates for teaching higher order thinking skills (HOTS). Teachers are very busy and have so little time to implement new teaching strategies. I will focus on HOTS in literacy to develop a sound case as to why to use them in the classroom based on actual criteria set for teachers to meet. I will use language that is familiar to them and directly linked it to our creative concepts and tools.

It became apparent to me after diving deep that the “why” I initially got buy-in
for was not enough to motivate teachers to learn how use the tools and concepts which resulted in little feedback. This “aha” helped me position CPS tools as simple, yet effective tools, that met higher order thinking requirements and learning mandates set by the Ministry of Education.

Reframing and expanding the “why” from the enhancement of existing lessons to stimulating HOTS that meet curriculum requirements would allow teachers to assess outcomes which is what teachers really want and need.
Section Three: Process Plan
How Do You Plan to Achieve Your Goals and Outcomes?

I have already been given approval to do this project with teachers, a principal and a literacy coach at a school. I have full support and commitment from them. The training day has been selected and substitute teachers costs have been approved to come out of the superintendent's budget. Teachers participating in the project understand the commitment and are willing and prepared to assist me. I will be allowed to offer consultation and go in to model in the classroom as some teachers have requested.

I feel with this strong support from the school, which is critical, I will be able to accomplish my goals and outcomes throughout the project period. I plan to research proven methods and tools that foster creative thinking in education and examine how to best tailor the tools to the classroom needs and feature once a week through my Word press site. I will use graphically talented fellow student, Melinda Walker, to design posters, support materials and lesson plans as required and requested during the consulting period following the training. Melinda, a teacher, is also my Sounding Board Partner (SBP) for the project and has great expertise and advice to offer based on her own experience using CPS tools in the classroom. I have bookmarked many sites and resources I have collected over the past months in anticipation of the project that I will reference and use. I will continue to seek advice from those with experience and experts in implementing creativity in the classroom. I definitely feel inspired, supported and encouraged by many interested people especially by members of my Supreme cohort.
## Project Timeline:

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<th>Week of:</th>
<th>Tasks to be undertaken:</th>
<th>Estimated time commitment</th>
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| Pre-work that started last semester | • Meetings with Izzy to develop and improve workshop  
• Conversations and communication with Cyndi, school officials  
• Preparation of proposal and meeting with School Superintendent and principal Nov. 27th  
• Create Prezi and flyer to inform teachers  
• Discussions and emails with principal about logistics and approval of project  
• Course and consult on creating a Word Press based site/blog to support teachers during the project and beyond | 40hrs                      |
| Jan. 23                         | • Skype meeting with advisor and SBP  
• Discuss final details of training day with Izzy.  
• Review my goals and course expectations, start work on concept paper. Feedback SBP concept paper  
• Develop teacher interview questions  
• Meet with principal to review training and my project objectives  
• Draft concept paper | 16hrs                      |
| Jan. 30                         | • 5 teacher one on one conversations (2.5hrs)  
• Teacher training-Feb 1 (6hrs)  
• Workshop prep  
• Word Press site development  
• Review training with principal  
• Review and transcribe interviews  
• Reflect, review and critique training with Izzy. Discuss results of the feedback forms. | 15.5hrs                    |
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| Feb. 6     | • Gather feedback from teachers regarding training  
             • Gather input from teachers to assist with development of support materials and tools  
             • Word Press development and blog entry and possible products | 10hrs |
| Feb. 13    | • Use feedback and input from teachers to plan support material and resources (posters, lesson plans, links, articles etc.) give them product to assist in the classroom.  
             • Develop/produce support products  
             • Build Word Press site and do blog entries and possible products | 10hrs |
| Feb. 20    | • Gather feedback from teachers and consultant on tools, give them a product to assist in classroom  
             • Continue to build Word Press site and do a blog entry and possible products  
             • work on draft of section 1-3 of | 10hrs |
| Feb. 27    | • Skype meeting with Sue to review and discuss progress of project  
             • Work on Word Press and blog entry And possible products | 10hrs |
| March 5    | • Gather feedback from teachers and consultant on tools  
             • Continue to build Word Press site and do a blog entry and possible products | 6hrs  |
| March 12   | • March Break (School closed/teachers off)  
             • Skype with Sue to review final details of project  
             • Continue to build Word Press site and do a blog entry | 3hrs  |
| March 19   | • Gather feedback from teachers and consultant on tools  
             • Continue to build Word Press site and do a blog entry and possible products | 5hrs  |
| March 26   | • Start work on draft of sections 4-6  
             • Create questions for final interviews\and | 10hrs |
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| April 2    | • Last week of 8wk project implementation  
• Review all notes and feedback to include in Final  
• Interview with school principal and literacy coach about their experience and observations with teachers | 10hrs |
| April 9    | • Begin presentation  
• Closing interviews with teachers (2hrs)  
• Evaluate and compare initial with final interview responses and write brief on results and key learnings to include in final | 12hrs |
| April 16   | • Continue consultation with teachers as needed  
• Add to Word Press entries  
• Continue work on presentation | 10hrs |
| April 23   | • Continue Work on presentation                                                            | 7hrs  |
| April 30   | • Finish presentation  
• Share findings with Izzy, discuss outcome                                                | 7hrs  |
| May 7      | • Presentations and Final Project submission  
• TOTAL hours calculated                                                                | Total est. 180 hrs |
Section Four: Outcomes

Working within the public school system requires patience for procedures and protocols. I understood from the onset that it was important to adjust, abide and show my respect for this system in order to move forward on this project. I felt the only way I would be able to penetrate the public school system would be in the spirit of further learning as a graduate student. I formed alliances with key people in government and school administration but was careful to follow the accepted approval process for this project. In turn I was given a lot of support and acceptance to work on my Master’s Project from my Superintendent, Principal and teachers. I know that the active role I have played in the school, as a parent volunteer for the past 10 years was a definite factor that was taken into consideration and helped me earn this opportunity. I have always put my time to good use by volunteering for projects that focused my interest and required my skills. My involvement in the school has been sitting on committees that focus school improvement and learning enhancements. I also developed and run a well loved after school program, “The Primary Challenge Club”, which fosters creative and critical thinking skills. These contributions are highly valued by the staff and parents at the school, which I am sure, were taken into consideration when approving my Project.

The following are outcomes from this experience and that I hope will benefit and advance others who want to take a similar pursuit.

Selling “Creative Thinking” to Public School Administration

I strongly believe that creative thinking is a necessary 21st Century skill and schools have a responsibility to develop it in students. To make this point, I created a
Prezi to show the superintendent and principal that outlines the need to foster creative thinking skills in students in order to best prepare them for their futures.

**Figure 4. My Prezi**


I met at the board offices with the Superintendent and my new school principal to present my Master’s Project Proposal. An important outcome was finding a way to “sell” creativity in this situation. I also had to communicate effectively about why I wanted to do my project and why they should agree to let me. I planned to articulate clearly that I was working from grounded theories and methods, that I was passionate in making a difference and that the project would not be an inconvenience but a valuable learning experience for all. I was allotted forty-five minutes to tell my story. In reality, it extended to two hours due to their interest.
My approach for the meeting was to present a scenario that would make sense to them as educational leaders. My presentation started with telling my story using my many books as props. This approach allowed me to explain the depth and breadth of this field and the vast amount of work that was behind it. It worked so well that I plan to make a video of it to put on my blog. I grouped the books by 1.) Popular authors they may already know (Robinson, Pink, DeBono and Florida) 2.) Foundation scholars (Osborn and Torrance) 3.) Current scholar representing different areas (Sternberg, Amabile, Cramond, Czikzentmihalyi, Carson) 4.) Faculty of the International Center for Studies in Creativity (ICSC) (Puccio, Keller-Mathers) 5.) CPS books and finally 6.) Creativity for education/schools (Starko, Beghetto and Kaufman).

I referred to these groupings to explain how each influenced and supported studies in Creativity. It was a very concise and powerful way to represent the solid science behind creativity as well as my studies. I gained credibility as I spoke about each cluster of books. The result was a very interested superintendent and principal who both said they were very impressed with the solid foundation of creativity and my knowledge. The visual image of all the books, combined with the ability to handle them, made it very engaging and sparked a meaningful conversation between us.

I presented my proposal that outlined the structure, process, goals, and requirements I had in mind for my project (Appendix D). I had positioned it as an opportunity to help me learn and develop that could benefit them at the same time. Our conversation revolved around how might it happen, what else they needed to know and do and how to accommodate it within all the guidelines they needed to abide
There were logistical issues that had to be worked out and the next step was for me to wait to hear back after they had done their due diligence.

For the next few weeks I remained patient and waited for updates from the principal who was very good at keeping me informed on the status. Final issues had to do with the training since it was a whole day and deciding who would participate. I created a flyer (Appendix E) for the teachers to give them an overview of what would be covered in the workshop. The training was approved and scheduled for the first of February. I was very appreciative of all the support I was given to further my learning experience in education.

Prior to the training I was able to have twenty-minute conversations with each teacher to learn about their current perceptions and thoughts on creativity as well as give them a brief about why and what I was doing. I also used this time to ask if they could help me by practicing use of methods they would learn in their classrooms. All the teachers were positive and eager to help and agreed to give me feedback. They all preferred to communicate with me through online means during the project. My intention was to use a hands off approach, at first, to gage their interest and participation. Initially, I was not to go into classrooms, at the request of the Principal who was concerned with the teachers’ time. It became clear that the only way the teachers would understand how the tools could be used was to model it in the classrooms which I did using a novel approach.

**Meaningful Connections and Collaborations**

A very important outcome for me was the relationships and connections I established with people. It gave me the chance to build a very close working
relationship with the new principal. I know this will benefit us both in many ways. At
times I reached out to those with experience to help me maneuver and shape this
project. These people were very empathic and generous with their time. I learned the
art of extracting information from one neighbour, an expert statistician who encouraged
me to have conversations with the teachers before the training and took the time to
coach me. A relative of mine spent significant time with me explaining the curriculum
and how to understand it better. She added an interesting perspective, as a primary
grade school teacher outside my project, who was able to be more candid with me
about barriers in teaching. This meeting was pivotal to redirecting my approach with
teachers and looking for ways to connect to the curriculum. I also got lots of insight and
help from the literacy coach for this school, who was also at the training. He agreed to
meet one on one with me to answer my questions regarding connecting the tools to
curriculum requirements. I also was referred to some other fellow Masters of Science in
Creativity colleagues, who I contacted for advice, Tony Pagliaroli, Jenna Smith, Joette
Field and Jeffrey Glaub and Professor Dr. Cyndi Burnett who advised me prior to being
assigned Dr. Susan Keller-Mathers.

Finally, I get energy when working with others and find end results are far
superior and richer. It was collaborating with fellow graduate students, Izzy and Melinda
and my trusted advisor, Dr. Sue Keller-Mathers, which was the highlight of the project
for me. All have experience, talents and strengths that compliment mine. I found it very
rewarding to work towards mutually beneficial goals and outcomes with each one.
Tangible Materials/Resources Developed as a result of this Project

Izzy’s brilliant workshop workbook (Appendix F) was inspiration from one of our meetings. Many other ideas were enhanced and improved as a result of working together to adapt her teacher training for my Project. Outcomes as a result of my work during the project include:

- My Blog
- Posters, Ekvall Evaluation and CPS tool templates (by Melinda)
- Magic Box Lessons: plans/case studies
- World Creativity And Innovation Week Activities and Showcase

My Blog

I created a blog, to communicate with the teachers and to highlight training concepts.

Figure 5. My Blog
Many of the teachers were shifting from worksheets and looking to online resources for Smart board; I put many of the tool templates in PDF form in the resource area for that use. Each week I would add relevant book recommendations to my “good reads” area. I enjoyed developing the blog content but stopped when it was not an effective way to communicate with the teachers. I plan to continue to develop it as an open source of information for teachers who want to foster creativity in their classrooms.

**Collaboration with Melinda on Materials and Resources**

As I worked on developing the ideal way to work with the teachers, Melinda and I collaborated on various resources that could be useful for them. I had one teacher that was very active in giving me input and feedback. He was the only teacher that had started to try out some of what he learned at the training on his own. Each week Melinda and I would discuss templates, posters or lesson ideas he proposed. The Literacy coach referred to him as a teacher “that naturally gets it, then runs with it”. Melinda was quick to develop and create what he suggested would be most useful to him in the classroom, including the Classroom Climate Evaluation Chart (see Figure 6) (also adapted for use in Business), a book choice Matrix and narrative stories Idea Box. We also worked on Divergent and Convergent guideline posters using child friendly graphics and terms (see Figure 7). Melinda’s strong graphic skills, teaching experience and understanding of the CPS tools were key to developing outstanding materials. It was a win-win situation since Melinda needed to practice and create templates for her own Masters Project to develop as a graphic facilitator.
Figure 6. Classroom Environment Evaluation Chart
Figure 7. Child friendly posters for Divergent and Convergent thinking
Figure 8. Evaluation Matrix adapted and used for book selection with a class

The Evaluation Matrix was adapted for use as a tool for Book Selection for a grade one class is included as Figure 8. The teacher’s feedback was that it took a long time to explain, yet was effective to help the kids choose appropriate level books for themselves. The teacher plans to use this exercise once a month.
Mystery Box Lesson

As I passed the half waypoint of my project work I felt I had not accomplished many of my goals. I knew I would have to find a way to show the teachers how some of the tools worked in their classrooms. I knew that identifying ways to use the tools for curriculum was not easy for me. I decided to work with the tools in a way that came more naturally and could do without much teacher involvement. I drew on my experience from my Challenge Club and came up with an exercise that had many of the elements that the kids loved about the club activities; unexpected, sensory, creative and fun. Kids in my Club always comment that they wished it could be everyday and one child told her mom she wished school could like it. I looked for ways that I could work with the same concepts for the classroom. I used the Torrance Incubation Model (TIM) as my underlying framework for the exercises. The Tim model is a deliberate framework to follow for teaching a lesson or topic creatively. The model has three stages:

- **Heighten Anticipation:** To create the desire to know and arouse curiosity.
• Deepen Expectations: To sustain the motivation created and encourage deeper exploration of a topic.

• Extend Learning: To keep it going even after the lesson is over.

My idea for a Mystery Box was to fill it with random household items, gift wrap it and put in on the teacher’s desk a few days before I came into the classroom to stimulate curiosity and interest. I carefully designed several lessons and activities using the Box. I reviewed my ideas with each teacher to ensure that what I was planning would be at an appropriate level for their students. I used the box in four different ways with four different classes.

With two kindergarten classes, I decided to do something different for each one to show the teacher how the same Box could be adapted for different learning objectives. In the grade one class I simply used the items to fill an Idea Box to inspire story writing. I would randomly pick out an item and ask the children what column to put it under. They had not idea why or what it was for. They chose an item from columns with main character, hero, challenge and what overcame it. The children really had fun with the example we did with the whole class and went on to create their own stories using storyboarding. The teacher was surprised how quickly it went and how creative the different creative ideas that came from it.

The grade two teacher wanted me to enhance and help her with a current unit on senses. We decided to have items that would meet her learning objectives and then each student would use the same items to make their own creature. The box became the focus of the senses unit and the teacher was able to extend it by using the creatures for many other lessons. The class showed off their creatures with a
showcase of the Box exercise that was displayed outside their classroom as part of the
their celebration for World Creativity and Innovation Week co-founded by an alumni,
Marci Segal.

Figure 10. Mystery Box Creature Inventions

Throughout the week the creature was the focus of different lessons and units
like math (weight and measurement), fact gathering, and various writing assignments.
One of the parents had made a comment to me that their child had a great week in
class and owed to the Box. The student teacher assisting the class was amazed how
easy it was to weave into all the lessons, its adaptability and how much the children,
she and the teacher enjoyed it too.
Figure 11. Extended uses of the Creature into other lessons and units.

It was a valuable that it could be used in many ways beyond what I had planned.

The Mystery Box exercise proved to be very successful for many reasons:

• It was a advantageous way to for me to get into the classrooms to model CPS and the tools I wanted because it was well received by all (principal, teachers and students) due to its novelty
• It stimulated the children’s curiosity and interest in my exercise
• It was fun and engaged the students
• I could use the same box but have different scenarios and a focus depending what my goal was.
• Created an “event” around using CPS, which was an effective way to stimulate interest and support from teachers. The exercise was interactive for the students as well as it encouraged collaboration between the teacher and myself.
• It was a comfortable way for me to present the tools and use CPS
• It could be used for other lessons as a theme that extends its usefulness.
• Each class had a different experience with this exercise. It was an effective way to demonstrate flexibility of the tools in a creative way. I used this activity to
experiment with different tools and learning levels and objectives. For the plans and case studies see Appendix G.

**World Creativity and Innovation Week Activities and Showcase**

In addition to the principal agreeing to display the Mystery Box outcomes, drawings, storyboards, and the creations during World Creativity and Innovation Week (www.creativityday.org) April 15-21, she and I planned something to engage the whole school.

![Figure 12. Brainstorming Ideas](image)

As my final in-class exercise I did a brainstorming session with the grade three/four to come up with creative tips as seen in Figure 10. The tips would be announced by this class to all the students to try at the morning and end of day announcements (see Appendix H). I used the opportunity to demonstrate SCAMPER and Forced Connections for the teacher. I found that these two tools were the most difficult for the teachers to find uses for in the classroom. We had hundreds of ideas but only had limited time to try making choices using an Evaluation Matrix. The students had a great time thinking of silly things and enjoyed it thoroughly. Each morning and afternoon students took turns to announce a different creativity challenge with a
creativity tip I slipped in. The French teacher got pleasure from the daily challenges with her classes and even did the chicken dance herself. She told me that as a result of all the focus on creativity in the school she had recently taken up painting again and realized she how it enriched her life. It was a satisfying way to end my Master’s Project’s practical work.
Section Five: Key Learnings

My passion to empower youth led me to focus on education for my Master’s Project. I am passionate about nurturing creativity in education. Since I have no formal experience in education I found it important to work with others who had experience and could advise me. My ability to connect, communicate and collaborate in many situations helped me gain support from key people who gave me the opportunity to do my project within the public school system. This project had many bumps and hurdles along the way that I worked to overcome and learned to take detours. Although I do not feel I achieved my original goals, I did find a creative way to get teachers to engage in an exciting way (i.e. Mystery Box). I learned that something very simple was all that I needed to engage the teacher in this project.

What worked well?

- The training was the critical starting point of my working with the teachers. We had a one-day workshop accompanied with a workbook that was especially created for it. Izzy engaged the teachers in activities and encouraged input. The training covered many elements of creativity. We touched on definitions, what creativity was, manifesto, leadership, creative traits, four Ps, creative environment and moved through the creative process using various tools. The parts of the training that evoked discussion and new thinking for the teachers were:
  - “Creative” ability report card gave them a tool to assess creative potential in their students.
• “Being affirmative” (yes but/yes and) gave them useful insight about how this slight change in language can generate possibilities and positivity.

• Creative Climate Assessment was a good way to have teachers practice diverging. They worked in pairs and chose a creative environment element they needed to expand or be more deliberate about bringing into their classrooms. Here are some examples of their ideas: Risk taking ideas ranged from focusing on the process instead of results, offering choices to celebrating errors, teaching to multiple intelligences could increase challenge, open-ended questions and letting students take the lead.

• I had strong support from the school administration. The principal was very responsive to my challenges with communicating with the teachers and helped me to move forward. It was good that I made it clear from the start what my requirements were and she felt committed to finding ways to make things work. The importance of this rapport cannot be understated. It provided me the opportunity to work with public school teachers, which was very important to my project. She offered to fill in for teachers while I had conversations with the teachers, she suggested and organized the lunch meeting to allow me to reconnect with the teachers, and gave me permission to go into the classrooms. It allowed me to get expert input from the Literacy Coach. This relationship was the reason I was able to gather the information I needed. I also learned more about the mandates teachers need to meet and how the overall focus tends to be meeting specific requirements vs. nurturing of higher order thinking skills which are part of the goals of the curriculum but are not
mandates for teachers. I got a better grasp of our education system, including the overall four components connected to higher order skills (knowledge and understanding, thinking skills, communication, application) that guide assessment and planning. These specific expectations are different for each grade and are what teachers are held accountable for covering.

- My Mystery Box exercise was more successful than I had expected. I received a lot of excitement from teachers and students. It was very non-threatening and an easy concept for teachers to understand. They were open to how I would work with it and welcomed the exercise. It was very simple to adjust and adapt to the different levels of the students. It created a concrete reason to go into the classroom and try some tools as well as CPS. There was keen interest from the teachers to participate and they were open to discussion about it before and after. The students enjoyed the mystery and were curious which fostered possibility thinking and an opportunity to brainstorm about what might be in the box. After my exercise a teacher carried the theme into other work (i.e. narrative writing exercise, list writing, habitat). This type of exercise would have been a great way to start off the project. It was something that teachers welcomed and could participate in without having to know many details. It was a novel and unique approach that teachers welcomed into their classrooms. I think this was in part due to the playfulness and spontaneous creative that stimulated learning. It was an effective way for me to teach teachers some creative thinking tools and how to use them. It lent itself to customization and was flexible and a highly interactive activity. I was more relaxed and confident not having to worry about curriculum concerns. I was able to present the tools in a creative way that the
children and I also enjoyed. I have learned to test in private schools first where there is easier access and fewer restrictions based on interactions with various people.

- Collaborating with two other graduate students Izzy (my trainer) and Melinda (my graphics designer of materials). I also connected with others from ICSC colleagues that had teaching experience and had a better idea than I did of how to use CPS tools in the classroom. This provided me with a wide range of skills and expertise in addition to my own. The strength in this was that it enriched and expanded what I was able to offer and accomplish throughout the project.

- I learned how to create a blog, which has become very useful to me for other applications. The blog was a challenge for me to learn since I am technically challenged but has become something I enjoy. It is the perfect way of connecting with many people to share information and resources that I am passionate about.

**What would I do differently?**

- Since neither Izzy nor I were teachers we had little experience using the CPS tools for education. It would have useful, after each tool was presented during the training, for teachers to reflect on how they might adapt them for use in the classrooms. I was unsure how to work with the teachers early on in the project and that in turn left the teachers to wonder what to do. It was difficult to reconnect with them to show them the tools after the training due to my limited access to them. Most indicated on the feedback form that they wanted to be shown concrete ways to use the tools in the classroom. However, there was
one teacher who immediately used the idea box and brainstorming with hits and clusters and reported back positive results.

- I would shorten the time lapse between the training and my first communication through the blog. It may have been better if I had a first blog entry ready, at the training, to demonstrate what was required. I tried to get teachers to go onto the blog the first three weeks with a reminder email and leaving them hard copies of what I wanted them to comment on, with a reminder about the blog. I let them know I understood they were busy and that I appreciated any help they could offer me. The teachers all had good intentions yet had many other responsibilities and limited time. Through many conversations I have had with teachers, it is clear that most would like to do more but find it a challenge to simply meeting expectations.

- I would concentrate more on Convergent and Divergent thinking and why they are both useful and required in Creative thinking. Teachers were very confused as to what most of the tools had to do with “Creativity” and it would have been better to go delve more into the two concepts. They were not really sure how to proceed.

- Use of different language. Half way through the project, after reading works by Anna Craft (Craft, 2006), I stopped using the term creative thinking and started to use possibility thinking and used the term expanded thinking to explain the concepts and tools. It became obvious to me through some of their questions that the teachers still, even after the training, related creativity to the arts.
The following are some obstacles that I faced that were beyond my control. I feel they are important to note because they caused much of my detouring from my original plans. Each one helped me stretch beyond it and resulted in finding opportunities to successfully move forward.

- The date of the workshop was at a very bad timing for the teachers since they were preoccupied with completing Report Cards. Another challenge was that out of the ten weeks of the project, eight were short weeks due to professional development days, events or holiday. This made it difficult due to less time overall for teachers.

- In the amount of time we were allotted for the training it was a challenge to cover the basics thoroughly. An advantage was that the group was small. We were following union requirements for breaks and lunch which gave us less than five hours of actual training time.

- The one-week spring break was in the middle of the project and delayed an intervention I had planned with the principal, and the lunch meeting with the teachers. This delayed my plans to review the CPS tools with the teachers and to get their feedback so that I could move forward and only gave me two weeks to do it in.

- The teachers I had to work with had young students, K-4 and one half time special education. This was a challenge due to the young ages of the students and their lack of reading and writing skills. I found it difficult to find ways to use CPS tools with this age group outside of the context of Problem Solving Process.
• The school is very small and has few resources to take advantage of so the focus is on developing teachers. These teachers were already teaching creatively and had many strengths in fostering creativity, as they were Tribes trained. They found the tools and concepts less useful as perhaps other teachers would that were less creative or did not have enrichment trainings.

• My lack of experience in education made it harder for me to suggest more interesting ways to use the tools. A teacher with training in creativity would have found more success in adapting the tools to meet the curriculum. This was the catalyst that forced me to find my own way to teach the tools and led me to the Mystery Box exercises.
Section Six: Conclusion

A teacher posting from my blog summed up the daily challenges faced in the formal education system: “I think that curriculum without flexibility is not the best model for learning. I like that there is a curriculum. I think there needs to be some kind of accountability and standard for the learning goals of a region. However, the focus of the curriculum should be the learners, not the letter of the document.”

As a result of this project, I learned a great deal about the challenges teachers face and how difficult it is to work with them due to time constraints and expectations that focus their attention. Teachers are extremely busy people with many responsibilities. I became familiar with curriculum mandates and understand how it affects what teachers do in the classroom. Each grade has specific protocols that teachers need to reach within the year. There are so many protocols that teachers told me they find ways to combine them so they cover everything required of them. Teachers feel the pressure but also appreciate having the accountability.

I found that using CPS tools, apart from problem solving, was not easy especially with this young age group. The place for the tools outside problem solving became focused on content, which was still a step towards expanding thinking. My advisor, Sue Keller-Mathers, always wise, pointed out that just "it is so valuable for children to start learn how to make choices using criteria. This alone is useful skill to learn at such a young age." One teacher had the idea to use stick it up brainstorming with hits and clusters to help students start off a project gathering first facts and points that were interesting to them then grouping them into like categories. These categories became the topics they would focus on and develop. In the past he started them off by choosing
categories then finding the details. He found the new approach worked better, that children were less confused and got into their projects sooner. When I asked my daughter how she responded to it, she said “it was more fun and easier to do than the other way”. When her teacher used the same strategy, with the whole class brainstorming for a Valentine’s letter, he was amazed how many ideas were generated. The teacher found it very effective to inspire them write their own letters and as a result they spent less time on the exercise. When I read the letter written to our family I noticed how rich and full it was in comparison to the ones in the past. The children enjoyed the collaboration and said it was a lot of fun and made it easier.

At first, there was much focus on data finding and understanding of context to see if my plan fit. I ended up revising my original plan as a result of my insights. I invested time gathering information to help me work with different strategies in order to find a breakthrough. Teachers are exposed to so many new methods that they find it overwhelming. Most would like to be able to enrich their teaching but the priority is meeting curriculum standards as set by the school board. I found going into the classroom as the most effective way to demonstrate the tools. It would have been the best way to get teachers started after the training. Near the end I learned, in conversation with a teacher, that she preferred to learn this way and had requested I come in but that it was not allowed according to board rules.

Working within constraints and barriers is frustrating; I struggled to find curriculum mandates that would link to the creative thinking tools. I was surprised to find out from the literacy coach that there was really no place in the Literacy curriculum that mandated possibility thinking. I realized that I had very little to work with in terms of
getting the teachers to try some of the tools to meet standards. At this point I decided to focus on how I might do something different to spark new interest in my project. I capitalized on my background in marketing and drew upon techniques that work well to create a “buzz”. One strategy often used to create interest is to plan around something novel like an event or launch. I transferred this strategy to my project and came up with the Mystery Box activity. When I introduced it to the teachers, at the lunch meeting, everyone was very keen and excited to participate. I found the flexibility of the concept allowed me to work with it in many different ways. The fact that I offered to do an activity with a concrete outcome got the teachers interested and involved.

Perhaps a program could be developed around featuring an event or challenge to promote use of creative thinking to be done in classrooms similar to other programs that come into the schools (i.e. Scientist in the school, Entrepreneurial Adventures, various arts workshops) that all work around themes and can be linked to curriculum requirements. If I were to develop this concept further, I would be wise to hire a consultant and define how I might present it in a way that makes sense for educators in terms they understand and how it could meet standards. Since education is not my area of expertise, sometimes I felt another language was being spoken that I did not understand.

This project brought forth a realization that my greatest strengths are in connecting with people and inspiring them to connect to my vision, which gains their commitment. In retrospect, I intuitively followed Torrance’s advice in his Manifesto for Children: to know, understand, take pride in, practice, develop, exploit, and enjoy your greatest strengths. This is evident in the number of people I connected with throughout
the duration of this project: Teachers, administrators, and students at the school; current ICSC students; former ICSC students; my advisor; friends, neighbors, and relatives. This was most rewarding for me and, I hope, inspiring for those involved.

Due to my lack of professional teaching expertise I knew success was inevitable without the help of those with experience and expertise in this area. Not only did their assistance lead to greater understanding of teaching profession, it increased my confidence and helped me see areas for further improvement. This follows Torrance’s fourth point in his manifests: Find a great teacher or mentor who will help you.

Working closely with mentors and other I collaborated with, really made Torrance’s last point central to my project: Learn the skills of interdependence. Unsatisfied with the results of my preliminary efforts, I took a risk and developed a project true to my own style, as opposed to trying to fit something into the tight curricular molds of the school. In doing so, I found my greatest success through Torrance’s third point on his Manifesto: Learn to free yourself from the expectations of others and to walk away from the games they impose on you; free yourself to play your own game. Because I was “playing my own game” I fully understood all the rules, unlike the foreign rules of the school system. I believe this is fundamental reason I felt so much more at ease during the Mystery Box activities than anything else, and in turn, what led to it being such a great success. Really, this also relates to Torrance’s sixth point: Do what you love and can do well. With my background in marketing, I excel at creating anticipation, curiosity, and excitement, which are all foundational to learning. Approaching the project from the perspective of what I do best resulted in the best part of my project.
This brings me to Torrance’s first point, and in my opinion, the most important:

Don’t be afraid to fall in love with something and pursue it with intensity. I chose to focus on education for this project, despite my lack of expertise in the area, because I am passionate about empowering children. I pursued that passion intensely through this project. Empowering youth is my passion and what I see myself doing is doing this through programs and initiatives I help to develop and market. I will continue to run the Challenge Club to primary students as a lunchtime program and may expand it to other schools and am looking into another opportunities for the older grades. I would also like to develop my Mystery Box concept and find a sponsor for it as a way for schools to celebrate World Creativity and Innovation Week next year. (Torrance, 1995)
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Interview with Dr. Chris Spence director of the Toronto District School Board.

Retrieved from [http://rmartellacci.podomatic.com/entry/index/2011-09-07T05_00_36-07_00](http://rmartellacci.podomatic.com/entry/index/2011-09-07T05_00_36-07_00).


305-310.


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Appendix A
Concept Paper
Concept Paper - CRS 690

Title of Project:
Creativity as a 21st century skill: Training teachers to take it beyond the arts

Name: Linda Salna

Date Submitted: February 6, 2012

Project Type: Using CPS concepts and tools to improve quality of life
Section One: Background to the Project

Purpose and Description of Project

This aim of this project is to examine the extent to which support materials and training for public school teachers to foster creative thinking and problem solving in their classrooms is useful to the teacher. A one-day (two part) training workshop will a) provide a background and promote awareness of the concepts of creativity and b) train teachers in Creative Problem Solving (CPS) methods, the Foursight framework and tools to enhance teaching practices. This is followed by an eight-week consultation to provide information and materials to assist teachers in incorporating and implementing CPS tools into existing lesson plans and current curriculum. The purpose is to provide research-based methods to stimulate and engage creative thinking in students. The teacher training was developed and will be delivered by fellow Creative Studies Masters student Ismet Mamnoon (Izzy). A workbook was created specifically to guide teachers through the training. The workbook is to be kept as a reference and practical source of tool worksheets the teacher can copy and use freely.

Creative Thinking can be deliberately taught and that is what I plan to do with a group of teachers in an urban Canadian public school system. A goal of this project is to assess the effectiveness and efficiency of methods used with teachers to promote creative thinking in their classrooms with their students. As part of this initiative I will identify areas that need improvement or further development based on the teacher feedback and input. I will use this information to continuously assess and tailor support material and products based on their needs and requests. I also plan to use a Word Press format to highlight a focus of the week that teachers will practice and
provide feedback on. It also provides a format for the teachers to communicate and share ideas with each other. I will use this platform as the main communication and will build content weekly providing videos, links, and other resources teachers request. The main objective is to provide teachers with the kind of support they prefer to use.

Before the training I will meet once or twice with each of the teachers to have a conversation about their thoughts on creativity. After the eight-week implementation period we will revisit their perspectives. Comparing the responses will allow me to find shifts in thinking or perception about creativity as a result of implementation. This informs my thinking about the types of materials and information I provide to teachers for their classroom use. Feedback about the training will be solicited immediately afterwards. This way, I will be able to reflect on the training and materials used in the workshop separately from the rest of the project. If I was to only to have formal conversations with the teachers before and after the project was completed, it would be difficult to determine how the training component influenced them. It will provide insight into what components of the training are useful.

**Rationale for Selection**

I selected this initiative for my Master's Project because I am passionate about empowering youth. I strongly believe that creative thinking skills are an essential life skill and that creativity can help humanity reach our highest potential. Creative thinking gives us the skills to adapt, innovate and change. The only way to prepare our youth for their uncertain future is to equip them with skills that help them effectively deal with unknown challenges in the 21st Century (Trilling and Fadel, 2009, Sternberg, 2010). The most recent PISA (Programme for International Student Assessment) rates
the Canadian education system high, the head of this school board is progressive and promotes higher order thinking, including creativity as vital life skills. Sir Ken Robinson has been a keynote speaker at recent board events. Yet, based on my observation, it seems that most school initiatives in creativity are related to the arts. With these factors in mind I feel it was an optimal time to present a proposal for a program in teaching creativity to teachers in this public school system. Although a Masters of Science gave me credibility I felt my lack of background in education would be an obstacle. I had a better chance of getting buy in and the chance to learn if I presented the proposal as the work for my Masters Project; to further my education. It gives me the opportunity to develop, learn and even make mistakes without feeling the pressure to perform as an expert, which I am not. It was also important to me to have an experienced advisor from the faculty to mentor me so I can offer a quality experience for the teachers investing in the project. I appreciate the limited time teachers have and do not want to waste their time.

There are so many ways to foster creativity but few are deliberate, conscious or proven. (Robinson, 2011, Davis, 2004) I felt that making teachers aware of deliberate creativity concepts and teaching the creative process and CPS tools would be a simple and effective way to get teachers to stimulate creativity thinking in the classroom. The tools are easy to learn and simple to use once practiced or modeled in the classroom. It would be great if this initiative with teachers made a difference in how they perceive creativity and influence the engagement of their students.

As a result of this project I see opportunities to develop materials and training frameworks to engage with more teachers and more schools. Based on the success
of my project, there are future opportunities to engage in the schools. The superintendent of this specific school may be interested in introducing it at the next principal meeting for her family of schools. It has been suggested to me that private schools would be interested in a program like this one of which there are many of in this urban area.

**Sections Two: Pertinent Literature**

There are many good resources available on how to foster creativity in the classroom. I will use these to explore and expand my knowledge as well as use them as support in my Word Press site. I have found material on specific ways to use CPS tools in the classroom that I will be able to draw ideas from for the teachers. Through this pertinent literature I am able to draw out key concepts to highlight in my blog postings. I will also utilize people who have experience with implementing CPS in the classroom such as my advisor, fellow students and alumni from my Masters Program. I have also connected with other colleagues with Internet sites and blogs that relate to creativity in education who will contribute to a wider scope. My intention is to extract the most impactful to feature in my Word Press site so I am providing interesting and useful information to the teachers I am supporting.

**Pertinent Literature and Resources**


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Prufrock.


Section Three: Process Plan

How Do You Plan to Achieve Your Goals and Outcomes?

I have already been given approval to do this project with teachers, a principal and a literacy coach at a school. I have full support and commitment from them. The training day has been selected and substitute teachers costs have been approved to come out of the superintendent’s budget. Teachers participating in the project understand the commitment and are willing and prepared to assist me. I will be allowed to offer consultation and go in to model in the classroom as some teachers have requested.

I feel with this strong support from the school, which is critical, I will be able to accomplish my goals and outcomes throughout the project period. I plan to research proven methods and tools that foster creative thinking in education and examine how to best tailor the tools to the classroom needs and feature one a week through my Word press site. I will use graphically talented fellow student, Melinda Walker, to design posters, support materials and lesson plans as required and requested during the consulting period following the training. Melinda, a teacher, is also my Sounding Board Partner (SBP) for the project and has great expertise and advice to offer based on her own experience using CPS tools in the classroom. I have booked marked many sites and resources I have collected over the past months in anticipation of the project I will reference and use. I will continue to seek advice from those with experience and experts in implementing creativity into the classroom. I definitely feel inspired, supported and encouraged by many interested people especially by members of my Supreme cohort.
**Prepare Project Timeline:**

<table>
<thead>
<tr>
<th>Week of:</th>
<th>Tasks to be undertaken:</th>
<th>Estimated time commitment</th>
</tr>
</thead>
</table>
| Pre-work that started last semester | • Meetings with Ismet to develop and improve workshop  
• Conversations and communication with Ismet, Cyndi, school officials  
• Preparation of proposal and meeting with School Superintendent and principal Nov. 27th  
• Create Prezi and flyer to inform teachers  
• Discussions and emails with principal about logistics and approval of project  
• Course and consult on creating a Word Press based site/blog to support teachers during the project and beyond | 40hrs                      |
| Jan. 23                          | • Skype meeting with advisor and SBP  
• Discuss final details of training day with Ismet.  
• Review my goals and course expectations, start work on concept paper. Feedback SBP concept paper  
• Develop teacher interview questions  
• Meet with principal to review training and my project objectives  
• Draft concept paper | 16hrs                      |
| Jan. 30                          | • 5 teacher one on one conversations (2.5hrs)  
• Teacher training-Feb 1 (6hrs)  
• Workshop prep  
• Word Press site development  
• Review training with principal  
• Review and transcribe interviews  
• Reflect, review and critique training with Izzy. Discuss results of the feedback | 15.5hrs                    |
<table>
<thead>
<tr>
<th>Date</th>
<th>Tasks</th>
<th>Time</th>
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</table>
| Feb. 6     | - Gather feedback from teachers regarding training  
- Gather input from teachers to assist with development of support materials and tools  
- Word Press development and blog entry and possible products | 10hrs |
| Feb. 13    | - Use feedback and input from teachers to plan support material and resources (posters, lesson plans, links, articles etc.) give them product to assist in the classroom.  
- Develop/produce support products  
- Build Word Press site and do blog entries and possible products | 10hrs |
| Feb. 20    | - Gather feedback from teachers and consultant on tools, give them a product to assist in classroom  
- Continue to build Word Press site and do a blog entry and possible products  
- work on draft of section 1-3 of | 10hrs |
| Feb. 27    | - Skype meeting with Sue to review and discuss progress of project  
- Work on Word Press and blog entry  
And possible products | 10hrs |
| March 5    | - Gather feedback from teachers and consultant on tools  
- Continue to build Word Press site and do a blog entry and possible products | 6hrs |
| March 12   | **March Break (CHINE PS closed/teachers off)**  
- Skype with Sue to review final details of project  
- Continue to build Word Press site and do a blog entry | 3hrs |
| March 19   | - Gather feedback from teachers and consultant on tools  
- Continue to build Word Press site and do a blog entry and possible products | 5hrs |
<p>| March 26   | - Start work on draft of sections 4-6 | 10hrs |</p>
<table>
<thead>
<tr>
<th>Date</th>
<th>Tasks</th>
<th>Hours</th>
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<tbody>
<tr>
<td>April 2</td>
<td>• Create questions for final interviews and schedule</td>
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<tr>
<td></td>
<td>• <strong>Last week of 8wk project implementation</strong></td>
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<tr>
<td></td>
<td>• Review all notes and feedback to include in Final</td>
<td></td>
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<tr>
<td></td>
<td>• Interview with school principal and literacy coach about their experience and observations with teachers</td>
<td>10hrs</td>
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<tr>
<td>April 9</td>
<td>• Begin presentation</td>
<td>12hrs</td>
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<td></td>
<td>• Closing interviews with teachers (2hrs)</td>
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<tr>
<td></td>
<td>• Evaluate and compare initial with final interview responses and write brief on results and key learnings to include in final</td>
<td></td>
</tr>
<tr>
<td>April 16</td>
<td>• Continue consultation with teachers as needed</td>
<td>10hrs</td>
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<tr>
<td></td>
<td>• Add to Word Press entries</td>
<td></td>
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<tr>
<td></td>
<td>• Continue work on presentation</td>
<td></td>
</tr>
<tr>
<td>April 23</td>
<td>• Continue Work on presentation</td>
<td>7hrs</td>
</tr>
<tr>
<td>April 30</td>
<td>• Finish presentation</td>
<td>7hrs</td>
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<tr>
<td></td>
<td>• Share findings with Ismet, discuss outcome</td>
<td></td>
</tr>
<tr>
<td>May 7</td>
<td>• Presentations and Final Project submission</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• TOTAL hours calculated</td>
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<tr>
<td></td>
<td><strong>Total est. 180 hrs</strong></td>
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Section Four: Outcomes

What will be the Tangible Product(s) or Outcomes?

A training, created by Ismet, was further developed and improved through collaborative discussions and efforts. These meetings also inspired the focus and content of my project. As a result of our collaboration Ismet created a workbook, which will be used to guide teachers through the training. It will provide teachers with a practical and useful resource for information and templates of the tools. The aim of my eight-week follow up consultation period is to create materials and useful resources based on teacher input. I will produce posters for the classroom for the guidelines to idea generation and focusing of ideas based on student friendly terms and visuals. Using suggestions from teachers I want to create other products that they request and find most useful. I can develop and improve these products based on their feedback and suggestions ensuring construction of high quality materials.

I had already been working on a Wordpress Creativity and Innovation portal site and will use this project to develop the education stream. I plan to find and provide relevant references and information that target educators. I will be featuring concepts in creativity using u tube videos, articles and quotes as well as information from experts and scholars. There will be examples of tools and possible lesson plans or suggestions for use of the tools at various grade levels. The site will be a work in progress that real teachers in this project will help me build. My intention is to provide teachers with an online resource they really find useful.
Section Five: Key Learnings

Personal Learning Goals:

- To extend my experience in working in education and with educators.
- To create effective and efficient ways to teach teachers deliberate creativity to use in the classroom to engage learners.
- To understand the implications of using CPS tools in real classroom situations.
- To find out what resources and materials teachers like and want in order to create useful products.

What Criteria Will You Use To Measure The Effectiveness Of Your Achievement?

I will measure my effectiveness primarily though the teachers participating in this project. I want teachers to learn the CPS tools in the most efficient manner for practical use in the classroom. I will ask teachers to try the tools in class, report back to me and the other teacher through a forum or blog on my Word Press site. I will measure my success based on how often they try the tools, ways they use them in current lessons and report back on their experience. I will know that I was successful in my achievement when they communicate with me about using the tools on a regular basis with success. In addition to conversations, feedback forms, blog comments and input from teachers, principal and literacy coach I will judge the effectiveness of my achievement by all the smiles on the students faces.

I will also find useful the comments and reactions of my colleagues in creativity
helpful for development of the project each week. I will consult experts for their feedback on a regular basis.

**Evaluation:**

I plan to evaluate through the feedback given by the teachers participating in this project. In consultation with an expert, I was able to construct questions that provided an effective means to dialog with teachers about their insights into creativity and their expectations to extract their views and reflect on changes with them after the training. Rather than asking specifics I want to know their broad views and thoughts in general and certain areas of Creativity (i.e. Environment, traits) I will use their responses to compare the before project insights and expectations with after the project. The first interviews will give me baseline information to compare against the final responses. I will analyze the responses to evaluate my training and coaching to see if there were any shifts or changes in perception, understanding, learnings, teaching and student engagement.

I will be able to determine the effectiveness of the training from a feedback form on delivery and content distributed at the end of the day. The aim is to provide high quality materials and strong training frameworks. I will be able to assess the effectiveness of the project by getting the teachers’ perspectives on the training materials and delivery as well as how well the coaching and supported them.

I will be able to assess the effectiveness of my coaching through regular feedback and input from the teachers through my Word press site and personal interactions throughout the eight week implementation period. I will be able to observe
the effect the tools have on student engagement in situations when I am modeling the tools in class. Teachers will be asked to read, learn and try weekly “tool and concept of the week” and post about their experiences and communicate with me and the other teachers participating in the Project. I will also speak with the principal and literacy coach upon completion of the project to find out about their personal observations and opinions. The focus of all these aspects of the project are to assess the quality and effectiveness of the materials and information shared within the educational system, not to evaluate the teachers, students or administrators.

Self-evaluation will be done through a journal I will use to record reflections. I will note my own personal findings and learnings as well as document how I feel I am progressing. I will do PPCO on significant situations that I need to assess in a more formal way, i.e. classroom modeling. I will ask for and appreciate regular feedback from my advisor when I seek it.
Appendix B
My initial email to local government official
I am a parent at Chine Drive PS. I am writing to you to get your advice. I was planning to work with Helen Fisher this fall about this but as you know is no longer our Principal at Chine. I don’t know if you can help me but maybe you can steer me in the right direction or provide me with information.

As well as being an active parent at Chine, I am also working towards my Masters Degree in Creative Studies through the well-respected International Center for Studies in Creativity at Buffalo State, University of New York. I developed and run a successful after school program called "The Challenge Club" that fosters creative and critical thinking for Primary grades. I am passionate about creativity.

My graduate studies have expanded my knowledge and expertise in training and facilitating creativity. I, along with class colleagues and faculty, utilize developed deliberate and effective methods to teach and train others. I would like to provide creativity and innovation training & workshops to teachers, students, parents and our community. Given your experience, what is the best approach to present my services and myself to the TDSB.

I am well aware that the head of the TDSB Chris Spence, as well as you Gary, are very interested in implementing creativity into the school system. I know he often quotes Creativity guru Sir Ken Robinson. I know Ken Robinson's work very well and am completely aligned with his beliefs that we need to reform our school systems to make creativity a key component. We need to equip the next generation with tools that will make them successful for the rapidly changing 21st century. Creativity leads to change through novel thinking and approaches. Innovation and new ways of doing things is critical and requires creativity. Although Robinson is very passionate and inspiring, he offers no concrete methods to integrate creativity into schools. I can fill this void.

Being creative something more than being artistic or talented. As a result of my studies I have discovered that creativity can be taught and learned by all. Teachers, parents and students can all benefit by deliberate methods and tools that develop creativity thinking. There are proven methods and strategies that work that Dr. Spence would be interested in for schools and the community. My masters program is about scientifically supported interactive, effective and simple ways to hone creativity.

At this stage, I am not sure how to get proceed. I imagine there are layers of approvals and requirements I must go through. It would help me to know what is expected before I create presentations, brochures and materials for my workshops and program. Please let me know the best way to get started so I can navigate in the most effective and efficient way. I appreciate any advice or support you can offer me.
Appendix C
Initial Contact Email with Superintendent
Hi

Gary Crawford put me in touch with you. He also forwarded an email I had sent to him and our school trustee that you may have already read.

If not I'd like to introduce myself. I am a parent at [redacted], interested in fostering creativity. I am very passionate about creativity. I am pursuing a Masters in Studies in Creativity through which I have learned and developed skills in teaching and training of creativity. The International Centre for Studies in Creativity (ICSC) is a well-respected program offered through Buffalo State. I have attained a Graduate Certificate in Creativity and Change Leadership and am working towards my Masters. The Center is very involved and supportive of its students. In fact, the [redacted] Whole Child School was co-founded by a graduate of my program and was the focus of her Master’s Project.

I am very passionate about creativity and promoting it as a critical life skill. I plan to introduce proven training and interactive workshops on Creativity for teachers, parents and students. I have been running a successful after school program for primary children at [redacted] for a few years that foster creative and critical thinking skills. I am looking to develop and expand it as well. I am seeking advice from you and others who can guide and assist me in devising the most effective way to present these programs and myself to the TDSB. I realize there is a protocol for approval etc. I need to follow and would appreciate your help with.

I look forward to the next step. Any help you can offer is very appreciated.

Thanks

Linda Salna
Appendix D
Masters Project Proposal for the Superintendent Meeting
Pilot Project Proposal

“Innovation is what drives transformation and creativity is really the fuel”
Dr. Christopher Spence, Director of the Toronto District School Board

This applied project is a culmination of my activities from a Masters of Science in Creative Studies that I am studying at the International Center for Studies in Creativity (ICSC), Buffalo State, via distance. ICSC has achieved an international reputation for scholarly research and teaching that focuses on developing creativity, leadership, decision-making and problem solving skills. I have a special interest in youth and am dedicated to fostering creativity in the classroom. My strong desire to succeed combined with my passion will ensure this pilot is successful.

Purpose

The aim of this proposed pilot is to train and support the teachers in fostering creativity in the classroom. I plan to demystify creativity by presenting its core elements and by teaching creative thinking and problem solving techniques. The goal is to incorporate these effective and proven methods to enhance existing lesson plans. Training will include working with Creative Problem Solving Method (CPS). CPS is one of the most widely used, well-researched processes for nurturing creativity. Originally developed by Alex Osborn, also developer of brainstorming, it is one of the most well known effective problem solving methodologies used today.

The purpose is to:

1. To provide the background and an understanding of creativity.
2. Train and assist teachers to foster creativity in the classroom through proven simple and easy to learn techniques that enhance learning.
3. To give teachers a solid understanding of creativity through the training and practice so they can enhance their teaching practices and curriculum delivery.
4. Enable teachers to transform youth into creative and critical thinkers in school and life thereby preparing them for the 21st Century.

Process

To ensure the success of this pilot project, I am working with a faculty advisor, Dr. Sue Keller-Mathers, who has expertise with creativity in education. I would need a minimum of five volunteer teachers who would be willing to participate in this Pilot Project for the spring semester, which runs from January to April of 2012. Here is what is involved:

- An one day teacher training workshop using engaging and interactive methods to teach teachers about creativity and how and when to use the techniques. This workshop will be
delivered by a skilled workshop leader Ismet Mammadov, a workshop leader skilled in teaching these techniques to teachers, will assist me in delivering this workshop. and I propose doing the training on a Saturday.

- I will offer consultation and resources to support and assist teachers in applying techniques within their own lesson plans and classrooms for an 8-10 week period. (This depends on when we do training.)
- Completion of two questionnaires (one initial and another at end of project) and weekly feedback and interaction either online or in person or a combination of both depending on how each teacher would like to engage.

Practise

Practical use of the creative thinking tools and techniques is the best way to embed what is learned in the workshop. The teachers need to commit to the minimum requirement of the practice and feedback to make this project successful. They need to commit to using each technique at least twice. This will require some planning, which I can help with. I estimate that the requirements will take an average of 45 minutes a week in total. I will be allowing for 10 hours a week for my consultation time. It is vital to keep time invested to a minimum given the teachers’ limited time and mandate to meet curriculum requirements. The objective is to implement this project in a way that can be replicated to teach other teachers.

Each week, one technique will be featured. Teachers will find ways to use the technique in their classrooms, which I will assist them with. This technique featured to deepen learning of each method. In addition to consultation, I will offer the following support to the teachers:

- A workbook with exercises and techniques to be used during the workshop and that can be used later as a resource.
- An online teacher forum that will allow teachers to communicate with each other and myself.
- An online resource for teachers and parents to find out more about the project and further information about creativity. There will be examples and tips on using the methods.

Passion

The results of this pilot will give me valuable information. This information will allow me to evaluate what is most effective and to programs for fostering creativity in education. I am passionate about empowering youth that is why I am focusing on education for my applied Masters Project. I strongly believe that creative thinking skills are an essential life skill and help humanity reach our highest potential. Creative thinking can give us the skills to adapt, innovate and change. The world is changing rapidly, globalizing and becoming information saturated. The only way to prepare our youth for an uncertain future is to equip them to effectively deal with the unknown challenges in the 21st Century. Creative Thinking is critical and they can be taught, that is what I plan to do. The results of this pilot will supply me with valuable information that will allow me to evaluate the effectiveness of this program and sharpen my strategies for teaching creativity to teachers.
Appendix E
Flyer for Teachers about the Workshop
Creativity thinking consists in coming up with new and relevant ideas. Critical thinking is a matter of thinking clearly and rationally. To be a good and effective thinker, both kinds of thinking skills are needed. There is nothing mysterious about creative thinking, it is a skill that can be deliberately taught and learned. This interactive workshop will inform and deliver concrete ways to cultivate and expand thinking in your classroom. You will enhance teaching and learning by:

- Understand creativity, what is it (and not) and how to expand it
- Identify and develop attitudes and behaviors that encourage creative thinking
- Find out how to create an environment that encourages creative and innovative thinking
- 4 Rules that promote creative and critical thinking
- Learn and practice effective, simple techniques to spark creative thinking and foster critical thinking within existing lesson plans
- Use a workbook packed full of information and is a practical useful resource

This program is based on Creative Problem Solving method, the most widely used creative process and method backed by 50 years of scientific research and use.
Appendix F
Workbook by Izzy
This was used to guide the teachers Workshop and keep as a resource.

Page 54 Scamper template

Page 21 Creative Environment
Appendix G
Mystery Box Lesson Plan/Case Studies
Mystery Box

Objective
A medium size box was gift wrapped and placed on the teacher’s desk for 2 days. The box contains random items of similar size of various textures and colours. There should be enough for each child. Note: items should be safe to handle by this age group.

1. To stimulate curiosity and foster creative thinking skills.
2. To use tools used to create inventions or improvements.

Materials
The box was filled with random household items, enough for one per student

• bubble wrap, plastic scouring pad, shoe laces, potato, bandana, duct tape, shells

Procedures
1. Attribute List of a familiar animal/item
   Discuss in detail all attributes how it looks, feels, acts, sounds

2. Open Box and have each student choose an item (no explanation yet)
   • have each look at their own items and examine the attributes

3. Forced Connection to create new or improved creature/item
   • ask students to think of ways they can use the item from the box to make a new creative. Show one example i.e.: ribbons can become funny looking teeth.
   • Use Scamper to stimulate ideas i.e. How can you combine the two to change? Maybe the item can be something instead of? Maybe you could use the item to add?

4. Draw a picture of the new creature and give it a name

5. Presentation and comments of creation by each student.

6. Discussion on how might this be used in real life. (inventions, new characters etc.)
Adaptations:

This exercise can also force connections using magazines or pictures. Students would each randomly choose an image to use as inspiration to something new. With this age group it was best to have one constant for the class that they all had interest in, in this case the cat in the yard.

Classroom Case Study

What Happened?

I asked the students what might be in the box?

Put up a image of a Cat that looked a lot like a cat they knew that is always around to connect to the familiar and stimulate high interest

Talked about the cat, I asked if they recognized it, asked what its name was then asked them what they noticed about it? i.e. Stripes, soft, prickly whiskers, ears that stood up, tail, furry, meows, purrs, orange and white

Next each student picked an item from the box and as they held it I asked them to notice how it felt and look at all the details of it and think about what it would become, replace or change the cat into a monster.

Each child drew their creature and talked about how they used the item.

Outcomes:

Here are some examples of the forced connections with Tiger the cat:

Bubble wrap inspired the cat’s texture
Duct tape roll shaped the body parts.
A bandana became a cape.
A hairstyle was modeled after a shell.
Mystery Box  Problem Solving Exercise

Objective
A medium size box was gift wrapped and placed on the teacher’s desk for 3 days. The box contains random items of similar size of various textures and colours. There should be enough for each child. Note: items should be safe to handle by this age group.

1. To stimulate curiosity and foster creative thinking skills.
2. To use tools and items to Problem Solve

Materials
The box was filled with random household items, enough for one per student

- bubble wrap, plastic scouring pad, shoe laces, potato, bandana, duct tape, shells

Procedures
1. Discuss a problem scenario that students that relates to something in their lives.
2. Brainstorm about what might be wrong to clarify the problem they will solve, write on each on a post it note.
3. Discuss each idea and use Card Sort to rank the ideas in order urgency from most urgent to attend to least.
4. Identify and discuss the problem will solve.
5. Open the box and have each child help then choose an item. (no explanation yet)
   • have each look at their own item and notice the attributes.
6. Ask them “how might you use your item to help solve the problem?” and give them a few minutes to think and discuss with a partner.
7. If time permits have them work in pairs and combine items and present together
8. Have them each play out the action to show their solution and explain.
Classroom Case Study

What Happened?

I asked the students what might be in the box?

Put up a image of a Cat that looked a lot like a cat they knew (Tiger) that is always around to connect to the familiar and stimulate high interest.

I described a scenario involving Tiger the cat: "In the huge tree outside, right in our yard, Tiger is almost at the top on a high branch. Tiger is meowing very loudly and his hair is standing up, his tail and ears are down. What might be happening?"

Talked about the cat, I asked "what might be the problem?" based on what you know.

The students brainstormed these ideas and then we discussed the level of urgency to card sort. Here are how the ideas were sorted:

1. Tigger is can’t get down
2. Tigger is in danger of falling
3. Tigger is scared
4. Tiger is hungry
5. Tiger is making too much noise

Next each student picked an item from the box and as they held it I asked them to notice how it felt and look at all the details of it and think about how they might use it to help solve Tiger’s problem. Each child acted out and explained their items.

Outcomes:

1. The students were able to understand what the possible problems were in the scenario as well as evaluate and rank the level of urgency for each one.

2. Here some examples of how the items saved the day:
   - a scouring pad became a landing pad to cushion Tiger as he jumped down
   - shoelaces became a harness that hoisted the student to the top of the tree to get the cat and bring it back down.
   - the bubble wrap became a large net that Tiger could jump down into

3. The students enjoyed acting out in pairs and found funny ways to combine items.
Appendix H
Creativity Week Challenges and Tips Announcements
Monday, April 16th - Morning Announcement:

Today’s creativity challenge is to just try to be a little different…

everyone write with your name with your other hand sometime today😊

Monday, April 16 – PM announcement:

In celebration of World Creativity and Innovation this week

This creativity challenge is brought to by (kids say name)

“Being Curious” is part of being creative…learn to wonder about things.

A home tonight “discover something new” by watching a different TV channel you have never watched before or try reading a new book!

Tuesday, April 17 – AM announcement:

Creativity can be expressed is so many ways…. art is one of them.

To celebrate World Creativity and innovation Week lets all use the sidewalk chalk on the back pavement area to draw some cool creative pictures! Lets work all week together to draw, colour, write, add your mark to create one of the world’s biggest and best sidewalk chalk mural!

This creativity challenge was brought to by….. (kids say name)

Tuesday, April 18 - PM

This afternoon’s Creativity challenge is brought to you by….. (say kids names)

Being creative is as simple as…”being open minded”….. Tonight

“ Trying something new”…….. try a different food …..maybe if you try it you’ll like it!

Wednesday, April 19-AM

This morning’s Creativity challenge is brought to you by….. (say kids names)
Lets keep working on our mural in the back........

We can all be creative today by “ doing something in a unique or novel way” ....

“talk in a different voice or way”..........Come on you can do it....Try it now!

Wednesday, April 19-PM

Today’s Creativity Challenge is brought to you by...... (kids say names)

Another thing a creative person does is “finds order out of chaos” ....tonight try it...

“ do what you mom and dad say to for the rest of the day”

Thursday, April 20 –AM

Part of being creative is being playful and having fun!

In celebration of World Creativity and Innovation week lets all

Today recess dance when you walk, maybe try the chicken dance

Thursday, April 20- PM announcement

Today’s creative challenge is brought to you by…..(name of students)

Being creative can mean “simply changing what you do, breaking out of your set patterns

“……tonight plan to wear something tomorrow that you don’t usually wear. Change what you

normally do and celebrate world creativity and innovation week that ends tomorrow.

Friday, April 21 – AM announcement

It’s the final day of our World Creativity and Innovation celebrations….today’s creativity tip is

brought to you by… (kids say names)...

We all make mistake …Making mistakes is a part of life, we learn from them. A creative

person celebrates their mistakes and grows from them. Many inventions are a result of

someone making a mistake......
Today’s challenge is, every time you make a mistake or error…instead of feeling bad… high five people, cheer, or simply smile…. look at it in another way, celebrate your mistakes…they might lead you to something good.

**Friday, April 21-PM**

Thanks for celebrating World Creativity and Innovation Week with us!

The last creative challenge is brought to you by,(kids say names)

Do something creative makes people happy! …This weekend think of all the ways you can be creative and try some.

So Have a fun, creative and happy weekend!  BYE