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Using Creative Problem Solving Tools with Kindergarden Students

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Section 1 Introduction

In my concept paper I was planning to improve literacy through achievement using CPS tools. Due to scheduling conflicts and lack of time I narrowed my project down to using CPS tools with kindergarten students. I contacted a teacher who I worked with in the past (her name is Paige Boles), and we discussed what I would be doing in her classroom. Boles is familiar with the Creative Studies program so she was very excited to have me working with her students. We decided it would be best if I worked with two small groups, one group of students who are considered at risk students, who were falling behind in their literacy skills. The other group is "high learners" who have excelled in their literacy skills. Boles and I decided that the sessions should not run any longer than 15-20 minutes. The lessons would take place in another room so my lesson and Boles' lesson would not conflict with each other. I would be taking the high learners in the mornings on Mondays and Wednesdays. We chose those times because we knew the students could leave the classroom and not fall behind in class material. The second group, the at-risk students, I would be taking at the end of the day on Mondays and on Fridays in the mornings. This was also a reinforcement of literacy for this group. I developed five lessons and visited the class ten times.

I spent one day observing the classroom. It was important that I started a relationship with the students so they would feel comfortable with me and respect me as a teacher. While I was in the classroom, I acted as an aide. I helped the students with their table work, which included writing words, and with math work.

I had a chance to read a story of their choice to the class. During the time I was there, Boles introduced me to the class and explained why I was there. I showed a three-minute slide show of what I would be teaching to some of the students in the classroom. We talked about what creativity was, how to problem solve, and what tools they would be learning. I also sent home a pamphlet that explained what creative problem solving was for the parents. The pamphlet discussed vocabulary terms and described different types of CPS tools. The tools that I felt to be age-appropriate with the kindergarten students were: Brainstorming, Storyboarding, Card sort, PMI, and Hits.

The goal of this project was: the students would be able to understand five CPS tools. I did not find research on CPS used with students. The research that correlated with Creative Problem Solving tools is on higher order thinking skills with young students. The reason this correlated is because the CPS tools use higher and lower thinking skills.

Section 2 Research

There is not a lot of research done with Creative Problem Solving Tools used with students. I found that the terms "higher order thinking" and "critical thinking" are used in common with creative problem solving. When I researched critical thinking and higher order thinking, one man stood out: Benjamin Bloom. In 1956 Benjamin Bloom developed Bloom's Taxonomy, this provides a way to organize thinking skills into six levels, from the most basic to the higher order levels of thinking (Pohl, 2000). There is both a new and an old version of the Bloom's taxonomy, the difference is in the titles of the six different levels of thinking. I based my work and research on the new version. The six levels are: Remembering, Understanding, Applying, Analyzing, Evaluating, and Creating. The higher order levels of thinking tie into the creative problem solving tools. There are four levels that require higher level thinking. They are: complex application, analysis, evaluation, or creation skills. According to the web site, www.oir.uiuc.edu/Did/docs/QUESTION/quest1.htm "Questions at higher levels of the taxonomy are usually most appropriate for: encouraging students to think more deeply and critically. Problem solving, encourage discussions, and stimulating students to seek information on their own". Any of the Creative Problems Solving tools could incorporate time for the students to have a discussion within the small group they are working in. For example, when they use Card Sort, they have to discuss which card is more valuable and why to place it by what number. When students use Brainstorming, it creates an environment where they are forced to seek out new information and build off

each others' ideas. Storyboarding allows students to think critically by having them make the choice of what steps they will need to reach the goal or the last step of the board.

I worked with two different types of students, "high learners" who were advanced readers for their age and "at-risk learners" who need more attention to their reading skills. The reason I chose the two groups was because the high learners need an outlet to excel in their creativity. I worked with the "at risk learners" to help develop self esteem while develop creative skills. Teaching them creative problem solving tools was a good way to promote their creativity. The at-risk group needed the extra time with me because they needed reinforcement on reading skills. During the lessons using the creative problem solving tools, I would incorporate reading skills into my lessons. According to Page and Mukherjee (2007), Bloom's taxonomy uses sets of objectives to deal with whether a student is able to perform in certain educationally desirable ways after instruction. After each lesson, I was able to see if the students were able to understand at a higher level by asking the question "how might we use this tool in school and at home?" I also worked on the lower order of thinking skills of the Blooms Taxonomy, Remembering and Understanding with each group. Going over these two thinking skills was extremely helpful for my at-risk group. This was the reinforcement that they needed to leave lasting impressions of how the CPS tools helped them learn.   This also had a positive effect on their learning skills, because the last two skills from Bloom's Taxonomy were reinforced. This also boosted the students' confidence in their own learning.

In this section I will present the lesson that was delivered to the students. The lesson will explain which New York learning standard will work for each lesson, each lesson will have a learning goal for the students. I will also list the materials needed for each lesson and instruction on how to deliver each lesson. After each lesson plan I will summarize what took place in each group that I worked with and what the reactions were from the students.

Lesson on Card Sort: "What body parts are most important?"
Developed by Santina Tulumello
Purpose: Prioritize ideas or things from least important to most important.
Learning Goal: The students will be able to sort the pictures of body parts from least important to most important.
NY Standard English Language Arts 3: Students will read, write, listen and speak for critical analysis and evaluation.

- Identify facts and give an opinion about a storybook orally or in writing.

Materials:

- Text: <u>More Parts</u> by Tedd Arnold (2003)
- Life size picture of a boy
- 15 Picture cards with body parts on them
- Sticky tack
- Instructions on Card Sort tool, Appendix B

Warm up:

- Picture walk of the book (Picture walk is when you look at the pictures in the book to make predictions of what might happen.)
- Read the story

Activity:

- Introduced the 15 cards with body parts on them (discuss what body parts would be important and some that we might not need)
- Introduced the concept of card sort (we will be sorting the 15 pictures from least important to most important.)
- What picture should go at number 15 and why
- What picture should go at number 1 and why
- Complete 2 through 14 the same way

Extending:

I asked the student, "How might you use this new tool in school?"

<u>Debrief on Card Sort</u>

At-risk Group

I started by talking about body parts and why they might be important. Then we read the book <u>More Parts</u> by Tedd Arnold (2003). After reading the book I introduced my card sized pictures with labels on them. I explained that we would prioritize the pictures from bottom to top, from least important to most important. We all looked at the pictures and talked about what body parts would be least important and, as a group, we talked about which would be the most important. After that, I had them take turns deciding what would be next. Some of the children had a hard time making decisions. Overall, they were able to complete the card sort tool as a group. I would like to cut the options down to about five and have each child complete his/her own sort. I do see how the sorting of options is a good tool to teach young students because, at that age, they are not used to making choices.

High learners group

I introduced the book and Card Sort the same way with the second group, I did not want to make any changes to the lesson because I need to see how the two groups would respond to the lessons.

When I finished the book, one the boys said, "This book can't happen to you unless something bad happens to you." I could not have been happier when he made that comment. It was a perfect way to lead into card sorting "what body parts are most important to you". I knew then that the connections would be different, because of the different level of students thinking skills. As a group, we did the least important and most important body parts together. After that we went around the group and took turns deciding what body part would be next. This group was able to give me detailed reasoning why each body part was important or not so important. They understood that you could live without some of your body parts and knew which body parts were vital to your health.

Overall, I was very impressed with how the kindergarteners were able to understand the point of prioritizing ideas. I did share the lesson and the outcome with Boles, gave her some ideas she could use to implement that lesson with her whole class.

Lesson on Card Sort and Brainstorming

Problem statements: "What might we need to grow a pumpkin?" and "What are important steps for growing a pumpkin?"

Developed by Santina Tulumello

Purpose: Prioritize ideas or things from least important to most important.

Learning Goal: The students will be able to list the steps to grow a pumpkin.

NY Standard English Language Arts 3: students will read, write, listen, and speak for critical analysis and evaluation.

- Identify facts and give an opinion about a storybook orally or in writing.
- Discuss the meaning of actions or events in a story.

Materials:

- Text: From "Seed to Pumpkin", by Wendy Pfeffer (2004).
- Written on chalk board: "What might we need to grow a pumpkin?" and "What are important steps for growing a pumpkin".
- Post its
- Picture cards with labels (water, dirt, sun, pumpkin seeds, vines)
- Real pumpkin
- Instructions on Brainstorming tool, Appendix C

Background information:

- We talked about our last lesson on card sorting body parts so the students would remember the concept of Card Sort.

Warm up:

- I asked them the question "What might we need to grow a pumpkin?"
- The group generated ideas to put on the board (I wrote on the post it and had a student put on the board)
- Card sorted the ideas they came up with
- Picture walk of the story. A picture walk of the story is when a teacher or a student flips through the pictures of the book to see what is going on in the story or what might happen in the story.

Activity:

- Read the story
- Go over the steps in the book to grow a pumpkin
- New Card Sort with the picture cards

Extending:

I asked the student to tell me why it was important to follow the steps for growing a pumpkin that we learned about from our book.

Debrief on Brainstorming and Card Sort with growing pumpkins

High learners

We started off by talking about what we did with the book about body parts and how we sorted through important body parts. I asked the students if we could come up with what we might need to grow a pumpkin? I had them tell me what they could think of and I wrote it on Post its and had one of my hyper-active students put them on the board. This is what they generated: Seeds, roots, worms, vines, pumpkins, lights, sun, flowers, water, ground, leaves. After we came up with all of these ideas, I asked if we could sort the ideas to see what would be important and not important for growing pumpkins. We started with least important and went to most important. We did this as a whole group. Their ideas and sorting did improve from the first lesson but, because they had not learned about pumpkins, they did not have the background knowledge to discuss how pumpkins grow. I went on to introduce the book From Seed to Pumpkin, by Wendy Pfeffer (2004). I read the book and stopped to discuss the importance of the different steps to growing a pumpkin. After reading the book, I asked the group if they wanted to change the priority from the first Card Sort and, of course, they did. I had new pictures and labels so the students could sort with out my

help. I asked if they needed to use the book for help and they said no they could do it. I watched over them while they worked together sorting. I did have to remind them that they had to start with the least important and then go to the most important. They were able to work together and prioritize the pictures.

I was impressed with this lesson. I got them to generate ideas then to sort ideas and re-sort ideas after they had some background knowledge. The most impressive part was watching them sort without my help.

At-risk group

I started out with the same lesson plans that I used with the high learners. While the students were generating ideas on what might you need to grow a pumpkin, I knew I would have to change the lesson, because the "at risk group" did not generate as much ideas as the "high learners". They came up with only five ideas, so I realized that the first group had a lot more background knowledge than the at-risk group did. I skipped over sorting their ideas and jumped into the book and talked about what is needed to grow a pumpkin. After reading the book, I introduced the pictures and problem statement of what might you need to grow a pumpkin. As a group, we sorted the pictures together. We used the book to see what would be the last thing we would need to grow a pumpkin and that helped us start off sorting our pictures. If I were to do this lesson again, I would read an additional book about growing plants to give the students some background knowledge on what items are needed to grow a plant.

Lesson on Brainstorming and PMI:

Problem statement: "How might I handle my feelings when I am angry?"

Developed by Santina Tulumello

Purpose: To let students know how to handle their feelings in appropriate way.

Learning Goal: The students will be able to give ideas to the class on how to handle feelings in school.

NY Standard English Language Arts 3: students will read, write, listen, and speak for critical analysis and evaluation.

- Discuss the meaning of actions in a story
- Identify facts and give an opinion about a story book orally
- Tell what they liked best about a book they read

Materials:

- Text: If You're Angry and You Know It! by Cecily Kaiser (2004).
- Post its ®
- White board with the question "How might I handle my feelings when I am angry"
- Pictures of different angry faces
- Instructions on PMI tool, Appendix D

Warm up:

- Discussed how a classmate becomes a peace maker in the class room
- What it takes to be a good peace maker
- What should you do when you are angry?

Activity:

- Generating ideas on how to handle your feelings
- Read the book: If you're Angry and You Know It! by Cecily Kaiser (2004).
- Pluses (what was good about the book),
- Minuses (what did you not like about the book)
- Interesting aspects about what the book had to offer (what was interesting about the book?).

Extending:

I asked the group: "Can we take the books ideas on how to handle our feelings and use it in our classroom?"

Debrief on Brainstorming: "How might I handle my feelings when I am angry?"

High Learning group

With this group specifically, it was important to keep them interested in the task at hand. Working with each other, rather than individually, has proven itself to be most successful in keeping the children intrigued. The group started by developing ideas as a group. The "high learning group" started to build ideas of each other. They generated ideas and motivated each other to keep the ideas developing. After explaining the topic, I explained to the group that we were going to work together to come up with as many ideas as possible. I introduced the pictures of angry faces and asked "How might I handle my feelings when I am angry?" We started off generating options. After about one minute, one of the students said, "I have an idea but it's a bad way to handle your feelings, is that ok?" After agreeing with the student that there are alternative ways to handle feelings, I decided to expand the discussion to focus on both good and bad ways to handle one's feelings. Collaborating with each other they were able to come up with 25 good and bad ideas. I was so impressed by the way they could stay focused, have fun, and generated good ideas. We went on to reading a book called, If You're ANGRY and You Know It! by Cecily Kaiser (2004). The students were able to read and sing along to the book. When we finished, I asked the group how we could incorporate the ideas from the book in our class (taking it

forward!). One of the boys said we could use the good ideas on how to handle our feelings to help us become "Peace Maker of the Week". Another student said, "If one of our friends is angry we can give them some ideas so they aren't so mad anymore." Listening to all the suggestions from the students made me realize what an impact these books and activities had on their thought processes. It helped their brainstorming abilities, along with their capability to understand the difference between both good and bad feelings.

This lesson had an impact on the students because they knew they had feelings but sometimes they didn't know how to handle their feelings. This lesson gave them the opportunity to come up with effective and non- effective choices on how to handle their feelings.

At-risk group

I repeated the same lesson plans with the at-risk group as I did with the high learner group. This group could not grasp the idea of generating ideas on how to handle feelings when angry in school. Instead of coming up with different ideas they only came up with the ideas from the book. I moved into reading the book to see what the students would come up with. I wanted the students to see the differences between what they said and what the book said. While I was reading, I stopped on every page and said, "This is an idea that we can do when we are angry, can anyone think of something different?"   When I asked that question, the students just restated what we started talking about in the beginning, how to change your behavior when angry in school. After reading the story, I did a picture walk of the book and said, "These are things we can do

when we are angry." After the picture walk, I modeled appropriate ideas that the students could do when angry in school. I did not feel it was appropriate to use the PMI tool on the overall lesson with the students. The group did not grasp the idea of the whole lesson so I felt it was unfair to them to ask what the pluses, potential and minus of the lesson would be. I did ask the students what they liked about the book. The students liked that the book gave them new ideas on how to handle their feelings when they are upset. When I asked the students what they did not like about the book, they couldn't seem to find anything to dislike about the book. I also asked what was interesting about the book. Each student agreed that they found it interesting that they could sing the story or read the book. Unfortunately, this lesson was not clear for this group because I did not spend time discussing what it meant to be angry. I should have discussed what were appropriate and non appropriate ways to handle yourself when angry in school, before asking them to generate ideas.

Lesson on Hits

By Santina Tulumello

Purpose: To narrow down a large number of options using hits

Learning goal: The students will be able to narrow options down using a focusing tool called Hits.

NY Standard English Language Arts 1: Students will read, write, listen, and speak for information and understanding**.**

- Use charts or webs to organize information.
- Select informational books from the classroom

Materials:

- 8 popular children's stories
- Small or round magnets/ dry erase markers
- Large chalk board / dry erase board
- Instructions on Hits Tool, Appendix E

Warm up:

- Review focusing rules
- Pick one to three books that interest the class
- Have students discuss the different titles of the books.

Activity:

- Give the students one, two, or possibly three magnets so they can choose the story they would like to hear
- Have each student pick stories that interest them
- Once the students are done narrowing the choices down, the class will have the story of choice to read.

Extending:

- After reading the story, discuss the beginning, middle, and end of the story.
- Talk about the Pluses, Minus, and Interesting facts of using our new tool, Hits.
- Ask "what did we learn how to do today and why was it important?"

- Talk about the P.M.I. of the story.

<u>Debrief on Hits</u>

High learning group

I started by telling the students the purpose of learning the tool, Hits, is to narrow down a large number of options. We had a quick discussion on how making choices is a part of an everyday task in our lives. We went over the book titles and I asked them to think about what two books they would like to read. When they were ready, I asked them to come up two at a time and to put an X over the two books they had chosen. While the students were making their choices one boy became very upset when he saw that another student put an X over the book he wanted. I stopped the group and explained that it was ok for them to have the same choices because that will help us decided what book to read. After they all had a turn, we looked at the eight book choices and noticed that five out of the eight books had an X over them. I explained that we narrowed eight books down to five. The next step was to see how many X were over each book. Looking at the five books, four of them had two X's and one book had three. I asked the class to tell me which book had been narrowed down to our main choice. We then discussed how we started with eight books and narrowed them down to one choice.

PMI

After reading the book, I asked the class what they liked about making "Hits". The group said they liked to place the X's on the books and liked counting the books down from eight to one.

I then asked the group what they did not like about using Hits. They said that that not all of their choices got selected so they did not get to read all the books they wanted. I explained the point of narrowing down choices and that we were not able to read all of the books.

I asked what they found interesting about using Hits. They unanimously thought it was fun to make their own choices on what book to read.

As a group, we discussed the story, which that was about colors and making choices to mix the colors to see what would happen. This lesson was a great example of using Hits. The students were able to clearly understand why and how we narrowed down our choices. The lesson was clear because the students were able to physically make their choices in narrowing down the options. Due to time constraints I was unable to deliver this lesson with the at-risk group.

Lesson on Story Board

Developed by Sandy Tulumello

Purpose: Understand that storyboarding allows you to create a complete story by starting with the first and last steps, that way you can fill in the other steps.

Learning Goal: The students will be able to complete a storyboard, as a group, and understand why storyboarding is important for writing complete sentences and stories.

NY Standards English Language Arts 2: Students will read, write, listen, and speak for literary response and expression
- Retell a story in sequence

Materials:
- Text: Mouse Paint by Ellen Stoll Walsh (2000).

- Post its

- White board

- Crayons

- Instructions on Story Board tool, Appendix F

Warp up:
- Simon Says

- Read the story Mouse Paint By Ellen Stoll Walsh (2000).

- Discuss how each student ended up with six colors

Activity:
- Discuss the steps of the story

- Explain that we will be learning how to make a Story Board and this is used to create stories and put them in to sentences.

- Fill in the first box with just a picture of the three paints, and then I will draw in the last box with all of the 6 different colors.

- Ask the class what steps we need to make all of the different colors.

- Have each student take a turn to create one box until the Story Board is complete.

Extension:

Ask the students what are the Pluses, Minus, and Interesting facts about using Story Boarding.

<u>Debrief on Story Board</u>

At-risk group

I started the lesson off with a warm up of Simon Says to try and get the group to refocus and to get out some energy before they had to sit for twenty minutes. I chose Simon Says because it was a fun activity engaged there listing skills. I went right into the purpose of the lesson and told them that Story Boards help us create steps to complete stories and help us create steps to solve problems. We talked about how all stories have a beginning, middle, and end**.** I introduced the story called <u>Mouse Paint</u> by Ellen Stoll Walsh (2003). During our picture walk, the group noticed that the book started off with three colors and ended up with six. Before I went on, I showed them the Story Board and asked them the question "What steps do we need to take to make six different colors?" I also asked, "Does anyone think they know where we should start and how this story might end?" We were able to fill in the first and last boxes. I had one student fill in the first box with the three main colors, red, yellow, and blue, and another student fill in the last box with all of the six different colors. We went on to read the story to see how we could fill in the rest of the boxes. Each student was able to take a turn and fill in a box by creating a new color out of the three main colors. (Red, yellow, blue, green, orange, and purple)

PMI

I asked what they liked about Story Board and the students said; "it was easy to put the steps in order."

The students did not find anything they did not like about the Story Board tool but I found that it was hard for them to visualize the steps until it was on the board for them to see.

They found it interesting that they were able to draw the steps instead of having to try and write each one out.

The Story Board tool is practical to use for everyday teaching because you can use this in so many different ways, for an example to organize your ideas for a story. The Story Board tool can to help figure out ways to problem solve. This lesson was also clear to the students after they were able to visualize the concept of a Story Board. Due to time constraints, I was unable to complete this lesson with the high learning group.

Section 4 Summary

Using the Creative Problem Solving tools with the kindergarten students was highly successful. The lessons were clear and to the point of what was expected for the students to learn. The students also understood that they could use these tools outside of school as well. The lessons worked well with the students because each lesson was planned to fit the students' needs. I purposely picked two groups of learners; group one were high learners and group two were at-risk learners.   I also took into consideration the students' attention span and classroom behaviors prior to picking my two groups. I wanted the lessons to be in a stress-free environment**.** With the ability to select the two groups, I was able to direct my attention and keep it focused on all of the students, rather than managing classroom behaviors. I felt that was important because I was working with the students for a minimal time of 20-30 minutes twice a week. I wanted to make sure the students got as much out of these lessons as possible with the fewest distractions.

The tools that I picked were: Card Sort, Brainstorming, PMI, and Story Board**.** Each tool was clearly understood by the students. Ideally**,** I would have worked in the classroom three times a week and completed three different lessons on each tool to further elaborate on the ability to use these tools in different situations**.** I would have kept each lesson aligned with what classroom teacher was teaching, Paige Boles. These lessons would have focused on the same topics selected by Mrs. Boles. It would have benefited the students even

further to learn the information in two different teaching styles by myself and by Paige Boles.

Due to the time constraint of school vacations, I was unable to deliver the last two lessons to each group. I delivered the lesson on Story Boarding to the at-risk group and the lesson on Hits to the higher learning group. Both groups did learn about PMI. I would have liked to use the Story Boarding lesson and Hit lesson with both groups.

When working with any age students you realize lessons can always be improved. I know that if I had the chance to work with the kindergarten students again I would make the lessons more active to ensure the students have more movement instead of sitting stationary in a circle. Typical kindergarten students range from four to five years old. Kids, at this age, tend to have short attention spans. Incorporating movement into the lesson would eliminate boredom and still allow me to utilize the 30 minutes of planned lessons. I would also like to break the entire class into small groups. I could rotate the small groups throughout the day. That way, I wouldn't limit myself to only twelve students. I could spend more time in the beginning explaining what Creative Problem Solving is and go over basic CPS terms and definitions. I did not spend a lot of time explaining what CPS is to the class because I did not think the students would be interested in it. Now that I have worked with the students, I realize that it would be appropriate to give them more information about CPS. When the students saw me walk into the classroom, most of them asked if they could work with me in the creative group. The students referred to me as "the teacher with

the Creativity Club." The class always seemed excited to see what I had for them for that day. They were interested to see what new games they were going to play. The students telling me that they wanted to work with me reassured me that this project was well worth my time and effort. I had one purpose for this project; it was to see how young students would react with CPS tools. I am certain when I say they enjoyed every minute of it. I feel confident that I now can walk into any classroom and work with students and teach them about CPS tools.

This gave me insight on how I can develop lessons using CPS tools for students with needs, such as emotional, physical, or developmental needs. Working with the different skill levels of learners showed me that these tools will work with any type of learner. Using the tools with students who have special needs is extremely practical, by giving them another learning tool to help them problem solve and decipher difficult information. My next goal is to develop lessons to work with students with developmental needs and then to implement them into their daily routines. I see myself working with young students, teaching them the CPS process. I would like to do this in one of three different ways, the first way is to be the teacher of a classroom and incorporate CPS in my daily lessons. Secondly, I would like to plan curriculums for schools using CPS.   The third way is to council students that need help with emotional needs or assist students with learning disabilities. This would help them learn, through the different techniques that CPS has to offer.

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Appendix A
Concept Paper 2007-09-01

Project Type:
Developing children's self-esteem through CPS while impacting literacy skills

What is this project about?
I will be coaching children, ages 13 and younger, CPS tools to boost their self esteem at Enterprise Charter School. I also will deliver literacy tips through CPS. Through the tools of CPS, the children will develop creative thinking skills and will also have self motivation to improve reading and writing skills.

Rationale for choice
 This gives me a chance to prove the reason why I chose a degree in Creative Studies rather than a Master in Education. I already have my BS in Early Childhood and Special Education. For my project, I wanted to expand my knowledge in CPS but still relate it to children. This project is exactly what I needed to show that improving children's creativity will allow endless opportunities that can be taught to a child's mind.

What will be the Tangible product or outcomes?
I will create a lesson plan for each meeting that will occur with the children. I will also collect the work that the children complete and will compare the work from the beginning of the sessions to the end of the sessions.

What criteria will you use to measure the effectiveness of your achievement?
I will know if I am successful if the children are having fun and understanding the CPS tools. I will expect the children to have higher levels of self esteem and basic creative thinking skills. This will allow them to improve their reading and writing skills.

Who will be involved or influenced; what will your role be?
I will be involved as the main coach of the students. There will be one teacher from the school overseeing the project. I would like to have between six and eight students to work with.

When will this project occur?
I would like to start this project as soon as I can make contact with Kristin Badger-Bach, Jill Norton (Enterprise Charter School) and Mike Fox.

Why is it important to do this?

This project is important to me because I want to take my teaching skills and apply what I know about creative problem solving and share this with students. I also think this would be a great reading and writing program for all elementary schools.

Personal learning goals
I will be able to:
- Develop my leadership skills as a facilitator
- Intertwine my creative studies with my education background for young children.
- Develop my creative skills to make sure this is a fun experience for the children, not a typical class room experience.
- I will apply new teaching techniques.

How do you plan to achieve your goals and outcomes?
In the first sessions with the children we will start with some warm up games so I can get to know them and they will start to understand the creative process. Also I will give some brief background knowledge of what CPS is and the four P's. The other sessions I will go over the main tools for diverging and converging. After I feel that the children have an understanding of the tools, I will start to use literacy as a basis of working with the CPS tools, so the students will learn to develop their skills. I will also have a brainwriting session on why is it important to have good writing and reading skills as a young adult.

Evaluation
Some informal ways I will know this is working or not working is by the children's reactions to the activities. If they understand what to do or if they are having fun. I would also like to speak with their teachers just to see if there is an improvement in self-esteem or literacy skills. I would like to work with the supervisor who is running this event at Enterprise Charter School.

Prepare project timeline
- I would like to meet with Enterprise Sept 25, 2007 and I would like to start working with the children by first week of October.
- I will meet with the students one or two times a week for any 45 minuets.

Identify pertinent literature or resources
I have elementary literacy books that will be useful when I am implementing the skills with the CPS tools. I will need to see what reading program the Enterprise Charter School is using to base some of the skills off of what the children are expected to know. I will be asking Sue Keller-Mathers for some helpful hints on how she uses CPS with young children.

Instructions on Tools

Appendix B
Card Sort Tool

Read the book "Even More Parts", by Tedd Arnold.
Find your least favorite body part by looking at the picture and stick it to the star with the number 15
Find your favorite body part and stick it to the star with number 1.
Repeat steps 2 and 3 until you have ranked all of your body parts (1-15).

Appendix C
Brainstorming Tool

Don't judge
Come up with crazy ideas!
Work together; share ideas
Write your idea on a post-it. (Write only one idea per post-it)
Say your idea out loud so that all other members can hear you.
Give the post-it to the facilitator

Appendix D
PMI Tool

Positives: List all positives parts of the idea.
Minuses: List all negatives parts of the idea.
Interesting: List all interesting parts of

Appendix E
Hits Tool

Judge ideas positively
Take the time to think about each idea, as it relates to your purpose
 Make ideas better
Select ideas that jump out at you

Appendix F
Story Board Tool
Number the sheets: Put 1-4 in the Sheet # spaces on the sheets.
Box 1: Draw a picture of how things look now.
On the last box: Draw a picture of how you want things to look.
Box 2: Draw a picture of a step to take, an action, or thing to do, that will move you closer to the way you want things to look (sheet #4).

Box 3: Draw a picture of the next step, action, or thing to do that will move you closer to the final picture (sheet #4).

Appendix G

Discovering my Philosophy and Vision for Creativity and Education

"Creativity allows you to express ideas in a non-conventional way". I developed that definition in one of my first creative studies classes. This definition shaped my way through creativity. Two years later, I still agree with this definition but this philosophy paper will re-define what creativity and leadership means to me. I will discus why I wanted to become a teacher and how creativity has impacted those decisions. I will discuss how leadership has played a role in creativity for me.

Who I am

I started off at a young age disliking school. I knew I learned differently from others. It wasn't until I was in fifth grade that I finally got it. I was just as smart as everyone else, I just learned differently. I am a visual learner, I benefit from looking at texts, pictures and graphs. From then on, I knew I wanted to make a difference in others' lives just like past teachers have touched mine. I would not be where I am today if it weren't for those teachers who cared if I got it or not. My parents also pushed me and told me I could to it, they gave me all the support I needed. I decided my junior year of high school that I wanted to make a difference in young students' lives the way some teachers have done for me. I wanted to work with elementary students because that's when school was most

difficult for me. I went into special education because I felt I could make an impact on students who needed the most with their education. I finished my undergrad in education and started to read about the program in creative studies. I thought this program would be a great way for students to learn in different ways. The program would give them a new outlook for school and their everyday lives.

Creative Studies

In the creative studies program I have learned about different theories of how creativity was developed and how it can be developed in one's life. I have picked some topics and some assessments that have shaped what I believe creativity is to me. By taking several Creativity assessments it also allows me to understand where my weaknesses are.

Creativity vs. Self-actualization

To teach creativity you must try to understand what it is. In CRS 580, I researched if creativity and self-actualization were the same thing. Maslow suggested that "creativity and self-actualization may turn out to be the same thing" (p.57). Yes, the two terms do have something in common but they do have different definitions.   I think the two words have similarities but the word "self-actualization" is intrinsic as compared to the word "creativity", which could be extrinsic. Rogers (1961) suggested that "the individual creates primarily because it is satisfying… because this behavior is felt to be self actualization" (p.351-352). Maslow and Rogers have different theories on this. Maslow feels that creativity and self-actualization could be the same thing but Rogers feels that you need

creativity to experience self-actualization. While reflecting on this subject, I do agree with Rogers on the need for one in your life in order to experience the other.

<div align="center">Domain Specific</div>

Domain specific verses domain general is an issue I learned about. I had the domain specific side to research (and even though the sides were chosen for us I still agree with my findings). Bear (1998) agrees that "a growing body of evidence suggests that a creative performance is domain specific. This has led both to changes in thinking about the nature of creativity and to a reexamination of previous evidence and assumptions about the generality of creativity" (p. 173). While looking at creativity, people look at it as a creative product, or creative processes, Kaufman and Baer (2002) looked at the processes and product and asked "How did they come up with the frame work to create the work?" (Bear, p6-7). By looking at how work was created it shows that a specific domain was used to create something. One thing should be noted when discussing domain specific is that to achieve the highest level of greatness in any one domain it takes approximately ten years to simply to reach that level of competences in one domain (Policastro & Gardner, 2006 p.216). People have beliefs about creativity in general and domain specific, both because they are part of who we are and because they influence the ways we think about creativity and about the creative behavior of ourselves and other people. (Kaufman & Bear, 2002, p9) Most individuals make major contributions to a domain without first acquiring a minimal level of domain specific knowledge and skill (Simonton, 2007). With that

said, I do believe that creativity is domain specific not domain general. I also believe that throughout your life span you will acquire multiple achievements in different domains. You may not master in more than on domain but, remember, it does take ten years to achieve the highest level of creativity in one domain.

Self Assessments

In CRS 580, I had the chance to learn about several different assessments and apply them to myself. I will discuss some of my favorite measures and some that did not have strong meaning to me. In those select measures, I will discuss my scores and how I interpreted the results.

The *Transaction Ability Inventory* measure was short and sweet but, because of that, I don't think it gave a clear indication of my skills. I scored a 30 for concrete sequential (cs) and abstract random (ar). While looking at the examples, I do see resemblance in both areas, an example is the AR. I am flexible with structure and, for CS, I follow step by step directions.

The *Torrance Tests of Creative Thinking* (Torrance, E. P. 1974), was a long process for me because I do not do well with time frames. But, over all, looking at my scores I do agree with the measure and it allowed me to open my eyes to see that I am creative. The scoring was discouraging when we had to evaluate it for common and uncommon answers. At the time when I took this assessment I was still new to the program, I would like to re take this assessment to see if I would score higher.

The *Kirton Adaption Innovation Inventory* measure (Kirton, M.J. 1994) was interesting to read about. I scored a 96, which is dead center. According to

the results, I would be great as an engineer or a military officer, unfortunately I do not see myself as any of those. I do agree that I am in the middle of wanting to be adaptive and innovative. I enjoy both ends of adaptive and innovative, I will develop my skills on both of ends after all it is my preference to be in between according to the KAI.

"ESTJ, what does that mean" is exactly what I said to myself when I saw that results of my *Myers-Briggs Type Indicator* measure (Myers I.B. & Mccaulley, M. H. 1985). Extraverted thinking with sensing is exactly me This was my favorite and most relevant measure. While taking this measure, I thought for sure I would be high on the intuition and perception side, but I was the complete opposite of that. Once I read the meanings and examples of what ESTJ meant, it was clear. Knowing this information allows me to step back and stop myself to make sure I am being sensitive to others' feelings and to see what might come out of this decision.

Foursight (Puccio, 2002) was a fun measure that is clear to anyone who takes it. Foursight is an assessment that anyone can take and not feel pressured while taking it. I represent the Integrators. According to Puccio (2002), "Integrators' take a very even approach to the break through thinking process with profile that shows no particular peaks or valleys (p.14)". I am able to be flexible and I accommodate to whatever task I am working on. I also work very well in groups and enjoy working in teams.

Taking the measures were helpful for me in many ways. I was able to understand why I have interests in specific things. I do see a resemblance in

most of the measures. I will be able to use the information I have gained in my work life as well as my personal life. The knowledge I have gained from these measures will allow me to develop my creative skills and help me develop my leaderships skills. I can use my strengths and, at the same time, develop areas of concerns.

While reading what different scholars in creativity thought allowed me to develop and share my own personal views. I also was able to develop my own understanding between the different scholars by agreeing with some concepts. I understand what they had in common with my concepts of creativity. The assessments taught me who I was and what I can develop myself to become.

Leadership

Leadership was a strong theme towards the end of this program (Creative Studies), but it only makes sense to focus on creativity in leadership after we have mastered our skills in creativity. We now have tools to share with others but how do we make that connection with others? A leader is a person who is strong, positive, and has the ability to solve problems. According to Beach (2006), "Authentic leaders strive to understand their organization's basic values and beliefs because they know that values and beliefs shape how the organizations members interpret events, including the leaser's words and actions"(p.29). A good leader has the power to influence others and can identify with their needs. A strong leader also can give teach the tools to inspire others to create new ideas and problem solve. Puccio, Murdock, and Mance (2007) write that, "Creative thinking is a process that results in change, while leaders often act

as the impetus for change (p.7)." I believe that I have the skills to lead and to develop others' creative thinking skills. Leaders have a whole thought process, they have the ability to encourage the heart, challenge the process, and inspire visions (Kouzens & Posner, 1987).

Conclusion

Creativity may allow you to express ideas in a non conventional way but having the tools to create an idea or solutions is what allows creativity to be unique. I see myself teaching in a classroom in a school that allows for new teaching methods, where using different teaching models such as the *Torrance Incubation Model,* is highly praised by the school. I want to give my students the skills to problem solve on their own as they develop different thinking skills. I will take what I have learned from the Creative Studies program and apply it to my students' needs.

Values

I have one main value, it is respect. With respect, you have the trust and understanding of others that will allow you to treat others the way you want to be treated.

Mission

I will take what I have learned about creativity and infuse it into any classroom that I teach in. I will make sure that the students that I come across will have the opportunity to express themselves as creatively as they can, then I will teach them new ways to develop their own creativity to higher levels. I will give my

students the ability to see past the negativity of a problem and give them the

tools that will allow them to solve problems and have fun while they are doing so.

Words of advice

Believe in yourself; believe you can be creative because everyone is in different

ways*.*

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