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Teaching the Universal Language of Creativity: A Guide to Training.

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International Center for Studies in Creativity

Teaching the Universal Language of Creativity: A Guide to Training.

A Project
in Creative Studies
by
Carlie Arnone

Submitted in Partial Fulfillment
of the Requirements
for the Degree of
Master of Science

May 2014

ABSTRACT OF A PROJECT

Teaching the Universal Language of Creativity: A Guide to Training.

The purpose of education in any regard is to provide knowledge and information, to teach something. Parents, educators, and professionals alike are experiencing some difficulty in education, in that they are not being properly taught how to nurture some particular needs of individuals with developmental disabilities, specifically on how to use creativity to do so. Educators, parents, and professionals in the field need to start advocating for a balance between strict regulations and creativity. In the recent years, there has been quite the push for creativity and innovation in businesses, nationally and internationally, so where is the same push for education? This project examines creativity, in a scholarly sense, since its beginning, as well as new standards placed in public school systems, specifically in Buffalo, NY, that seem to stifle creativity. Using interviews and short survey results, the project examines and presents a curriculum to incorporate creativity into educating those who interact with individuals with developmental disabilities on a regular basis.

Keywords: creativity, education, special education, developmental disabilities, Common Core, International Center for Studies in Creativity, curriculum.

Date

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Dates of Approval:

Project Advisor: J. Michael Fox

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Introduction

Individuals with developmental disabilities are becoming more and more prevalent in our school system, and in our society. For this exponential growth,

educators, professionals, and parents have not necessarily been able to keep up with this huge push for change. Structure in school systems is much different than it was 25 years ago or even five years ago. Student bodies are much more diverse, teaching styles are different, and learning styles cannot be categorized into only “gifted and talented,” “typical,” or “special education” boxes anymore. Educators (for reasons of this paper, educators in this sense means those working with individuals with developmental disabilities), parents of those individuals, and professionals who work in the human services field, need to start advocating for a universal language. A universal language is needed that will not structure these individuals, a language that will not paint everything black and white, but a language that allows for individuality, growth, and most importantly, creativity.

Buffalo is the third poorest city in the country (McKinley, 2013), but many see this as being a city with the most potential for any type of change. Parents, educators, and professionals need to recognize resources around them, particularly the International Center for Studies in Creativity. In a survey done by this writer, only 12% of all survey takers have heard of the International Center for Studies in Creativity (ICSC). The international hub for creativity rests in the heart of the city, yet educators, parents, and professionals alike, have no knowledge of this, and if they do know, do not understand how it can be used to their advantage.

History

First, let us begin with the history of the International Center of Studies in Creativity, and why it is so important to this city’s history. Dr. Gerard Puccio, Department Chair of the Creative Studies Department, said creativity has been inscribed

in our minds from the very early species of human, dating back to almost 2.5 million years ago. As brain capacity began to increase, so has human capability and creativity. Puccio spoke about a hand axe, which had been developed about 1.5 million years ago and stated: “While conformity is necessary for evolution, I would suggest that it is not sufficient, that it also requires creativity” (Puccio, 2012). Puccio then spoke about the “Creative Explosion” which archaeologists labeled a particular time in evolution where tools became more complex, art and jewelry making became evident, and intricate clothing emerged. Creativity is innate and natural, but it can also be deliberate as well. With the introduction of tools, humans recognized the need for better, more advanced tools to complete their tasks. Puccio’s work on creativity linked to early human evolution provides the basis for our research on creativity and how humans must adapt to changes they see around them. Again, our lives are ever changing and doing so quickly, why is education not doing the same?

The actual Creative Problem Solving Process with Alex Osborn (Isaksen & Treffinger, 2004). Osborn went to New York City in 1939 and became the president of the BBDO Advertising Company, which led him to his work with creativity theory. In 1942, Osborn wrote *How to Think Up* (Parnes, 1992) where his technique of brainstorming was published. Brainstorming, as we know it today, is an idea-generating tool where divergent thinking is used. Judgment is set aside, and members of the session say the first thing that comes to mind. The purpose of brainstorming is to come up with as many ideas as possible.

In 1950, J.P. Guilford, another creativity scholar, held the presidency of the American Psychological Association and spoke his presidents’ speech where he called for drastic action for research and work in the field of creativity. In 1965, Dr. Sidney

Parnes and Osborn began to call for more creativity research and development (Isaksen & Treffinger, 2004), especially since the Russian launch of Sputnik began an era of technological advancement and competition between nations. We see the competition for innovation has been embedded into humans much earlier than the launch of Sputnik, and Guilford's president's speech.

In 1954, Osborn developed the Creative Education Foundation, or CEF, at the University of Buffalo. In the next year, he came up with the first Creative Problem Solving Institute, or CPSI, in June of 1955. CPSI was the first training center meant for deliberate creativity to take place. Parnes became very much involved in that, since upon hearing about CPSI, tried to put together his own in Pittsburgh. Parnes began a member of the Retailing Department at University of Buffalo in 1956 as an Assistant Professor. This is where much of Osborn and Parnes' professional relationship was born.

The Retailing Department was the first to teach a creativity course, which was offered from 1949 to 1953 and was taught by advertising executives from the BBDO advertising company. Parnes joined Osborn where they began to develop an educational program for the Creative Problem Solving Institute.

Parnes began to develop many professional relationships and spread the word of the CPSI conference to other faculty at Buffalo State College, increasing awareness and spreading the word about the need for creativity in education. This was the beginning of an era of creativity development and research in Buffalo.

In 1962, Alex F. Osborn wrote an article regarding creativity appeared in *A Source Book for Creative Thinking* titled "Developments in Creative Education," which was originally delivered to the sixth annual Creative Problem Solving Institute in 1960. The article focuses on scientific research conducted as of 1960 validating Osborn's

theories of creativity (Osborn, 1962). He discussed stages in the CPS process, the principles of quantity breeding quality and deferred judgment; collegiate courses teaching an aspect of creativity; and applications of creativity tools in business, public affairs, the armed forces, and worldwide. Osborn wrote: “Our main aim is to help education do more to develop creative ability” (23). This “aim” is the reason behind why his establishment of the Creative Education Foundation (CEF) and how it’s mission has evolved into the following: “to expand the use of creativity and innovation worldwide” (Creative Education Foundation, 1999).

In 1965, Osborn worked with Parnes towards reaching the goal of enhancing students’ abilities to understand and apply their own personal creativity in every aspect to their lives. Osborn passed away in 1966, but Parnes and his colleagues continued to work with CPS. Parnes and his peers developed a modification of Osborn’s approach, which is known as the “Osborn-Parnes Approach to Creative Problem Solving.” The model was unique and highly regarded because it took aspects from other models and combined and synthesized them in to one. Osborn’s original structure was tested with secondary schools (Parnes, 1966) and the 2.0 version of CPS was also used in an extensive, two-year program called the Creative Studies Project at Buffalo State College. This included a four semester series of creative studies courses followed by 150 students enrolled in the courses and 150 students as the control group to measure and provide practical support for the courses effectiveness. (Noller & Parnes, 1972). This two-year program proved that creativity could in fact be taught and nurtured. As Dr. Puccio once said “every person has the potential to read, but one must be taught, it doesn’t just happen” (lecture, spring 2014).

Purpose

From the information above, the reader can see the major impact creativity has to the history of Buffalo, yet many people do not know about the International Center for Studies in Creativity. Why is this information so vital to creativity in education? Since the 1940s, there has been a push for creativity, which is sometimes referred to as “the Quiet Revolution” (Torrance & Goff, 1989). We must begin to teach and spread this universal language, because the revolution is not coming to a stop any time soon.

Why must we teach creativity to educators, parents, and professionals? Why is it beneficial for them to know? In 1907, Sigmund Freud (founder of psychoanalysis) wrote in his essay *Creative Writers and Day Dreaming* about how play relates to creativity, which has been studied extensively in the current research of creativity. Freud believed that everyone is creative and children are the ones who show it the most. Children are able to bask in creativity and imagination, and when children grow into adulthood, they give up that type of play. Freud also questioned if it is really possible for adults to give up that pleasure they get from imagination and playfulness once they experience it.

This also relates to the “fourth grade slump” that another creativity scholar, E. Paul Torrance, wrote about in 1968 called “*A Longitudinal Examination of the Fourth Grade Slump in Creativity*.” From 1959 to 1964, 350 students were tested each year. Torrance found that many children end up with lower scores in the fifth grade than they had in the third grade. The test Torrance used was the Torrance Tests in Creative Thinking (TTCT), where elaboration, fluency, flexibility, and originality are measured. After this particular experiment, Torrance found there was a potential for growth in elaboration and the weakest was in the fluency category, but it was definite that in general, students were more creative in the third grade than in the fourth grade, and their creativity decreased after the fourth grade.

It is clear that creativity must be nurtured from a young age, as Freud and Torrance presented, but it is never too late to teach creativity, which is evident in the study by Noller and Parnes.

Why does creativity need to be understood by parents, educators, and professionals? All students are different; we know this. We also know that all students, including those with developmental disabilities, learn differently. Multiple Intelligence Theory, developed by Howard Gardner in 1983, is intuitive, and is an excellent example of how students learn differently, including those individuals with developmental disabilities, who do not necessarily have to be enrolled in school to be titled “students.”

Howard Gardner, a scholar who studied and works at Harvard University, developed the theory of Multiple Intelligences (MI). The Multiple Intelligences theory simply states that all humans learn differently, and categorized the learning into seven different types: mathematical, spatial, linguistic, kinesthetic, musical, interpersonal, and intrapersonal. In his revised editions, Gardner added the component of naturalist to his MI theory in his 1999 book *Intelligence Reframed: Multiple Intelligences for the 21st Century* and is currently deciding whether or not to add the component of existentialism.

Since the development of the original MI theory, many other scholars have adopted it, such as Thomas Armstrong, who uses the MI theory strictly in educational settings. The MI theory has also been referenced and used by the Office of People With Developmental Disabilities (OPWDD) in New York State in which they title them “Learning Styles.” The intelligences that are listed are all the same descriptions, but only use the original seven, rather than including the “naturalist” intelligences (Gardner, 2011).

Each type of intelligence has an explicit definition, which are outlined below:

- Logical-mathematical is the intelligence that involves learning in a series of logical steps. The logical-mathematical learner has an ability to understand logic, reasoning, and mathematics, and has a vast understanding of numbers and abstract problems.
- Spatial intelligence, according to Gardner, is the ability to visualize using the mind's eye, and the ability to recognize large and small-scale images.
- Linguistic intelligence is the ability to understand and analyze words, speeches, and languages and usually these types of learners are advanced at reading and writing.
- Bodily-kinesthetic intelligence is usually associated with physical action and muscular movement, so it is essentially someone who uses their body as means of expression or as the product to solve problems.
- Musical intelligence is the ability to recognize sounds, tones, and music and the learner is able to use these components to learn new information. This particular type of learner is able to use these types of musical elements to learn new information by means of rhythms and patterns.
- Interpersonal intelligence is the ability to interact positively with others and being sensitive to other's moods. This type of learner obtains information by communication with others and has an easier time cooperating with people.
- Intrapersonal intelligence is the ability to learn through observation of others and taking time to self-reflect on what was observed. These learners most likely obtain and retain information best when it is a one-to-one learning situation. This type of learner is also able to predict his or her own reactions, emotions, and motivations.

- Naturalist intelligence is the ability to use one's natural surroundings in nature to gain information.
- Finally, the existential intelligence is one of the "spiritual" sorts, and that this particular learner yearns for answers to life's "big questions" such as "what is the meaning of life?" and "how is life possible?"

This leads us to the continued discussion of the Multiple Intelligences theory of Howard Gardner. The nine intelligences were explicitly explained above. Since each one of the intelligences are different in their own way, some scholars believe that teaching to each particular learning style might be a waste of time and that it would be easier for learners to adapt to the educators learning style rather than the educator having to adapt to each particular intelligence. This is where the Creative Problem Solving (CPS) Process comes in to play. The CPS Process has tools and exercises for each type of person, and specifically, each type of intelligence. The CPS Process is useful to any type of learning style or intelligence, whether it is spatial or musical, or bodily kinesthetic or logical-mathematical. It fits personal preferences. It is clear that individuals with developmental disabilities learn much differently than "typical" students. Parents, educators, and professionals must learn and be provided with these resources to better educate themselves in order to better educate the population that they deal with. Creativity and MI goes hand in hand. This relationship is evident because creativity, although inherent, is a deliberate and teachable process. As mentioned before, MI is intuitive, so this process should be natural and go hand in hand with creativity skills. If parents, educators, and professionals were to better understand some of these theories and the practices of creativity, then individuals with developmental disabilities could be more successful in their every day living.

Curriculum for Training Teachers/Educators

Certain standards that have been recently placed on the Buffalo Public School System, known as the Common Core academic standards, are extremely rigorous and structured. These standards do not allow children to move at their own speed. While this may be beneficial to some students, to others, such as those with developmental disabilities, it is quite the opposite. The Common Core standards are meant to “prepare” students (including those in Grades 3-8) for higher education, and to prepare them for the type of work they will see in college. New York State adopted the standards in 2009, and each school year has implemented something new. In 2012-2013, NYS implemented the Common Core Standards to grades three through eight, administered Common Core tests to evaluate their learning, and in 2013-2014, Common Core standards were implemented into some Regents exams.

In the Common Core Learning Standards document located on the Buffalo Public School System website (New York State P-12 Common Core Learning Standards for

English Language Arts & Literacy, 2010), the final statement in their introduction read “...students who meet the Standards develop the skills in reading, writing, speaking, and listening that are the foundation for any creative and purposeful expression in language.” Students cannot meet the Standards to develop those skills without their individual skills being nurtured properly. Placing classrooms of students into one large bundle is not providing for creativity, but instead stifling it. There are numerous accounts of parents across the nation who agree that “one size fits all” does not apply in education, specifically to the Common Core Standards. Bryce Mulhull, from Missouri, is diagnosed with autism and is in the 9th grade (Lester, 2014). Mulhull testified against the Common Core at the Missouri State Education Committee, stating that the material is over his head, but when he requested another class, the district said no. Mulhull said that his teacher does help him, but this makes him much more dependent on others. Isn’t the point of the Common Core to foster those skills that will enable students to move to more *independent* parts of their lives? A Buffalo News article from August 2013 reported that The State of New York as a whole failed miserably on the new reading and math tests that were implemented by the Common Core.

Educators are obviously having a difficult time with this, and this has begun to reflect on parents as well. Many parents have begun to take a stand against these Common Core Standards and many of their children are choosing to opt out of taking the exam. Since more and more students are opting out, this has caused some drama in school districts; they say they cannot schedule any curriculum for those students who are not taking the exams, which results in the students essentially doing nothing. Parents have called it “sit and stare.” To an outsider, this seems like punishment for not taking the standardized exams. Students in some districts are not even allowed to work on

homework or assignments for any of their classes. Although the Common Core is supposed to provide standards for students and teachers alike to abide by, it seems to restrict students from learning to their fullest potential.

Figure One was taken from a report put together by the New York State Education Department entitled “District and School Performance in 2012-2013,” it shows in the top chart that the enrollment rate did meet the standards of participation. The bottom chart, however, did not meet the state target for performance in any section.

Figure 1: From “District and School Performance in 2012-2013” in New York State

Participation in State Assessments	2011-12			
	Grades 3-8 English Language Arts (ELA)	Grades 3-8 Math	High School English Language Arts (ELA)	High School Math
▪ Enrollment of students with disabilities for participation rate	3,581	3,588	504	504
▪ Participation rate	96%	96%	90%	90%
▪ State target for 2011-12	95%	95%	95%	95%
▪ Meets State target?	Yes	Yes	No	No
Performance on State Assessments and Adequate Yearly Progress (AYP)	2011-12			
	Grades 3-8 English Language Arts (ELA)	Grades 3-8 Math	High School English Language Arts (ELA)	High School Math
▪ Enrollment of students with disabilities for performance accountability	3,557	3,566	391	391
▪ Score on performance index	74	81	67	43
▪ State target for 2011-12	Make AYP	Make AYP	Make AYP	Make AYP
▪ Meets State target?	No	No	No	No

This simple-to-read chart is proof that Buffalo Public Schools are failing themselves and their students. Are the new standards the reason for the failure? Are the teachers not preparing the students enough? With training in creativity, teachers have the flexibility to work with those standards and also around them, in order to fulfill what their district is asking for, but will also provide better learning experiences to their students.

This writer sent out a questionnaire to 50 individuals. The questions are below and the answers are charted below as well:

Survey Questions:

1. Which category below includes your age?
2. Do you know an individual with a developmental disability?
3. If your answer was yes, how do you know that individual (personally, professionally, etc.) and please list your profession:
4. Please choose the best option based on this statement: Individuals with developmental disabilities are fully supported in public school systems, specifically in Buffalo, NY?
5. Please elaborate below.
6. Do you think creativity has a place in schools?
7. Please elaborate below.
8. What is your opinion on the Common Core standards that is in place in Buffalo Public Schools?
9. Have you heard of the International Center for Studies in Creativity?

Results:

Figure 2: Question one: The majority of respondents were ages 21-29 and 50-59.

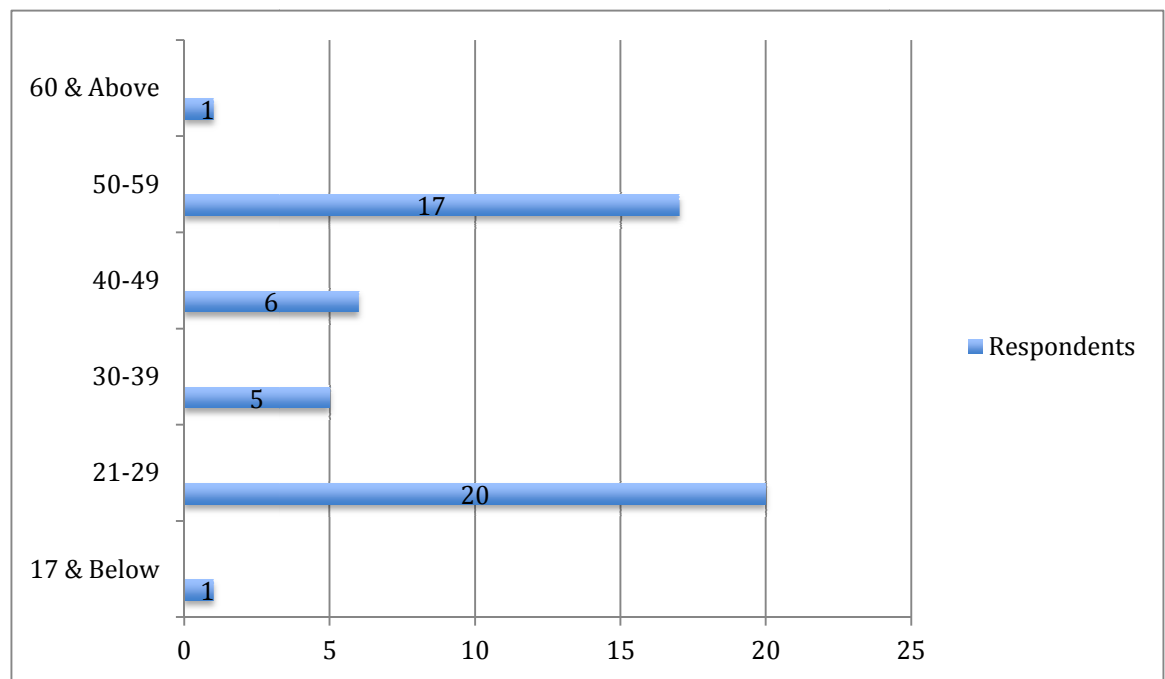
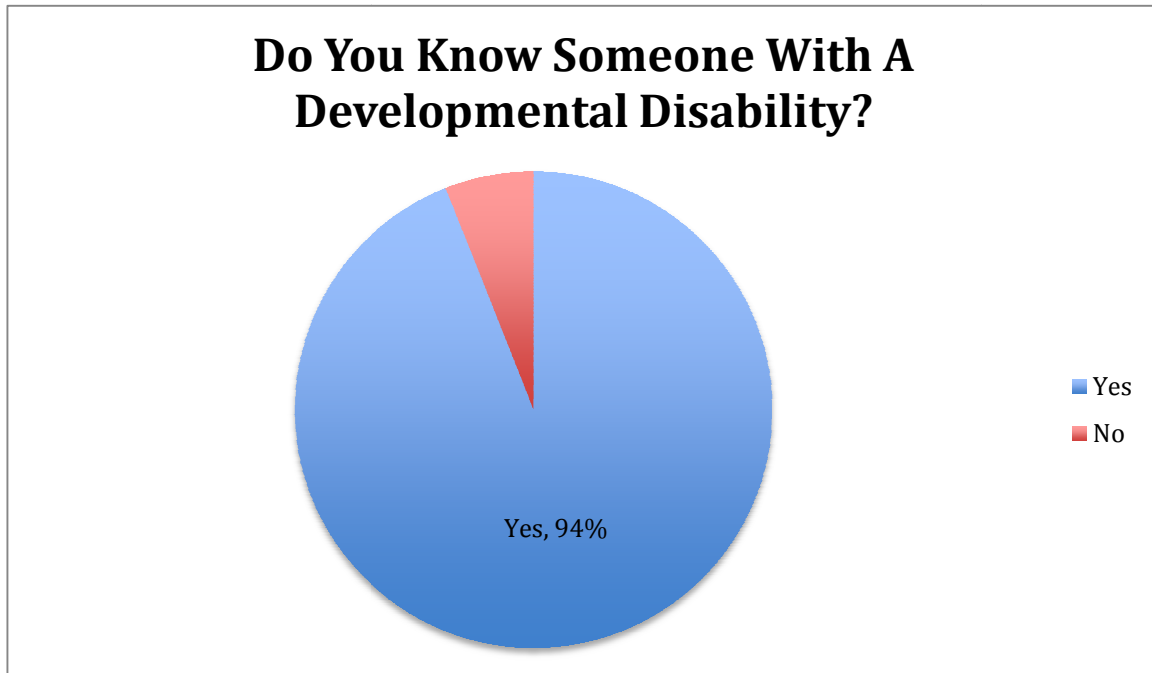


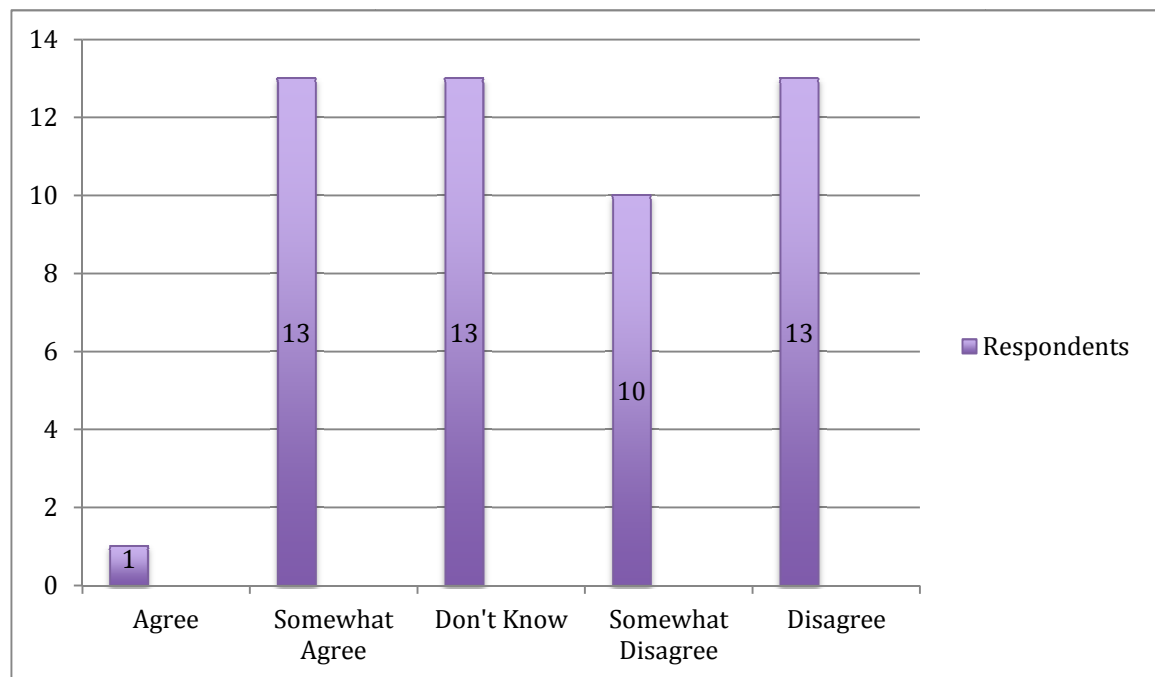
Figure 3: Question two



Question three:

Due to the difficulty of the wording of the question, there are no results regarding how respondents knew the individual with a developmental disability they had in mind. Many responded with “personally and professionally” and some did not respond at all. In regards to their profession, 28 answered “teacher/educator”, eight answered in the administrative category, five answered “student”, four answered in construction/landscaping profession, three answered in the food service industry, and two answered “unemployed”.

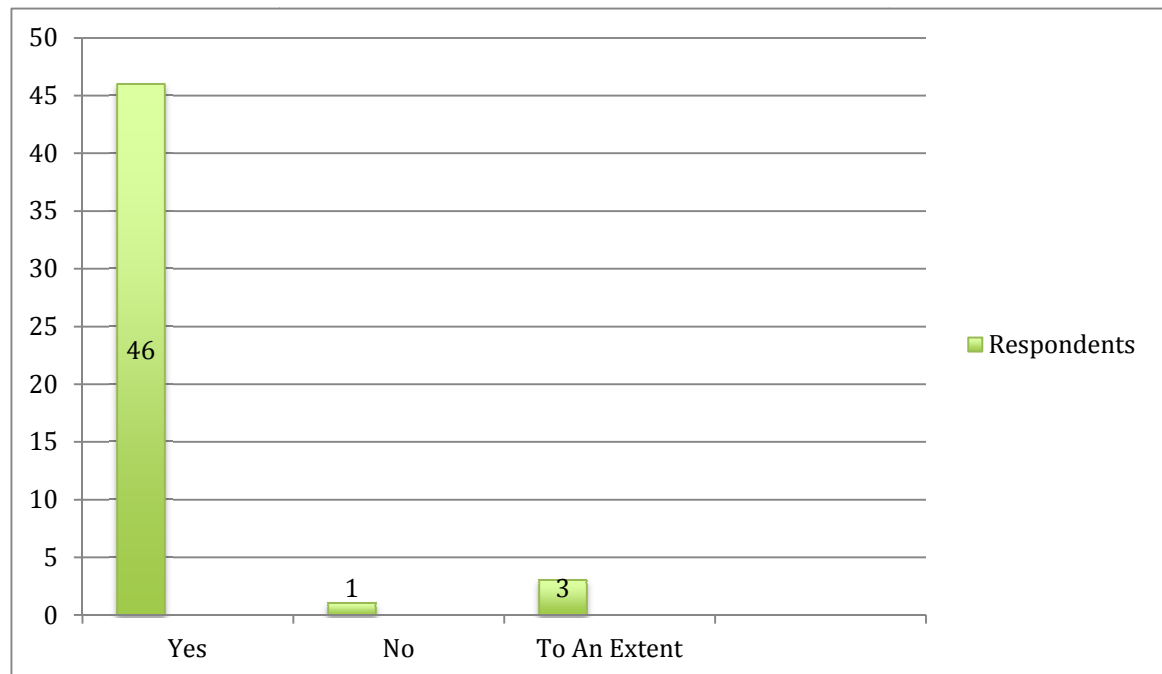
Figure 4: Question four- “Individuals with Developmental Disabilities are fully supported in public school systems, specifically in Buffalo, NY?”



Question five asked for elaboration on the respondents answer to question four (All answers are opinions, and no respondent answered with any cited information). Answers included that some students with supportive parents do receive the support they need, while others who might not have that support do not receive the proper support. One respondent wrote: “there are laws and programs in place, and we generally have a good range of educational options. There is always room for improvement!” Another said that support has come a long way, but there is need for improvement and the type of support depends on what level of care the individual might need. One respondent, who happened to be an educator wrote: “suburban Buffalo does support. Buffalo schools are NOT DD friendly and doing many illegal things Parents of DD children do not know how the schools are treating their children so wrong.” Another educator wrote “For example: classrooms previously designated 6:1:1 for students with Autism, redesigned in

October as 8:1:1 and standing IEP's (Individualized Education Plans) modified to suit the change. How is that in the best interest of those students?" Other answers mentioned class sizes, lack of accessibility, lack of teaching skills/effectiveness, and that success and support depends on the school district.

Figure 5: Question six asked "Do you think creativity has a place in schools?"

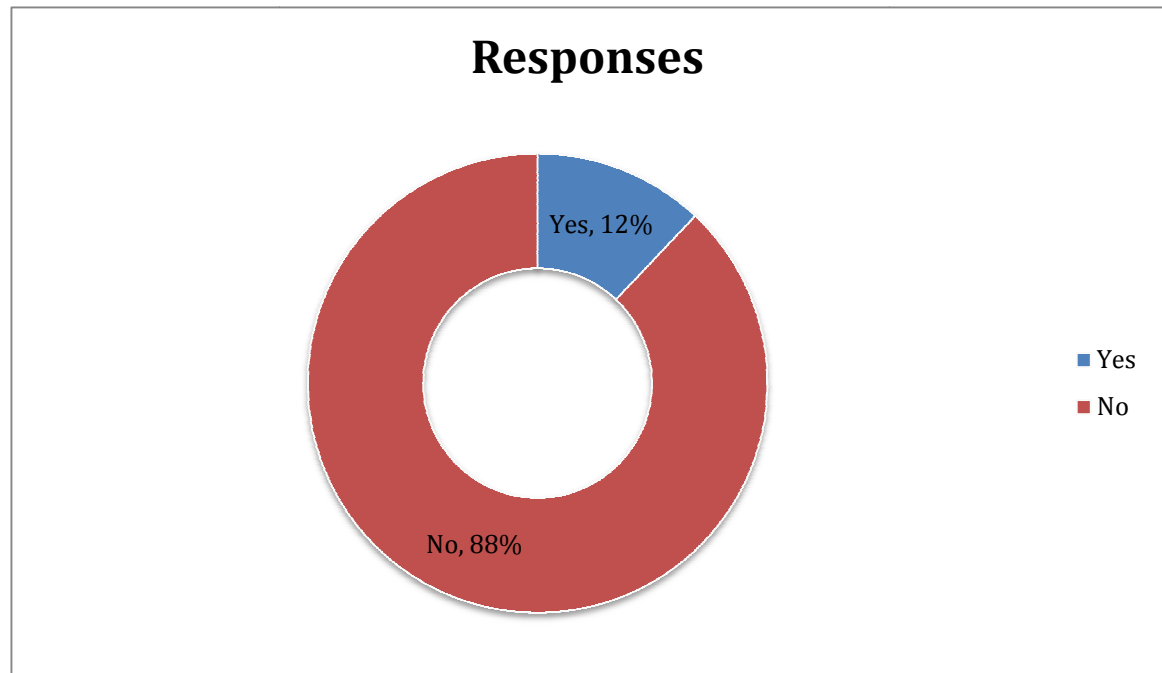


Question seven asked to elaborate on the above question and many responses included that when students are being creative they are more apt to learn and with the new Common Core Standards, there is no room for creativity anymore. Many responses mention a "creative based economy" and that school curriculum should adapt to prepare students for that. The individual that answered "no" to the above question elaborated with "special education students do not learn the same as their general education peers." Many responses say there should be a place for creativity and too many teachers are "teaching to the test." Between these two questions, the majority of respondents are in favor of teaching creatively and recognize the push for more innovative and original thinking

strategies in the workplace. Again the question is raised: why is the educational system not doing the same?

Question eight asked respondents to write their opinions on the Common Core Standards. Only 38 responses were recorded, all 28 of the teachers/educators responded, all five students answered, the two unemployed respondents answered, and three administrative respondents answered as well. Responses ranged from “they are setting up students to fail” and that the Common Core Standards are not at all useful. One respondent mentioned that students do not take the tests seriously because they do think they “count” and that the tests are a waste of time. Many said that there is a need for some type of guide and there are appropriate skills, but curriculum is rushed, and they are “awful.” One respondent also said it discourages the teachers to teach. There was not one positive comment about the Common Core Standards.

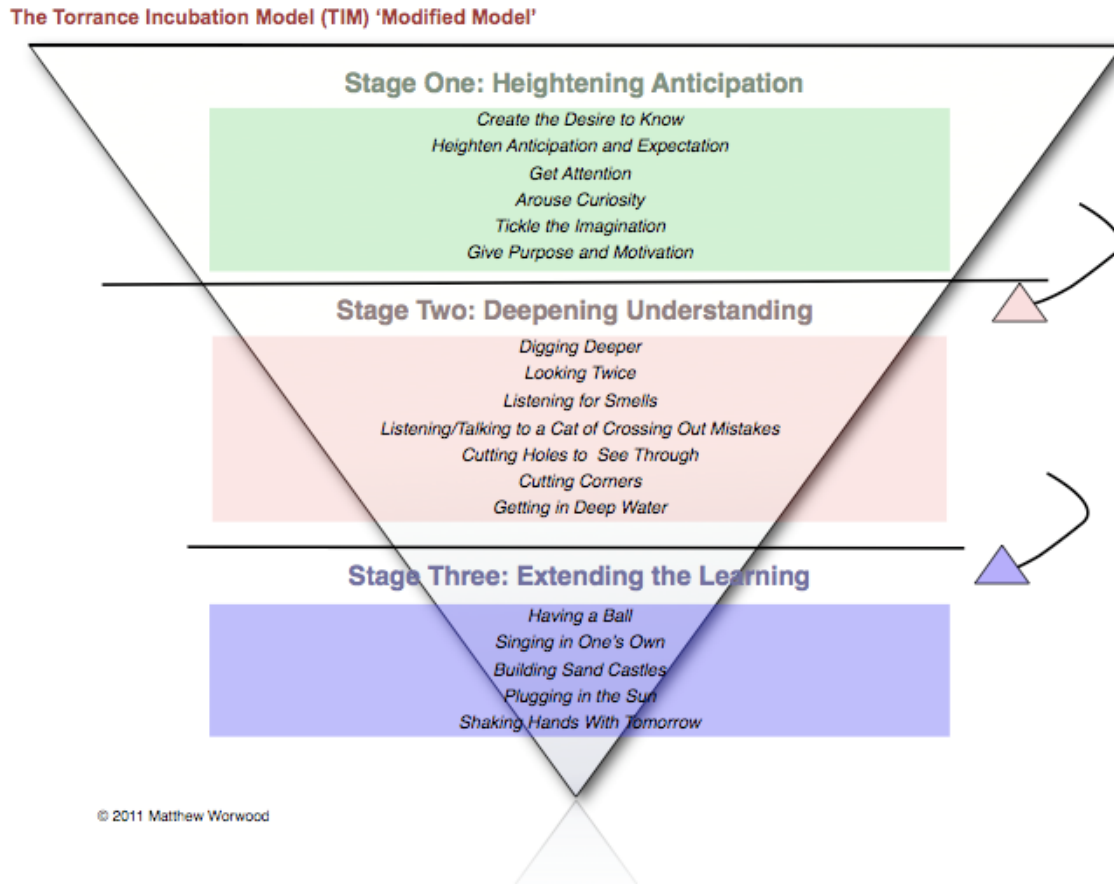
Figure 6: Question nine, the final question asked if the respondents had heard of the International Center for Studies in Creativity?



It is clear that all respondents had an opinion on creativity in schools, as well as the Common Core Standards placed in public school systems. The survey also showed that the respondents do not know where to look for answers or support to encourage students; many of the answers given were negative and somewhat defeated. The training in development will train teachers how to teach using creativity skills, as well as using a lesson-planning format outlined below. It will also give the educators an insight into the International Center for Studies in Creativity, which is located in the heart of Buffalo, New York (find the PowerPoint outline of the training in the Appendix section of this project).

Creativity can be taught across the board. Below are examples of a week long Torrance Incubation Model (TIM) Lesson, developed by this writer, to keep students engaged and so they can enjoy the learning process, in their own individual way. The three steps in a TIM lesson are to heighten anticipation (warm up) then to deepen expectations (digging deeper) and then extend that learning (closing down).

Figure 7: Matthew Worwood synthesized the stages of TIM into the following visual



The skills that can be used throughout the TIM model are:

- Get glimpses of the future: predict, imagine, and explore.
- Produce and consider many alternatives: generating many ideas.
- Elaborate-but not excessively: adding details in a quick way.
- Be aware of emotions: using feelings and observing verbal and nonverbal cues.
- Enjoy and use fantasy: imagine and play.
- Let humor flow and use it: respond to a surprise and recognize discrepancies.
- Visualize the inside: pay attention to fine details.
- Be original: breaking away from the normal way of thinking.

- Visualize it-richly and colorfully: use vivid and colorful imagery.
- Be flexible: variety.
- Highlight the essence: what is more important and getting rid of unimportant information.
- Combine and synthesize: make new connections with unrelated things.
- Look at it another way: seeing things from a different perspective.
- Put your ideas in context: putting experiences together into a bigger situation/story.
- Breakthrough-expand the boundaries: thinking outside of the box.
- Make it swing! Make it ring: using kinesthetic and auditory senses.

TIM, or the Torrance Incubation Model of Creative Teaching and Learning, was developed by E. Paul Torrance, where one creativity skill was identified and taught throughout the entire lesson. The three parts of the TIM lessons are “heighten anticipation,” “deepen expectations,” and “extend the learning.” The use of a creativity skill throughout allows the learner to come up with original ideas individually as well as learn with the group. The TIM Model includes those cognitive strategies that educators strive for, and also has deliberate activities in each stage of the teaching (Murdock & Keller-Mathers, 2002).

The purpose of training teachers TIM, will not only teach them those set of creativity skills, but will also allow them to revamp their classroom environment and culture. The training for teachers will include a small introduction to creativity, a quick brainstorming session as a group as a “warm-up,” and then the training will go through one lesson in the TIM lesson provided. To evaluate the teachers’ thoughts about the TIM

lesson, the trainer will ask them to take an assessment for the trainer, and will be provided with more information and resources they can use to “extend the learning.”

Here is one TIM lesson. Find more examples in “Appendix A.”

Lesson One (Example).

Main Content:

To exhibit a moment in history that caused a significant impact on the country at that time. The event we will discuss is the Vietnam War.

Content Objective:

Students will be able to analyze the Vietnam War and describe its impact on America by examining the reactions of American citizens.

Creativity Topic:

Looking at it a different way/Combine and synthesize.

Creativity Objective:

We will view the Vietnam War through a different lens in the form of a song. Students will apply their musical intelligence to analyze the reactions of American citizens.

Materials:

A computer
Overhead
Lyrics of the song that was played
Paper
Writing Utensil
Dictionaries (at least four or five)
Thesaurus (at least four or five)
Computers for the students to use
Colored Pencils

Heightening Anticipation:

I will first play Marvin Gaye’s “What’s Goin’ On” to the students on YouTube. It will be projected on to the overhead in a lecture/smart classroom. I will ask the students if they

have ever heard of the song (most likely they will have heard this version or the revamped version by the Black Eyed Peas and Justin Timberlake more recently). I will ask the students why they think I played the song. As the instructor, I will ask questions to attempt to lead them in to the correct direction, hinting towards historical points. This will take about 15 to 20 minutes, making sure that the students heard the song in its entirety a few times.

Deepening Expectations:

I will then hand out the lyrics to this song and define the word “revolution” for the students. I will ask the students to come up with synonyms for the word and circle or highlight words or phrases in the song that symbolizes revolution or a type of change. The students will need some assistance doing so, and dictionaries and thesauruses will be distributed to assist them in this task. The students will be asked to write their list down on the paper provided in front of them. The instructor will ask for them to, in their own words, describe what type of situation is going on in the song when they were listening to it. The song will be consistently playing in the background if they choose to keep it on. Students will then choose to sketch out what they think was going on, or write a detailed piece about it.

At the end of their analysis, the students will go over their interpretations and explain why they described the event in that particular way. I will then describe the Vietnam War and the horrifying news of the numerous casualties and injuries of our soldiers, and why (some of) the American public was completely outraged, giving background information on how America became involved in the War. This should take 60-75 minutes.

Extending the Learning:

At the end of the lesson, the students will get a homework assignment regarding the Vietnam War and why it had such a huge impact on the society in America and the revolution that followed. I will also give students a small background history regarding Marvin Gaye’s inspiration for that song and explain the relationship: “Marvin Gaye’s brother returned from the War with horrid stories and Gaye wanted to bring this to light, he wanted the American people to know-and what better way than through music? Gaye produced an entire album around this message in ten days. It was a hit. Why do you think

this was so important, and how does this show that the Vietnam War had a strong impact on American society?” The students will finish up any loose ends from the day’s lessons and ask any questions for clarity. This will be the remainder of the day, so about an hour.

Training Curriculum for Human Service Agencies

Building a training curriculum to a specific group of professionals is simple, since creativity can be taught among all disciplines. Above, creativity was taught by using TIM lesson planning structure through the history discipline. The group of professionals this curriculum is built for are those involved in the Human Service Field, specifically for Medicaid Service Coordinators, or MSCs. MSC’s are hired to provide services to individuals with developmental disabilities and their families and link them to services appropriate to their individuals’ wants and needs. The current state of the New York State

Budget is constantly changing. As of April 2013, six percent of funding for nonprofit agencies, which equated to about \$120 million in cuts for all agencies (providing services for individuals with disabilities) under OPWDD, or Office for People with Developmental Disabilities. There is also an issue in overbilling to Medicaid, by about \$15 million, over 20 years. New York State could be responsible for paying this back, thus losing more money instead of the money being used in these agencies. Because of these constant cut backs, decreased staffing, and increased need, people working for these nonprofits, in this case MSCs, are feeling the burden. There has been a call for new solutions and “creative ideas” to help aid this problem. At one time, there was a creativity center located at People Incorporated’s administrative office on Sheridan Drive in Buffalo, New York. Unfortunately, it closed down due to lack of interest, lack of budgeting, and no time.

How can MSCs solve these challenges when many do not know what creativity means? One MSC at People Incorporated (who wishes to remain nameless), said “creativity means imagination and dreaming. We do not need creativity, we need better leadership.” The training curriculum will teach skills such as divergent/convergent thinking and tools to go along with them such as brainstorming, Brainwriting, SCAMPER, The Idea Box, Why What’s Stopping You?, Hits/Highlighting/Restating Clusters, POINT, Targeting, and Card Sort (Miller, et al., 2011). Giving MSCs this overview of creativity tools can assist MSCs while they hold meetings among the individuals in their caseloads as well as among each other.

A Service Coordinator with People Incorporated is in charge of the MSC Resource Group. The MSC Resource Group began in the summer of 2012 as a way for MSCs to get together in a relaxed, yet professional environment to discuss information

and issues pertinent to being an MSC.

The agenda typically flows as follows:

- I. Introductions
- II. Brainstorming Difficult Cases
- III. Discussing questions/concerns/comments about the organization/policies/procedures
- IV. Sharing Resources (Out-of-the-box/non-traditional services and supports)
- V. Any other topic of interest (past discussions have revolved around topics like: trainings that would be helpful, beginning Therap (the new software system that MSCs are getting used to) office procedures/supplies, ideas on organization/efficiency in the MSC role, etc.)

The training materials used in the workshop are listed in Appendix B. Examples of PowerPoint slides are listed in Appendix C.

Training professionals will be based on their knowledge of creativity and their interest in learning more. The training will include the same introductory PowerPoint (located in Appendix D) but will include handouts and will go through a Creative Problem Solving session using Creativity Tools and the Thinking Skills Model.

Figure 8: The Thinking Skills Model.



Creative Leadership: Skills That Drive Change
Puccio, Murdock, & Mance (2007)

Recommendations for Development of Training for Parents

Parents, specifically those with children with developmental disabilities, are a tough audience at times, since sometimes there is not much support. One parent that was interviewed, who wishes to remain anonymous, is the mother of a 27 year-old man with severe autism. This parent is also a professional employed by Buffalo Public Schools,

and her entire professional background is in special education. Her son has many challenges, having the cognitive ability of a three year old, and needing assistance with many communication skills, daily living skills, and many things that typical 27 year-old males take for granted. This parent has been dealing with issues to find appropriate housing for up to five years now, with no movement whatsoever. Many parents are in the same situations, and need assistance with finding a voice and coming up with alternate ways to service their children.

It is recommended that the creativity training for parents will teach parents different creativity skills such as divergent/convergent thinking, brainstorming, and leadership skills. Parents need to know the basic guidelines in creativity and need to also know leadership skills that will assist them in becoming better advocates for their children. The training should also include the traits of a creative person, and what this entails.

There are numerous lists and traits that a creative person can have, some positive and some negative. Fox and Fox write in their text *Exploring the Nature of Creativity* (2010) that “we do not absolutely know how many characteristics of a creative person are necessary (to be creative), but it certainly takes at least one” (2010). Fox and Fox write an extensive list of traits, including, fluency, flexibility, originality, and elaboration. These four traits are measure by the Torrance Test of Creative Thinking, or TTCT, which will be discussed later in more detail.

More traits that Fox and Fox mention are the tolerance for ambiguity, the ability to defer judgment, concentration, willingness to test assumptions, the openness to ideas, the willingness to take risks, self-confidence, the ability to excel in defining problems and the capacity to stay focused and find order in a chaotic situation.

Adding to the list are the abilities to toy with problems and ideas, the abilities to use imagery, the use of intrinsic motivation (being motivated by something more powerful within, not being motivated by money or anything external), curiosity, optimism, humor, persistence, independence, self-awareness, commitment, self-discipline, impulsiveness, objectivity, and flow.

In this extensive list of traits, we can see that being a creative person can mean many things. The list is extensive because all people are different, but all creative people must possess one or more of these qualities. For a person to be able to handle unclear situations, as well as be persistent enough to find clarity to solve the problem at hand, it really does express a drive that might not be found in others with a lower level of creativity.

This will allow parents to see that *every* child is creative, regardless of their learning style or a disability. The Multiple Intelligences Theory, listed previously in this project, may also be included in future training for parents'. The curriculum will teach parents skills they can use around the house, after school, and at any time they would like to engage their children. Training for parents is recommended for further research and development, at this time, it has not been pursued.

Conclusions/Recommendations

The supporting documents that are attached in the appendices are meant to inspire and influence those who have such a great impact on the most impressionable populations. If used properly, educators and professionals alike will be able to use these creativity tools in their everyday lives and in their professionals to positively influence all of those around them.

The workshops will also include links and references for further exploration of the topics that were presented, along with contacts to the International Center for Studies in Creativity (such as the Twitter, Facebook, website/blog, address and phone number) to stay in the loop of any news about upcoming trainings, certifications, and research. The hope is to walk away from these trainings with confidence and hope that a difference can be made.

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Appendix A

Additional Examples of TIM Lessons

Lesson Two

Main Content:

The second event that will be discussed is the media's portrayal of the Vietnam War and society's reaction to the war. There will be further and more in-depth discussion of "what (was) goin' on!" (referring back to Marvin Gaye!)

Content Objective:

To learn specifics about the war: why it started, who was involved, how many casualties, why it had such a major impact on the American way of life, etc. and for the students to recognize the significant impact of the Vietnam War on American soil.

Creativity Topic:

Enjoy and use fantasy/Elaborate-but not excessively

Creativity Objective:

By utilizing only visual, students will again have to interpret the photos that will be flashing overhead, rather than listening. The students will perform critical thinking skills by using their spatial and visual intelligences.

Materials:

A computer

Overhead

Copies of the photos that will be shown on the overhead.

Paper

Writing Utensil

Computers for the students to use

Heightening Anticipation:

I will ask to students to sit down and watch the photos that are flashing across the screen.

I will let them know that these are photos from the Vietnam War. I will ask the students to write down words to describe what they are seeing in these photos. We will take about 10-15 minutes to do this, since there will be about 25 photos that will keep playing in a slideshow. Each student will get a handout of the photos after the allotted time.

Deepening Expectations:

We will then watch clips from the National Geographic website from “Inside the Vietnam War” which includes testimonials and information regarding the war (website is <http://channel.nationalgeographic.com/channel/inside-the-vietnam-war/video/>). Each clip is about five minutes long. Since the students enjoy visuals, they will appreciate being able to watch these clips. They will also get to see and hear testimonials of how bad the war was, and more information regarding the background of the start of it. After each five-minute video, students will get five to ten minutes to write a reflection. This will take about 30 to 45 minutes. I will then pass out a series of questions regarding content of the facts of the war (why did America become involved? Why did many believe that President Johnson’s “Texas blood” got in the way of a clear decision?). I will also ask questions towards the end of this segment of the feelings they experienced while seeing

the photos at the beginning of the lesson, as well as when they watched the clips. This discussion will last for about 50 minutes. I will ask them to refer back to their list of key words they wrote down when seeing the photos, and I will ask them to use those to describe some of the emotions or thoughts they were experiencing. This second reflection period should take 10 minutes and then a break for lunch.

Extending the Learning:

At the end of the lesson, students will be asked to come up with a number of different ways the war could have been avoided, or could have been different. This should take up about 30 minutes of discussion time. This will conclude the particular lesson, with the students using about 10 minutes of the rest of their class to start brainstorming for both sides of the argument for American involvement in the War and against American involvement. This will excite the students and provide them with something to think about for the rest of the evening so they will be prepared to start their research the next day.

Lesson Three

Main Content:

The third lesson we will use in our discussion of the Vietnam War will be the opposing views of America's involvement in the war and why this event had such a significant impact.

Content Objective:

Students will understand the politics behind America's involvement in the Vietnam War, why we became involved in the war, and the outcome of the war. This will serve as a type of repetition so the students will understand the events that were taking place and can use critical thinking skills to debate their sides.

Creativity Topic:

Keep open/Put your ideas in context

Creativity Objective:

In this particular lesson, the students will be asked to put their personal perspectives aside and look at the actions of the Vietnam War in a more neutral and open-minded way. The students will have to force themselves to think critically and creatively to complete their learning objectives.

Materials:

A computer
Overhead
Paper
Writing Utensil
Blindfolds
Blue straws/sticks
Red straws/sticks
Something to hold the sticks in, like a small vase
Three copies of my personally written account of the background of the Vietnam War, with facts from both sides of the argument
Computers for the students to use
Poster boards
Markers
Colored Pencils
Printer Paper
Tape
Glue
Scissors

Heightening Anticipation:

As the students enter the room, each will have a blindfold sitting at their desk with nothing else. I will ask the students to not take anything out, and just to sit down. I will then ask the students to blindfold themselves. After they do so, I will instruct them to visualize what I am speaking about while they are wearing the blindfold. I will read my prepared background of the opposing thoughts. It will be a short, five minutes introduction in to the opposing sides. As I am done, I will then instruct the students that I will be coming around with a vase and as they reach out, they will choose one straw. I will ask them not to look at the straw until I say to take off the blindfold. Each student will pick a straw. This should take about 10 minutes total.

Deepening Expectations:

After each student picks out a straw, I will ask each of them to take off their blindfold and divide into the two colors. On the board, blue will read against troops in Vietnam and red will read for American troops in Vietnam. I will ask the students to venture off with their teams to their computers and answer a series of questions to guide their debate (why was Congress in agreement to involve troops? Why did President Johnson lie about the number of victories, casualties? Etc.). This introduction to the assignment will take another 10 minutes. The students will then break off and do research entirely on their own, and will be allowed (and encouraged) to print out photos and develop any type of “evidence” for each particular side, since they will need to present a visual. Each side will get my personal, handwritten sheet of facts that I read off at the beginning of the class. I will be available to assist the students, but I will encourage the students to do this on their own. I will suggest assigning group members roles, such as one person is the representative, or the speaker, of the group, one is the secretary, one is in charge of evidence creation, etc. The students will have to organize their teams how they want to according to their own particular skills and interests. The students will have the rest of the day to do so. They will be given breaks throughout the day, but will have to develop a serious case for or against sending troops to Vietnam. They will spend the rest of the day on this research and building their case, only stopping for lunch and two or three five-minute breaks.

Extending the Learning:

The students will have their cases completed by the end of the day. I will ask each of the students to prepare a small speaking part on what they contributed to the team and each will have to share their “role title” that they played on their team. I will collect the students work at the end of the class, asking them to leave it there, and will ask them to record on a sheet of paper or in their journals, their personal feelings about their particular side of the argument. Do they agree? Do they disagree? Why or why not? The students will have to reflect on their experience as they prepare for the debate the next day.

Lesson Four

Main Content:

The final lesson will be the student's debate, and their takeaways from the process of learning about the Vietnam War. There will be a class discussion, and we will relate it to current topics that also are controversial.

Content Objective:

This will serve as the closedown of the weeklong lesson on the Vietnam War. The debate regarding either side will cause the students to use critical thinking skills and believe in their side in order to "win" the debate. They will also have to learn to respond and counter the opposing arguments, which means their material must be organized and complete.

Creativity Topic:

Combine and synthesize/Be aware of emotions

Creativity Objective:

By utilizing the evidence they created themselves, they will see how creativity can play in their execution of their side.

Materials:

Two long tables facing one another
A podium or music stand that I will be able to sit at in the middle.
A video camera
Tape to hang up poster boards (if needed) or pictures
Stands to present the poster boards (if needed)
Markers
Flip Chart Paper

Heightening Anticipation:

Once seated, students will be given the direction that they will be acting this whole debate out as political leaders of today to oppose one side on the current issue of American troops in Afghanistan, since there has been much conversation surrounding the similarities of the two on reasons of why we entered the way, how many soldiers we have lose, and our success or loss. They will be using the Vietnam War as their evidence to either side of the argument. The students will be asked to leave the room for a brief, 5

minute conversation of their plan of action, and then they will be asked to return in all seriousness and ready to debate.

Deepening Expectations:

As the students go on to debate the sides, I will be asking questions throughout to guide the conversation. I will ask both sides the same question, and then will ask one group one question, etc. As we go through, I will say “pause” and the students will be asked to write down their reflection of the debate so far. During this reflection, the students will be asked to write about what the OPPOSING team is doing well, and what points they brought up were valid. This will allow the students to have to critically think about the opposing argument, therefore learning both pieces of the puzzle in regards to the Vietnam War. I will do this three times: once in the beginning, then the middle, and then at the end. The students will get ten minutes to write their reflection. I will also make sure to give the students breaks to debrief with their teams to discuss strategy and to relax. At the end of the debate, the students will get up, shake hands, and leave the room. They will be asked to reflect on the process and instead of write for 10 minutes, they will be asked to write for 15 or 20. This will be the wrap up.

Extending the Learning:

At the end of the debate and the 20 minute reflection period, the students will be asked to come back in the room and we will spend the rest of the class time discussing a sort of PPCo-what were the pluses, potentials, concerns, and ways to overcome those concerns. I will ask if they would like to do something like this again to gauge their outlook on the entire process. The PPCo should take a half hour. The discussion will allow me as the instructor to see who actually took something away from the lessons, and who did not. This will serve as my “test” and evaluator. I will ask the students to share some of their reflections and give constructive criticism to one another. As the take away, the students will all get copies of their debate (since they were notified they were recording) so they will always have the facts of the Vietnam War handy that they can watch, rather than a paper to read. We will summarize their key learning on the board, which they can record in a notebook, and I will type them up for handouts the next day. I will then explain that

the “winners” of the debate was the side who had given the most factual information, rather than opinionated.

Appendix B

Handouts for Educator Trainings and Professional Trainings

+ The rules of divergent thinking:

- Defer judgment – go with whatever idea you think of, do not second-guess or judge them!
- Strive for quantity – go for as many ideas as possible. The more ideas, the better!
- Seek wild and unusual ideas – The wilder the better. “It’s easier to tame a wild idea than to invigorate a weak one” (Miller, et al, 2011).
- Build on other ideas.

Miller, B., Vehar, J., Fireston, R., Thurber, S., & Nielsen, D. (2011). *Creativity unbound: An introduction to creative process*. Evanston, IL: FourSight, LLC.

Tools for Diverging:

- Brainstorming
- SCAMPER
- The Idea Box
- Why, What's Stopping you?

+ Tools for Converging:

- Hits,
- Highlight,
- Restate
- Clusters.
- POINT
- Targeting
- Card Sort

Miller, B., Vehar, J., Fireston, R., Thurber, S., & Nielsen, D. (2011). *Creativity unbound: An introduction to creative process*. Evanston, IL: FourSight, LLC.

The rules of convergent thinking:

- Be affirmative – think to yourself “what’s good about this idea?” before immediately shutting it down.
- Be deliberate – avoid quick decisions and give every option a fair chance.
- Check your objectives – keep your original goal in mind.
- Improve ideas – take time to make those “sparkling ideas” better.
- Consider novelty – be brave!

Brainstorming:

- Write the challenge you're working on so you can reference it easily.
- Set up a goal of 25+ ideas and don't stop if it is going well!
- Write down everything and always refer back to the challenge.
- Make sure you have enough ideas.

Stick 'Em Up Brainstorming:

- Same idea as brainstorming, except with a group.
- Need some type of front board.
- Set a goal the group can reach.
- Call out ideas and give them to facilitator to post.
- Make sure you have enough to address the challenge.

Miller, B., Vehar, J., Firestien, R., Thurber, S., & Nielson, D. (2011). *Creativity unbound: An introduction to creative process*. Evanston, IL: FourSight, LLC.

SCAMPER

Substitute - What can you substitute?

Combine - What can be combined?

Adapt- What else is like this?

Modify - How about a new twist?

Put to other uses - What else can it be used for?

Eliminate- What can you get rid of?

Rearrange- What other patterns might work?

The Idea Box

1. Pick important characteristics of your challenge statement.
2. Create column headings.
3. Fill in options under the columns.
4. Mix & match them!
5. Stretch!

Miller, B., Vehar, J., Firestien, R., Thurber, S., & Nielson, D. (2011). *Creativity unbound: An introduction to creative process*. Evanston, IL: FourSight, LLC.

Why, What's Stopping You?

- 1- Write down the challenge or goal.
- 2- Why do you want to solve this challenge?
- 3- Rephrase the answer as a "how to", "how might" question.
- 4- Take new challenge question and replace "how to" with "why might you want to..."
- 5- Rephrase new response into new challenge question with "how to", "how might?"
- 6- Repeat steps four & five until you get to the point where the person says: "to be happy."
- 7- Now ask, what is stopping you?
- 8- Rephrase the answer as a "how to" challenge question and then "what's stopping you?"
- 9- Rephrase response into challenge question and continue until challenge questions are so

Miller, B., Vehar, J., Firestien, R., Thurber, S., & Nielson, D. (2011). *Creativity unbound: An introduction to creative process*. Evanston, IL: FourSight, LLC.

Hits/Highlighting/Restating Clusters

With your ideas you came up with in the diverging stage...

1. Mark ones that excite you the most.
2. Cluster those marked ones together that have similar themes.
3. Restate the entire cluster into one phrase or question, however the clusters were worded.
4. Restating clusters for challenge questions...
 - o Word them as "how to" or "how might"
5. Restating clusters for ideas...
 - o Word them as "what we see ourselves doing is..."

Miller, B., Vehar, J., Firestein, R., Thurber, S., & Nielson, D. (2011). *Creativity unbound: An introduction to creative process*. Evanston, IL: FourSight, LLC.

POINT

Pluses – what do you like about the work?

Opportunities – what could this become?

Issues – express concerns as open-ended questions & use "how to" "how might" questions.

Now **t**hinking- with the list of issues brainstorm ways to overcome them.

Miller, B., Vehar, J., Firestein, R., Thurber, S., & Nielson, D. (2011). *Creativity unbound: An introduction to creative process*. Evanston, IL: FourSight, LLC.

Card Sort

Helps prioritize up to 12 options.

Get scrap paper/cards and write your options on each.

Find the option you like the least, and write the number of options you have on the back (for example, you have 5 cards, write 5 on this card).

On the option you like the best, write "1."

Of the remaining, find the second best and write "2."

Arrange the cards in numerical order after all are numbered. Now they are prioritized!

Targeting

Define the bulls' eye or ideal state. Place options as close to the ideal state as they relate to it.

After options are set, place forces helping you towards the ideal state and forces that are pushing you away from it.

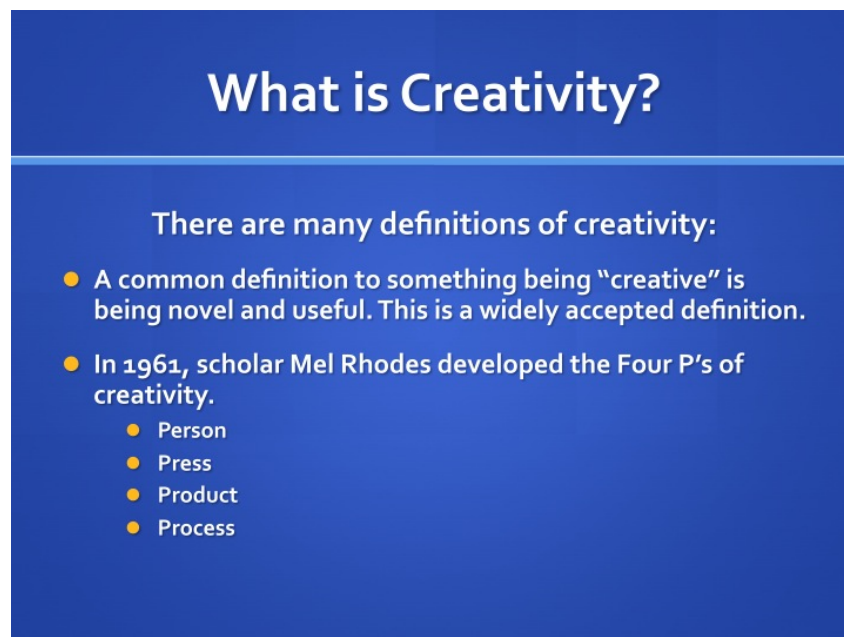
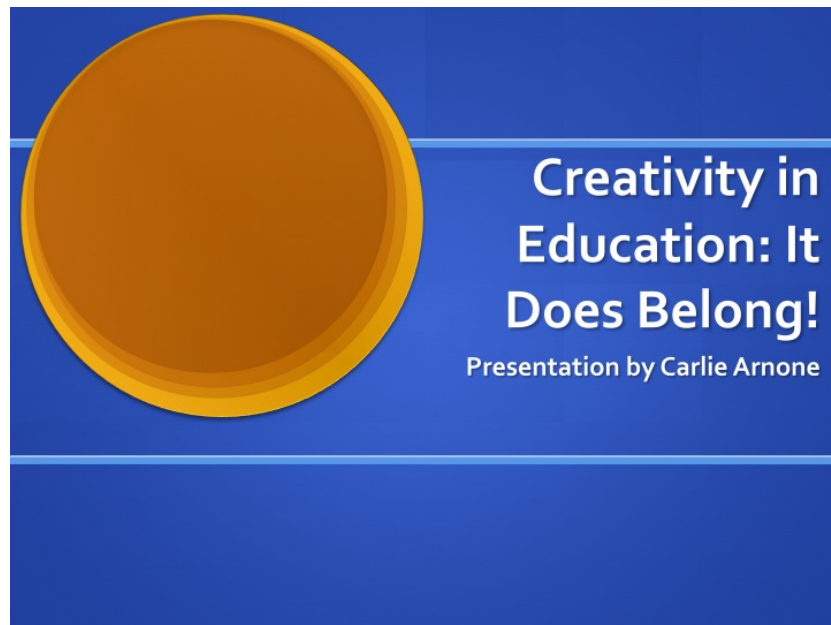
Brainstorm on ways to overcome the most significant challenge or push.

Use those ideas that were generated to strengthen your solution statement to make your ideal state more detailed and workable.

Miller, B., Vehar, J., Firestein, R., Thurber, S., & Nielson, D. (2011). *Creativity unbound: An introduction to creative process*. Evanston, IL: FourSight, LLC.

Appendix C

Sample of PowerPoint Slides used in the Creativity in Education Training:



A Masters Program in Creativity?!

- Creative Studies is indeed a Masters of Science Program.
 - The world's only Masters of Science degree in Creative Studies.
 - The Foundations Strand teaches students all about the history, the importance, and how to assess and define creativity.
 - The Creative Problem Solving and Facilitation strand trains students how to use specific tools to promote creativity as well as solve real life challenges.
 - The Research Development, and Dissemination allows students to study research, as well as develop their own.
- Creativity spans across all realms; business, education, communications, and more.

What Does This Have to do with Education?

- Creativity, if used appropriately, is engaging, exciting, useful, and relevant to all domains.
- It can be taught within all disciplines.
- Creativity itself is an innate life skill, and can be nurtured into a deliberate process.
- Creativity allows for diverse learners.

The TIM Lesson Planning

- The Torrance Incubation Model of Creative Teaching and Learning, was developed by E. Paul Torrance.
- One creativity skill was identified and taught throughout the entire lesson.
- The three steps in a TIM lesson are to heighten anticipation (warm up) then to deepen expectations (digging deeper) and then extend that learning (closing down).
- The TIM Model includes those cognitive strategies that educators strive for, and also has deliberate activities in each stage of the teaching (Murdock & Keller-Mathers, 2002).

TIM Creativity Skills

- Get glimpses of the future: predict, imagine, and explore.
- Produce and consider many alternatives: generating many ideas.
- Elaborate-but not excessively: adding details in a quick way.
- Be aware of emotions: using feelings and observing verbal and nonverbal cues.
- Enjoy and use fantasy: imagine and play.
- Let humor flow and use it: respond to a surprise and recognize discrepancies.
- Visualize the inside: pay attention to fine details.
- Be original: breaking away from the normal way of thinking.

Appendix D

A Sample of PowerPoint Slides used in the Creativity in Human Services Agencies

Training:



WHAT IS CREATIVITY?

There are many definitions of creativity:

- ◉ A common definition to something being “creative” is being novel and useful. This is a widely accepted definition.
- ◉ In 1961, scholar Mel Rhodes developed the Four P’s of creativity.
 - ◉ Person
 - ◉ Press
 - ◉ Product
 - ◉ Process



WHAT IS CREATIVITY?

- ◉ Creativity is divergent and convergent thinking.
- ◉ The Creative Problem Solving (CPS) Model
 - Useful set of stages that helps solve challenges.
- ◉ E. Paul Torrance's definition is a "process that resembles steps in the scientific method." (Davis, 44).
- ◉ Scholar Ruth Noeller's definition:
 - $C = f_a(K, I, E)$
 - Creativity is a function of attitude applied to knowledge, imagination, and evaluation.

WHAT IS CREATIVITY?

- ◉ One of the more popular notions is the process of creativity through a medium, such as art, music, literature, and even science.
- ◉ Creativity is much more than art and music (which is a common belief).

WHY IS CREATIVITY IMPORTANT?

- ◉ Creativity is natural
- ◉ Creativity results from persistence and hard work
- ◉ Creativity is not just for artists or musicians, it applies to everyone
- ◉ Creativity does not stop at childhood
- ◉ Creativity can be taught, nurtured, and trained
- ◉ Creativity is a life skill

WHO USES CREATIVITY?

- ◉ Everyone!
- ◉ Creativity is studied around the world.
- ◉ Local college Buffalo State, has students study their creativity program from all over the country and internationally:
 - China, Singapore, Argentina, Italy, South Africa, Germany, Ireland, Brazil, NYC, Seattle, Arizona, and many more.
- ◉ Every year Buffalo State College holds the Creativity Expert Exchange where scholars come for a weekend of presenting new research, findings, and discussing their passion for creativity.

WHAT DOES THIS HAVE TO DO WITH MSC?

- ◉ Creativity, if used appropriately, is engaging, exciting, useful, and relevant to all domains.
- ◉ It can be taught within all disciplines.
- ◉ Creativity itself is an innate life skill, and can be nurtured into a deliberate process.
- ◉ Creativity allows for diverse learners and for diverse populations, including all of those we serve.

GARDNER'S MULTIPLE INTELLIGENCES THEORY

- ◉ There are nine different types of intelligences, according to Gardner.
- ◉ Logical-mathematical
- ◉ Spatial
- ◉ Linguistic
- ◉ Bodily-Kinesthetic
- ◉ Musical
- ◉ Interpersonal
- ◉ Intrapersonal
- ◉ Naturalistic
- ◉ Existentialist