DEVELOPING A CREATIVE THINKING COURSE FOR COMMUNITY COLLEGE STUDENTS

by

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SYNTHESIS

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Abstract:

This project describes the development of an online Creative Thinking course designed specifically for community college students. This interdisciplinary college course will be one component of an entrepreneurial certificate program aimed at business students, but will be open to all students seeking to improve their creative thinking abilities. While developing the course the author engaged in the process described in Cameron's *The Artists Way* as a structured reflective practice.

In this writing, selected theories of creativity are described in their connection to course content and approach. The course was informed by traditional western ideas on creativity as well as an eastern holistic view. Western theories of creativity draw from the works of Gardner, Csikszentmihalyi, and Sternberg, while Eastern concepts of creativity are addressed through the Taoist notion of *ching* or quiescence. In addition, the course has been informed by the emerging field of Positive Psychology due to the observed effects of positive attitudes on increasing creativity in individuals and Positive Psychology's compatibility with eastern viewpoints. Approaches to pedagogy were influenced by the particular needs of community college students. The unique learning needs of community college students include a desire for connection to practical applications, as well as high levels of interaction and personal meaning. The course was also designed to address critical viewpoints on the limiting nature of our educational system on creativity as described by Robinson in *Out of Our Minds*.

Major assignments and learning activities are described in detail including the Sci-Fi SCAMPER—an adaptation of the well-known SCAMPER activity, and the Problem of Personal Interest Project—a long term project in the domain of the student's choosing, identifying a problem, and developing and testing a solution. The course outline and syllabus are also provided.

The first decade of the 21st century has presented us with complex problems at both local and global levels. The economic crisis and social changes emerging from the clash of cultures in an increasingly shrinking world has created the requirement for all Americans to work smarter and

innovate in order to remain competitive and find new ways to create positive interactions. It is for these reasons that creative thinking has become a crucial tool for everyone in our society.

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Discovering My Own Creativity and Charting a Map for Others

I have never thought of myself as creative. When I attended college I did not know what subject to study and began taking different types of elective courses that I found interesting based on their descriptions in order to pick a major. I took some law courses and while I enjoyed the logical thinking, I was not completely engaged in the subject matter. I also took psychology and sociology courses which I enjoyed as well, but when I thought about it, I could not imagine myself in any professions I knew of linked to those fields.

Then I took a film course. I had always loved good films and even thought it would be fun and creatively fulfilling to make my own film. I fell in love with the course immediately, however, I did not even think about this course as one that would lead to selecting a major. That would be silly since I knew that I was not creative; everyone knew my youngest brother Richie was the creative one in the family. After all, Richie wrote poetry, made art, and generally expressed the sensitive nature of an artist that my mother treasured. To my disbelief, I received an A in the film class and, based on my success, decided to take more film and photography classes. I soon discovered I was not only interested in film analysis and production, but also in photography and art history as well. Eventually, I managed to accumulate the courage to change my major and earned a bachelor degree in Art, surprising everyone including myself! Taking that first film course changed my life and how I viewed myself and my own creativity.

Many people do not see themselves as creative because they have been told they are not and believe it. Also, there are two societal misconceptions that interfere with individuals accepting their own creative natures - first, creativity only lives in the fine arts and, second, that people cannot learn to be creative; they are or they aren't. I feel I am improving my creativity all

the time; however, I have not been cognizant of it until recently. I believe becoming conscious of your own creativity and creative process is a required component to flourish as an artist, thinker, business person, inventor, innovator, or whatever profession you choose. It is through the Critical and Creative Thinking (CCT) program at the University of Massachusetts Boston and reflective practice that I have become cognizant of my creative process. This is how my personal experiences helped me to set an overarching goal for the creative thinking course.

Due to a fortunate set of events I have been offered the opportunity to develop a Creative Thinking Course for students attending Middlesex Community College. A previous Critical and Creative Thinking course called "The Mind at Work; The Mind at Play" had been offered in the past, but the faculty member who developed and taught the course retired and the course left with him. To my knowledge, the college has never offered any course focused specifically on the theories and practices of creative thinking. As part of my synthesis, in addition to the creating the curriculum materials, I have documented the course development process and reflected on the choices I made and their intended impact on the shape of the course.

In spring of 2012, the implementation of a new *Entrepreneurship in Small Business Management* certificate program at Middlesex Community College triggered the need for a creative thinking course and a mini-grant was written for course development. This course will be a requirement of the program, based on the idea that creativity is a necessary aspect of entrepreneurship. In the fall 2012, I was approached by the Dean of Business, Education and Public Service for my ideas regarding the creative thinking course and was delighted to be asked to develop and teach this new course myself. Although requested by the Business Division, this course was not intended to be taught as a business course. Rather, the course is to be an interdisciplinary experience offered through the Humanities and Social Science Division

addressing the psychological and human dimensions of creativity. I have worked closely with the Assistant Dean of Social Sciences and the Chair of the Behavioral Sciences Department to determine the appropriate scope of the course. Together we presented the course to the Middlesex Curriculum Committee in February of 2013 at which time the pilot was approved. Initially, the course will be delivered online in order to allow it to draw from the widest possible audience to get the necessary enrollment to run. Once the course and the new certificate program have been established, I plan to teach it in a hybrid format in order to take advantage of instructional opportunities made possible by face-to-face interaction with students. Still, I believe this course can and will be highly successful delivered in a fully online format. This will be discussed in more detail in a later section of this paper.

Throughout the process of developing the course outcomes, learning activities and assessments, I am participating in the creative process described by Julia Cameron in *The Artist's* Way - A Spiritual Path to Higher Creativity (Cameron, 2002). The Artist's Way is a twelve-week, reflective process that brings participants through creativity unblocking techniques as a spiritual experience. I was introduced to this book as an option for the final assignment while taking the Creative Thinking course in the CCT program. Although I did not choose to engage in the process for the final assignment, I was intrigued by the concept and purchased the book for future reference. A few times before I have considered engaging in this process, however, I have not had the time or motivation to do so until this project. I cannot help but appreciate how apropos it is to use a process for unblocking creativity while developing a creative thinking course.

Four main themes emerged during my development of the course description and learning outcomes. They are Creative Process, Creative People, Creative Environments and

Finding Your Passion. I will attempt to make connections from the readings, resources, activities and discussions to the themes in every course unit. These will be discussed in more detail in a later section of this paper entitled Course Themes. The course description is as follows:

This interdisciplinary course will increase students' understanding of the nature of creativity and creative problem solving. It provides students with an introduction to skills and techniques designed to increase their creativity and ability to develop innovative solutions to meaningful problems. Students will analyze the creative process from a variety of theoretical perspectives and participate in activities that develop capacities to generate original ideas. Topics include modern theories of creativity from psychology and allied fields, environments that enhance creative functioning, techniques to promote divergent thinking, and case studies of creativity will be explored and practiced. Knowledge and skills gained in this course are applicable to solving business, scientific, and environmental problems, as well as the arts and sciences and other areas of personal interest.

Ideas about Creativity That Have Informed My Thinking

My understanding of creativity has been informed by a range of theories and ideas. Some of these ideas come from traditional Western creativity theories, while others are drawn from Eastern views. In general, most Western understandings of creativity will connect the ability to be creative with some form of intelligence. On the other hand, Eastern views of creativity are related to the basic nature of the universe and the connection of an individual to a higher consciousness. While Eastern and Western ideas on creativity may at first seem incompatible, I believe they can be understood as complementary, and in the following section I have tried to point out where these ideas intersect and how they might be used to develop a working notion of creativity for my course. In developing my course, I used the framework of the Six Ps to organize and categorize the variety of creativity theories with the purpose of seeing these theories in relationship to each other and their possible utility in the course. This allowed for better visibility of the overlap and limitations of each theory as I selected specific ideas to include in the course in order to support the goals of the course and the needs of the students. In addition, other key aspects of creativity were investigated including: Big C versus Little C creativity; the importance of frames of reference and social conditions; and the relationship between critical and creative thinking. These broad topics were arrived at from looking across the different creativity theories, and each is important for understanding the nature of creativity as it is applied in the context of the course.

Intelligence and Creativity

Howard Gardner's work on Multiple Intelligences has had a profound impact on education. The notion that it is not how smart you are, but rather how you are smart has many implications for the way society should educate people. According to Gardner, people possess different kinds of minds and learn and recall information in different ways. In his book *Multiple Intelligences*, Gardner identified nine different intelligences: visual-spacial, bodily-kinesthetic, musical, interpersonal, intrapersonal, linguistic, logical-mathematical, naturalist, and existentialist. In addition, he believes creativity is a subset of each type of intelligence, and, while an individual may be creative within one or two disciplines or domains, no one can achieve creativity across all intelligences. Gardner's research focuses on "Big C" creativity, the kind of creativity that creates changes within their specific domains. While he does not deny that creativity exists in the small and medium "c" capacities, he feels strongly that in order to

understand the concept of creativity you must look at people who have made large contributions to their domains, (Gardner, 1999, p. 117).

Gardner was interviewed for Denise Shekerjian's *UnCommon Genius* and stated, "I think if you're going to write something about creativity for the public... one of the main points is to disabuse them of the nonsense you see advertised: 'Come for a weekend, learn to brainstorm, learn to free-associate, and we'll make you a creative individual." Gardner believes creative work requires a "certain kind of person, which includes being able to work on things for years, a drive not likely to come to people who paid five hundred dollars for a weekend under a tent" (Shekerjian, 1990, p. 141). Gardner's dismissal of creativity workshops was disappointing to me since it does not coincide with the idea that creativity exists and can be nurtured in the small and medium "c" capacities to a big "C" creativity given the right conditions.

By contrast, psychologist Robert Sternberg does believe that creativity can be developed within the individual. In his confluence approach to creativity and the investment theory, novel ideas and creativity emerge from the convergence of basic resources: intellectual abilities, a rich knowledge base, flexibility in thinking styles, personality traits and a supportive environment, (Sternberg, 2003). These five resources can be developed and learned in order to improve one's creativity. For example: (1) intellectual abilities refer to the ability to see problems in new ways and with the ability to persuade others that your ideas are worthwhile. There are known strategies for developing and exercising the ways people see themselves in a variety of contexts. In addition, by engaging in conversation around your ideas you will naturally improve communication skills and persuasion techniques; (2) I believe finding your passion is important for building your knowledge base. Having passion for a topic or profession will provide the intrinsic motivation necessary to build a rich knowledge base in your domain; (3) flexibility in

thinking styles – it is common for people who view themselves as creative to get into a creative rut or become blocked and there are different strategies to help people unblock or build new ways of thinking; (4) Personality traits – I have observed, within myself and others, a difference in behavior when around certain people. Behavioral traits, such as willingness to take risks and tolerating ambiguity, are known to be traits of creative people. These traits can be learned with modeling and practice; I think surrounding yourself with people who are positive and willing to take risks, make mistakes and try again is central to developing these traits; and (5) a supportive environment in which change is encouraged and uniformity of thought is not imposed. I think this may be the hardest factor to change of the five for socio economic and cultural reasons. For example, if your employer is not open to new ideas and does not provide room for experimentation and you are dependent on the position for financial reasons, this is a hard block to overcome and would require more critical thinking in regards to finding other options for a supportive creative environment.

In 2004 in an interview Sternberg said the following on a definition of intelligence

I prefer to refer to it as "successful intelligence." And the reason is that the emphasis is on the use of your intelligence to achieve success in your life. So I define it as your skill in achieving whatever it is you want to attain in your life within your sociocultural context-Meaning that people have different goals for themselves, and for some it's to get very good grades in school and to do well on tests, and for others it might be to become a very good basketball player or actress or musician.And the things that they don't do so well-They find ways either to compensate, meaning that they perhaps have someone else do the things they don't do well, or they have them done by electronic means or whatever. Or correcting their weaknesses- They make themselves better at whatever it is they didn't do so well, by adapting to, shaping and selecting environments, which means that some of the time you change yourself to fit the environment. That's adaptation. You need creative skills to come up with ideas; you need analytical abilities to know whether they're good ideas-to evaluate the ideas-and you need practical abilities to make your ideas work and to persuade other people that your ideas are worth listening to.

This definition states that we can and should capitalize on what we do best, and we have the ability to improve where we do not do as well by shaping our environment and building our creative, analytical and practical skills and abilities. Sternberg theorizes that several components must converge in order for creativity to take place. He identified 4 of the 6 P's of Creativity, to be discussed later, as the necessary components for creativity: cognitive style (process); personality traits (personality); the right environment (place); and the ability to persuade others to consider or accept the idea (persuasion).

Eastern View of Creativity

This Creative Thinking course will draw from the Taoist notion of *ching* to promote reflection, and tranquil contemplation in order for new ideas to incubate and emerge. In contrast to the Western view that sees creativity as a form of intelligence, the Eastern view sees creativity as a natural aspect of the nature of the universe that may be accessed by individuals who achieve a particular frame of mind. The Eastern view of creativity is informed by a variety of philosophies including Confucianism, Buddhism and Taoism. For the purposes of this project I focused my research on the influence of Taoist thought in the Eastern view of creativity. Taoism places significant focus on the process of self-realization and its influence on creativity. I chose to focus in this way because I believe these ideas complement and augment ideas that come from Positive Psychology, another major influence on the course.

According to Taoism there are two means of achieving enlightenment, *ming* and *ching*. (Chang, 2011, 274) *Ming* is described as developing insight into the nature of the universe and acting harmoniously with the natural world. On the other hand, *ching* or quiescence deals with the process of self-realization or a state of personal fulfillment. Quiescence is a state of inactivity or dormancy we achieve through meditation referred to as *ching*. According to the Taoists,

through meditation and the use of breathing exercises we can develop a sense of spiritual wisdom and connectedness to our inner self. Through an awareness of yourself and your environment, we can free ourselves from the confusion or chaos in the world by obtaining inner peace.

One of the fundamental principles of Taoism is *yin-yang* which is symbolized by the familiar half-black and half-while circle with a white dot on the black side and a black dot on the white side (Figure 1.1). This symbol represents the idea that all things exist in duality and that everything contains its opposite. From the Taoist perspective nature is a set of contrarily opposed forces that create duality and interrelations in all things.



Figure 1.1 yin-yang symbol

The *yin-yang* concept is illustrated by the state of *ching* in which all things are connected in a never-ending process of construction, deconstruction and construction again, allowing for new connections and perspectives to develop. This is the Eastern notion of creativity. In a passage from the works of famous Taoist philosopher Chuang Tzu, he describes how through achieving *ching* he was freed from the world and all the externalities of his existence. After experiencing this freedom he experienced Oneness, and in this state found no distinction between past and present, living and dying and came to the realization that the destruction of life did not mean death and birth did not mean life. For one who has achieved *ching*, all things proceed to destruction and all things proceed to construction. He calls this, "tranquilization in confusion," and explains that, "tranquilization in confusion means achievement through chaos," (Chang, 2011 p. 274).

The idea that insights and new perspectives can be born from a tranquil state is not unique to Eastern thought. The Western idea of incubation has been proposed as an important aspect of creative thinking. Through incubation you sit with your ideas, taking a break from conscious processing and allowing your unconscious mind to work on the problem. This rest period often results in unique combinations of ideas.

6 P's of Creativity

The six P's framework for the study of creativity (Kozbelt, Beghetto, & Runco, 2010, pp. 24,25) is helpful in thinking about the nature of creativity in general and how I will structure the activities in the Creative Thinking Course in particular. The six p's will be used as a broad frame work to locate any individual theory or concept within this structure. For example activities based in the developmental creativity theory, would have process, person place, but not product. The six p's will provide structure for students as they look at the different ways creativity is understood and developed. The six P's of creativity are process, product, person (or personality), place (or press), persuasion and potential. Below is a description of each as described in Theories of Creativity. (Kozbelt, Beghetto, & Runco, 2010)

Creative **Process** – conscious vs unconscious, chance or deliberate planned process and reflection – Students will engage in a variety activities to boost their creativity, and they reflect on what processes work best for them.

Creative **Products** – or specific works – this is the most objective approach to examining creativity but it does not provide information about potential creativity. Students will have the

opportunity to create products and have the opportunity to improve on their initial ideas and products.

Creative **Personality** – intrinsically motivated, wide set of interests, openesss to experiences, and autonomy. Personality is now viewed as one influence of creativity and in the past was thought of as a must have. Students will be provided an opportunity to explore what is important to them; intrinsic motivation comes from working with what is passionate to you. If you are passionate about a topic or genre you will be motivated to work in this area.

Creative **Place** – or environment. Opportunities for exploration, independent work and originality is encouraged. Students will not only explore their own creative personal spaces, but they will also learn about cultural and social influences on creativity.

Creative **Persuasion** – good ideas are only as good if you're able to get people to buy into them. Persuasive individuals are likely to influence a domain. This is an important factor for business and entrepreneur students. – Activities will include creating and refining elevator pitches.

Creative **Performances** or *Creative* **Potential** – Performance - divided into products and persuasion theories and any other perspective that focuses on manifest or unmistakably creative behavior; the latter is divided into personality, places and any other perspective that appreciates unfulfilled possibilities and subjective processes.

The last two additions to the alliteration are focused on and allows for research in everyday creativity and the creative potentials who may have most of what it takes to be creative, but require educational opportunities or other support before they can perform in a creative fashion. The creative potential addition to the 6 P's is important to the development of this course as this references people who may have functioned in a creative fashion if they were

given the oppportunity and the encouragement to do so. Many of the students who will take this course may not identify with being creative, but through this course they will engage in multiple opportunities to find their creative potential.

I see this course incorporating the western ideas from the Developmental, Economic and Systems creativity theories, Eastern views of Creativity from Taoism, in addition to the Positive Psychology framework which I will discuss further in the next section. Since this course is using a variety of creativity theories, the 6P's are helpful in looking at the different theories. See Appendix A for a chart depicting the Creativity Theories, a short summary of each theory and the P's focus.

Everyday Creativity – Big C or Little c?

Another tool to evaluate creativity is to be able to differentiate between levels of creativity and how much impact a creative work has had on a domain. Creative Magnitude – Big "C" eminent & objective and little "c" – everyday & subjective (Kozbelt, Beghetto, & Runco, 2010, p. 23) There is a tendency to overlook the little c and focus on the big "C" when evaluating creativity, since big "C" provides tangible evidence of creativity. This overlooks the creative process and individual's personal interpretations of the creative work and creative potential. The tendency to only value Big "C" can also help to reinforce myths and misconceptions about the nature of creativity.

In order to evaluate everyday creativity two more categories were introduced to the ...(mini – c and Pro-c) The mini "c" category helps to differentiate subjective and objective forms of the little "c" making room for more internal or emotional forms of creativity. The pro C provides a category for the grey area between little c and big C. This is for professional level

creators who have not yet attained eminent status and are well beyond little c creators or weekend artists who delve in a genre for relaxation, (Kozbelt, Beghetto, & Runco, 2010).

While famous, highly creative people like Einstein and Da Vinci are fascinating and well worth learning more about, I think researching how everyday people are creative or ways they can improve their creativity might be more helpful to society. It's seems apparent that some people are naturally more creative than others; however, that does not mean ordinary people cannot improve their creative abilities. In my opinion, creative people are flexible and open to new ideas, they often change their minds based upon new information and are not afraid to do so. They are confident and persistent. According to the confluence approach to creativity, creative people often see problems in new ways and bring in a variety of thinking skills to the problem solving process. Lubart & Sternberg highlight three attributes of creative functioning: self-efficacy, overcome obstacles, take sensible risks, and tolerate ambiguity. Creative thinkers are open to new ideas and are intrinsically motivated. Creative thinkers often have a natural curiosity and are drawn to problems and problem solving (Sternberg & Lubart, 1999).

So does this mean that if you do not possess these traits you cannot learn to improve your creativity? I believe not and I would emphasize that the first step is to find your passion and doing so will naturally increase your motivation to solve problems. Personally I have experienced engaging in a creative process and experiencing my creativity increasing my motivation to do more. I do believe all of the attributes listed can be improved upon with practice and positive and constructive feedback on the creative process. In addition, studying the aspects of creative personalities in big "C" creative people will be helpful for students making connections to their own personal behaviors and creative processes.

The Importance of Multiple Frames of Reference and Positive Social Conditions

Often, we think of creative people as having a special talent, but we do not always see the special talents within ourselves. Nickerson in his 1999 article, *Enhancing Creativity*, argued that all of us have the ability to be creative in our own rights. He suggests that the originality component of creativity can be thought to include the generation of ideas that are new to that individual, even if they are not novel to the domain or society at large. It follows from this idea that any individual who is able to look at a problem from different perspectives not previously considered is practicing a kind of everyday (small c) creativity. The ability to take different perspectives is referred to as exploring frames of reference. Examples of exploring frames of reference include imagining a story from a different perspective than the one it is written from; thinking of better ways to use your time; or seeing events or objects in a different light (avoiding functional fixedness). As individuals practice looking at ideas and objects from different perspectives they develop more complex understandings of problems and ideas, gaining insight and making new connections.

In addition to the ability to think from a variety of frames of reference, social contexts are also important to creative thinking. First, social interaction is necessary for creative thought to occur. Educator Sir Ken Robinson said, "Creativity is about making connections and is usually driven more by collaboration than solo efforts," (Robinson, 2011 p 211). Creativity cannot exist within a vacuum. Robinson points out that creativity is a dialog between ideas and a particular medium (Robinson, 2011 p 153). Therefore, creative solutions *must* be seen by others within a domain and evaluated as both unique and useful to meet the definition.

Next, the particular social environment must have specific characteristics. The environment must value creative thinking, be tolerant of mistakes, and recognize creativity when

it occurs. Even if people are supported at home and are doing well in school, if their society does not provide opportunities to be creative, then it is difficult to aspire to creativity. In an environment without opportunity for creativity, one might spend one's entire life trying to fit in to a predetermined mold and, by doing so, lose self-confidence necessary to think creatively. As Ken Robinson asserts, we are all born as creative individuals and are educated out of our creativity through our socialization (Robinson, 2010). In fact, as I described in the introduction, if I had not happened across an undergraduate film course, this might well have happened to me.

Another important aspect of the social environment is that it must recognize creativity. Csikszentmihalyi (Csikszentmihalyi M., 1999) suggests that a new idea that has not been accepted by a domain should not be considered creative. In this way he separates simple originality from creativity. Whereas Nickerson believes we can all be individually creative, even if our ideas are not truly original for society, Csikszentmihalyi says even truly original ideas are not to be considered creative if society does not accept them. By this definition, any new, useful idea that has not been accepted by the majority within a domain is not creative. Still, there are many examples of the ideas of creative persons not being accepted until long after their deaths. Csikszentmihalyi asserts these people, a good example might be Van Gogh, are not truly creative until society later says they are, often posthumously, far too late for them to appreciate the complement.

This creativity course will need to create and promote a social environment among participants that values the creativity within each student as well as their potential for creative thought. Also, the environment should be tolerant of mistakes, not penalizing students for taking risks and experimenting with different ways of approaching problems and different frames of

reference for understanding problems. Also, the social group within the class will need to recognize and accept the creative ideas that are generated by students.

After thinking and reading more about this, I came to understand that originality is only one part of the process of creativity. To be creative is also to have meaning for society. Not only should the work be applicable, but it needs to be accepted or else it will never be applied to the domain and therefore have no meaning beyond the individual creator. This thought led me to think more about the big "C" and little "c" concept. I believe creativity in everyday life, or the little c, does not necessarily need acceptance in order to be considered creative. For example, in the context of little "c" if you create a new solution to a problem at work and your co-workers do not agree with your solution, it will not be viewed as a creative solution by them; however, if it is successful to solving the problem is it not creative?

In *The Uncommon Genius*, Stephen Jay Gould recounted his talent as someone who can easily make connections. He devours himself on a topic and feels he has an innate ability to see connections that most other people do not. He was a great communicator of ideas as well. (Shekerjian, 1990, p. 6) Gould makes us think more about how important acceptance it is to be able to tell your story or relate your ideas to your domain. This seems to be an important detail in regards to achieving acceptability or notice but do you really need to be noticed in order to be creative? Isn't Mozart's music beautiful even if the experts in his domain do not approve? Sometimes it can be subjective.

The Relationship between Critical and Creative Thinking

What we might consider *good* thinking includes both critical and creative thinking. And, skills involved in critical thinking intertwine with creative thinking. To think outside the box

one would need to take a good look at the box first and try to identify misconceptions, frames of references and assumptions that may be getting in the way of a new approach to whatever problem is being looked at. Four to six phases of the problem solving process are identified as finding or recognizing the problem, moving through some possible solutions for the problem, identifying bias or assumptions, looking at the problem from different perspectives, evaluating other alternatives, reflecting on the process or re-evaluating. (Dominowski, 1995) I believe the critical thinking skills in this process are identifying bias or assumptions by looking at different perspectives, evaluating all the information, thinking about the process or thinking about your own thinking and reflecting on the process or re-evaluating. I think creativity brings to this process is problem finding and the ability to brainstorming several solutions without being self-conscious. Often people continue to perform tasks a certain way because it is what they've been taught to do. However, creativity or creative people can help to identify effective ways to perform tasks by looking at processes in a different way or from a different perspective. Baer said there is evidence that students who have been taught to explore different ways to define problems may engage in more creative problem solving over the long term (Baer, 1998). Below are some basic skills for creative problem solving (Moore & Murdock, 1991):

- Knowledge of your domain
- Intellectual playfulness and imagination
- Motivation or passion
- Encouraging confidence and willingness to take risks. (people who are susceptible to conform tend not to take risks)
- Improve performance develop mastery
- Self Confidence people need to believe if they are persistent then they will succeed
- Reflection looking back

An understanding of your domain or having a wide knowledge base is helpful in making connections and combining ideas; and it is a skill required of both critical and creative thinking. A powerful way to improve your domain knowledge is not only by reading and studying, but by paying attention to yourself and your surroundings. Most of us miss problems that need to be solved and solutions that are right there in front of us. By increasing your awareness of your surroundings you will learn more about your environment and yourself and by doing so you are increasing your knowledge base. Framing and reframing ideas, making connections combining ideas, challenging assumptions and developing a knowledge base of your domain are skills that enhance both critical and creative thinking.

It is recognizable to me that critical and creative thinking processes overlap and to improve these skills you need to become aware of what they are and practice building and enhancing them. Knowledge and imagination are not enough; every person needs the mindset and drive to solve problems. If you do not have the motivation to make changes in the way you think, you will not reframe ideas, make connections and challenge assumptions.

Connecting with Other Ideas: Additional Theoretical Frameworks

In addition to Eastern and Western views on creativity, I have connected with the emerging psychological field of Positive Psychology. I have made this connection for two reasons: first, many theories of creativity emphasize the role of positive mind frames and attitudes in increased creativity, and, second, embedded in Positive Psychology is the idea that people can and should continue to grow and develop in positive ways. A synthesis of these ideas will provide important underpinnings of the creativity course. Western views of creativity such as those of Gardner and Sternberg will provide grounding in research, as well as analyses of

creative processes. The Eastern view will be used to stress the importance of quiet reflection, contemplation, and quiescence in developing creative solutions. Positive Psychology will add to the mix, the importance of maintaining positive perspectives and the idea that creativity can be developed within individuals.

Positive Psychology

This project has been informed by the theoretical framework of positive psychology which is an outgrowth of humanistic psychology. The recently emerging field of positive psychology has been largely pioneered by the influential psychologists Mihaly Csikszentmihalyi and Martin Seligman. According to Csikszentmihalyi and Seligman, the purpose of positive psychology is to find and nurture the genius and talent that exist within individuals and increase satisfaction and fulfillment in everyday life (Compton, 2005). Positive psychology is a particularly useful theoretical framework for this course. As positive psychologist Barbara Fredrickson observes, "Positivity is an especially good investment when you need creative solutions fast," (Fredrickson, 2009). Her research has shown that visualizing a positive memory or receiving a small kindness measurably improves one's ability to develop creative and optimal solutions to problems.

Connecting with Fredrickson's assertion that positive psychology is useful for the rapid generation of creative solutions, this course hopes to develop creative problem-solving skills within individuals. Moreover, consistent with the goals of positive psychology, the Creative Thinking course I am developing is aimed not at recognized or established artists or acknowledged creative individuals, but, rather, designed for typical community college students who may be studying in any number of disciplines with the goal of transferring to a four year college or university, or who may plan to move directly into careers. The course will seek to

develop the creative potential of everyday individuals with the purpose of improving their ability to creative problem solve and find personal fulfillment in recognizing themselves as creative individuals, whether the context of their creativity is further academic work, in a career, or in their personal lives.

Consistent with the philosophy of positive psychology, the Creative Thinking course is designed to make students more aware of themselves in regard to values clarification, identification of individual passions, and strategies and processes that allow for and promote optimal engagement or "flow" (Csikszentmihalyi, 1990). Seligman has described this state as, "flourishing" (Seligman, 2011). While Seligman initially was recognized in psychology for his contribution of the notion of learned helplessness, his more recent work has been to investigate the psychology of personal well-being and self-fulfillment. His notion of learned optimism suggests that positive thinking as a trait can be learned and increased in individuals, and this is consistent with this course's approach to the notion of creativity as a natural tendency that can be increased through a combination of awareness and practice.

According to Seligman, there are three different elements of positive psychology: (1) positive emotion, (2) engagement, and (2) meaning. And, as stated earlier, Fredrickson's work has connected positive emotion with increased creativity. The idea of engagement is directly connected to creative thinking in regard to the flow that takes place when you are deeply immersed in an engaging activity. The notion of meaning is important in regards to finding your passion. We need to first be engaged in order to get to flow, for, while flow is not always an easy state to achieve, it is much more possible when an activity has meaning for you. Seligman suggests that areas of meaning might include a broad range of topics from religion, political

activity, environmentalism, to family relations (Seligman, 2011). One aspect of this course will be helping students to find these areas of meaning for themselves.

Seligman's Well-being Theory asserts that the state of flourishing is the goal of positive psychology. He says there are three core features of flourishing people: positive emotions; engagement and interest; and meaning and purpose. The additional features of flourishing are self-esteem, optimism, resilience, vitality, self-determination, and positive relationships, (Seligman, 2011 p .27). In order to flourish from Seligman's perspective, an individual needs to have all three of the core features as well as three of the six additional features.

In fact, many "big C" creative people, those who have made a major creative contribution within a specific domain (Gardner, 1999), commonly demonstrate the characteristics of flourishing - with the possible exception of optimism. The cliché of the suffering or depressed artist is well known. Still, Seligman asserts that there is no research supporting the idea that emotional suffering or negative attitudes lead to better achievement of goals. This is echoed by Julia Cameron in her view of creative people and the creative process described in *The Artist's Way* (2002). Cameron explains that one of the reasons depressed artists sometimes experience increased creativity is the extreme attention to detail that results from depression and other associated negative emotional states, but, she maintains that this is not a necessary or even desirable condition of effective creative thinking or expression (Cameron, 2002, p. 20) I agree people do not need to be depressed or mentally ill to practice and benefit from creative thinking strategies for an increase in creativity. The idea that positive emotions and clear mental states are good for promoting creativity will be prevalent in the course.

Growth Mindset

Positive psychologist Carol Dweck of Stanford University has written extensively about the idea of the growth mindset. Her research compares people with growth mindsets to people with fixed mindsets. Dweck has concluded that if people maintain a growth mindset, that is, if they believe they can improve and increase their intelligence, they are often able to do so. Also, the corollary is true as well. If people have a fixed mindset and believe that traits such as intelligence are unchangeable, then for those individuals, they are. In her book, *Mindset: The New Psychology of Success* (2006) Dweck has carried this idea further to the areas of education, sports, relationships, and personal change.

This course is fundamentally based on the premise that we are all born creative, but through experiences we become fixed on the idea that we are not creative or that creative work is primarily based in the arts. In the course I plan to dispel this idea and help students rediscover their creativity and learn new strategies to nurture and grow their capacities for creative work.

Thinking Fast and Slow

According to Daniel Kahneman (2011) there are two kinds of thinking. He describes them as System 1, or thinking *fast* and System 2, or thinking *slow*. In System 1 the brain is constantly surveying the environment and acts quickly on opportunities, responds to dangers, and creates impressions very quickly through short-cuts and heuristics. System 1 is prone to many mistakes and errors on the side of caution. Most of the time we work in System 1 and it is effective because we are accustomed to working in this mode and have created rules to work within this system of thought. Working in this system we are able to form quick impressions with limited information. System 1 can be used to inform System 2 taking the impressions from

System 1 to process and plan in more detail. System 2 is conscious and deliberate and is related to critical thinking.

Kahneman explains in great detail how Systems 1 and 2 work together to make decisions and how often one system can misinform the other, leading to errors in thought. In this regard, Kahneman makes a connection to creativity. He describes creativity as operating in System 1 and, like the positive psychologists, asserts there is a connection between happiness and positive mood and creativity.

Mood evidently affects the operation of System 1: when we are uncomfortable and unhappy, we lose touch with our intuition.... A happy mood loosens the control of System 2 over performance: when in a good mood, people become more intuitive and more creative but also less vigilant and more prone to logical errors. (Kahneman, 2011, p. 69)

I agree there may be a relationship between creativity and System 1 and positive emotions as Kahneman asserts; however, I would argue that creativity needs a balance of System 1 and System 2 thinking. I think the creative thinking Kahneman is describing is similar to deBono's concept of divergent thinking, where we freely let our imagination soar looking for new ideas and use our intuition without hesitation. However, creativity exists in a place where we work in both systems; we need System 2 and System 1 to work together and converge the new ideas with an analytical eye in order to create something new and applicable.

In this course students will be encouraged to work fluidly between Systems 1 and 2, allowing them to be creative and unfettered in their idea generation, but at the same time, returning to a critical thinking mode to examine the applicability of the solutions

generated. It is important for true creative thinking that solutions that are generated be applicable as well as novel.

Bringing Ideas Together

In the process of my research I came across a reference to the infamous "one word exam" from Oxford University's All Souls College. Students are given a writing prompt of one word and are then challenged to write an essay inspired by that word in three hours. This famous challenge has been called the hardest exam in the world because it requires not only a breadth of knowledge, but also the ability to generate creative connections. I thought this is an interesting way to view my synthesis project and therefore, I am assigning myself a one word exam with my writing prompt being the word "creativity."

In the context of this course, my operational definition of creativity will emphasize two of its key aspects - originality and applicability. While these two concepts are basic to the western notion of creativity, I am also planning to develop and add to this definition to include eastern ideas of personal fulfillment and the importance of contemplation in seeing the connectedness of things as the course examines different aspects of creativity and creative persons. By integrating the eastern and western views, I believe that students will construct more complete understandings of creativity and its importance to every individual's life. At the same time, I recognize that the context of this course is within a business-focused certificate program, so I will place a high degree of emphasis on the usefulness of creative solutions generated.

It is significant to me that creativity must produce something both new and applicable. I think generating different ideas can come quite easily when brainstorming especially if you practice this kind of exercise; however, it is more difficult to develop the applicability of new

ideas. It is only when new ideas are relevant to a specific problem or brings in new insights that creative thinking is useful for professions, domains of knowledge or life in general. This type of thinking is what I aspire to promote in myself and my students, looking at problems or issues from all angles and becoming comfortable expressing new ideas and applying them logically for every day problem solving.

At the same time, that the Eastern view of creativity will continue to provide a useful counterpoint to the Western view. The Eastern view, centered on developing a state of personal fulfillment and a connection to a primordial realm, is less focused on an innovative product and more connected to western psychology's conception of creativity part of self-actualization. It is more spiritual in nature than innovative solutions to problems (Lubart, 1999). Given the importance of understanding global perspectives, using eastern ideas in conjunction with western ideas will have great pragmatic as well as philosophical value in this course.

My Reflections on Key Decision Points and Insights in the Course Development

In this section I reflect upon key decision points in the design of the creative thinking course. This is not intended to provide the reader with a comprehensive and detailed description of what makes up the course, but rather is an opportunity to describe my thinking during the development process and why I made certain decisions in the course design. First, I identified a set of ongoing themes that came out of my research and supporting theories in order to connect topics throughout the course. Next, I reviewed other creative thinking college-level courses to determine the appropriate scope and sequence. This allowed me to determine the appropriate amount of content for an undergraduate, community college audience and to organize the content in a way that would be meaningful for students. Next, I created a series of major course

assignments that would require students to engage in creative thinking, think metacognitively about their processes, and socially engage each other's ideas in positive ways. Throughout, I made certain design decisions in order to take best advantage of and accommodate the online delivery format in order to use the delivery method to its full effect. In this section, I reflect upon my thinking and decision-making regarding each of these important aspects of the course design.

Course Themes

This course has four themes. They are: (1) Creative Process, (2) Creative People, (3) Creative Environments and (4) Finding Your Passion. Each of these themes is addressed in an iterative fashion throughout the course. The themes integrate the major ideas I intend to bring to the course. The theme Creative Process will address Western and Eastern ideas on how people engage in creative thinking and practice and sharpen their creative abilities. The theme Creative People will provide opportunities for critical thought about Big C creative people in order to promote in students insights and possible empathy for the creative processes of particularly successful and influential people. The Theme Creative Environments will encourage students to think about the social context for their creative work and to critically determine how to improve their social environment to be more conducive to successful creative thinking. Finally, the theme Finding Your Passion connects with Positive Psychology and other theories which emphasize the role of finding meaning and fulfillment in order to become fully engaged in creative thinking work. While these themes are presented independently, I recognize that they are interconnected and overlapping in many ways. For this reason, the four themes were not used to structure the content of the course, but rather as a set of important and reoccurring ideas.

Embedded in this course is the idea that in order to develop an understanding of the nature of creativity, students will need to be introduced to and begin to develop each of these themes throughout the semester. They will also need many opportunities to practice and reflect on the each four themes in order to fully grasp their importance to understanding the concept creativity and the creativity that exists within them. This is consistent with my own experience in the CCT program of developing understanding of own creative processes that made me successful as a student, professional and artist.

Therefore, students will be required to perform a variety of activities prompting them to think about their own creative process and discover new processes that help improve their own creativity. Through practice of a variety of different strategies and reflection on these strategies of the creative process, students will identify the ones that work best for them and why they are effective. Students will read and discuss the creative processes and environments that shape big "C" (2) creative people. I agree with Howard Gardner's assertion that in order to understand the nature of creativity we must look at how highly creative people practice their craft. (3) Creative Environments or place is also an important component to understanding the nature of creativity. In this theme, students will think about their own environment and what nurtures and inhibits their creativity. They will also study environments that nurture and inhibit others in the world in which they live. I believe the fourth theme (4) Finding your passion needs to be discovered in order to find your true creative self. Without a real investment in what you find interesting your creative practice will suffer. Discovering what it is that you are passionate about will provide the intrinsic motivation required for creative practice.

Scope and Sequence

After reviewing several creative thinking course syllabi, I decided to not focus heavily on creativity theory. Instead, I plan for students to come away from the course with the idea that they are developing their creativity and an understanding of the need to continue to practice using the strategies they have been exposed to in order to develop as creative thinkers. The syllabi I reviewed provided me with useful ideas about what content to cover, at what depth, and how to organize the content.

For example, in the online Creative Thinking course offered through CCT (Gallo & Witkowski, 2012), the course builds across a set of connected phases, going deeply into an examination of each. The phases in this course are: Understanding the Creative Process, Understanding Creative People, and Using Creative Strategies. These are certainly important aspects of creative thinking, but this course provided too much theoretical detail to serve as a basis of my course. Instead, these phases helped me to determine the list of course themes I eventually developed. It also helped me to understand the inter-relatedness of the themes.

A contrasting example of course I examined which informed my development of the course was a critical and creative thinking course previously offered at my community college. Don Marguils' "The Mind at Work, The Mind at Play" (Marguilis, 1992) provided useful examples of activities that engage community college students as well as samples of the level of depth and detail that would be useful and achievable by the intended audience. In particular I took away from this course the need to engage the learners in the material (often through technology tools), the importance of making practical connections to issues of importance for students, and the need to add an element of fun and enjoyment to the learning.

Through a review of other creative thinking courses, I was able to determine what this course should be and should not be. Working backward from a set of overarching course themes and goals, I structured the course around a series of, hopefully, relevant and engaging assignments. These assignments were designed using established theories, not to get students to become expert in creative thinking, but rather for them to recognize the importance of creative thinking, learn about themselves as creative thinkers, and develop a repertoire of creative thinking strategies. The next section describes the major assignments in more detail, where they fall in the course sequence, and how they support the intended scope of content in the course.

Major Assignments

The course will have four major assignments that will comprise the majority of the grade. Students will engage in *Weekly Online Discussions*, responding to prompts designed to get them to apply intellectual material from the course and expand their understanding of course concepts. Students will be asked to create an *Expanded Personal Definition of Creativity* that will be informed by course readings and class activities. Students will write short papers based on the course themes, including one consisting of a study of a creative person who is interesting to them. This *Research Paper on a Creative Person* will not only describe the creative process of the person they study but will also relate it back to their own experiences and aspirations. In addition, students will practice a creative thinking strategy for brainstorming in small groups using an abstracted, imaginary context in an activity called *Scifi SCAMPER*. Students will keep an ongoing *Reflective Journals* to develop their insights into and awareness of their learning. Also, students will engage in weekly *Me Time activities* (based Cameron's idea of the *Artist Dates*) to help them to discover their individual passions. Finally, over the course of the semester, students will participate in a long-term project called *Problem of Personal Interest* *Project (PPIP)* in which they identify a problem in their area of individual passion that requires a creative solution, find a solution and evaluate its efficacy. What follows is more detail regarding the major assignments, my thinking regarding their development and purposes, and a description of my role in the course.

Weekly Online Discussions will take place within the discussion boards in the Blackboard Learning Management System on weekly readings, activities and topics introduced. Discussion prompts will elicit deep thought and understanding through dialogue. The online discussion board will provide the added value of immediate feedback to the students through participation in discussion with their peers and the instructor. Carefully designed discussion questions will allow me to monitor the students' progress in the acquisition and application of course concepts.

Given my personality and style I think facilitating discussions will be much easier for me in an online environment. In this role, I will not be the expert leading the discussion instead I will act as more of a peer facilitator, leading the group only when they stray from the intended learning objectives. I discovered in 2002, when I took my first online course that I really enjoyed online asynchronous discussions and I participated in them much more freely than a face to face discussion. In fact, I confess that before enrolling in CCT, I would never participate in class discussions unless I was called on to do so. Moreover, I have come to realize the reflective nature of online discussion is what I enjoy the most from this interaction. In an online discussion I have time to reflect on the question and my response and will not feel intimidated by the time needed to provide an immediate response.

Creativity Definition Assignment – The expanded personal definition of creativity will take place over five weeks in the course. Students will begin working in pairs to define three words

associated with the concept of creative thinking: creativity, originality, usefulness. After participating in readings and discussions on the topic of creativity, students will be asked to expand their definitions, now working independently, to include more detail and provide specific examples. I will provide feedback on the definitions prompting students to think about course concepts as they expand their understandings.

This activity came to me while participating in the Artists Way this semester. As I was participating in the morning papers, I realized I was expanding my own definition of creativity by revisiting my earlier writings and adding new discoveries about creativity that I wanted the students to explore while participating in the course. I think this process will be a good one for the students to participate in as they discover what creativity means to them and to society. It can also be used to get them started writing in their journals.

Course Theme Papers – The course will contain three Course Theme Papers as part of the Weekly Activities Grade. These papers, two to three pages in length, will address the course themes of Creative People, Creative Process, and Conditions for Creativity. The theme paper on a creative person will be a descriptive profile of someone who the student considers to be a creative person, and will include an analysis of their creative process and a connection to their own creative aspirations. Students will need to connect to the concepts presented in the readings creative process and environments to the case. The Oxford University "One Word Exam" will serve as the final Course Theme Paper prompt. Students will choose one word from a list of vocabulary terms they have been exposed to during the course and craft an essay inspired by that single word. There are no right answers to this paper, however each student's response will need to demonstrate their knowledge of the subject and their ability to generate creative connections to the concepts presented in the class and their personal experiences. These assignments will

prompt students to use strategies they have practiced during the course to help leverage what they know and to stretch their imaginations and abilities to make creative connections. The goal is for students to practice some of the divergent thinking strategies in the course and not to get bogged down in research.

Scifi SCAMPER – Is a group activity in which students will practice working as a group to find creative solutions. Students will read an excerpt from *The Left Hand of Darkness* by Ursula LeGuin, view a PowerPoint presentation with the main ideas extrapolated regarding the culture of Gethen (fictitious planet in the story), and they will view a map and Wiki-pedia entry on the book. The Left Hand of Darkness is a science fiction novel about a planet, Gethen, where it is always winter and the technology is more purposefully primitive than on earth. The most significant difference is that the inhabitants are on a cycle where they change from male to female. Using this story will force the students to be creative because they will not have any preconceptions of how things should be. Students will be forced to think about the cultural differences without gender differences on Gethen. They will then be asked to create something novel and applicable for Gethenian use. This could be a piece of technology, clothing, architecture, or any other useful tool for the planet. I believe this activity will help the students stretch their creativity and practice their skills in more abstracted way.

This activity will use the popular SCAMPER creative problem solving strategy. SCAMPER is an idea generating activity that uses a checklist of questions to spur new ideas by making connections to seemingly unrelated ideas or objects. In this activity students will practice brainstorming, stretching their thinking by looking at different perspectives and making connections to things that appear to be unrelated. The activity also works well in groups; group members can split up the activities or do them together and compare results. Although I have

used SCAMPER in the past, I did not use this strategy to come up with the idea for the Scifi Scamper activity; I actually made the connection one week during one of my Artist Dates.

I was on one of my typical Artist Dates in which I go for a walk and take pictures while walking. Usually I do not focus on the photography part of the walk, but use this time to think about the development of the creative thinking course. While walking I was thinking about creating an activity where students would work together to create something new and applicable. I was thinking about how they should have similar interests in the "object" they would be creating and how I could come up with some different topics from which they would choose. Also, I thought about how I would pair them up for such an activity. The activity was not very clear and I was not invested in any one idea; I knew I needed to flush it out. While I was walking and thinking I started to take some photographs of different landscapes and plant life, when I noticed a small plant in the ground that looked peculiar from a far and quite alien. Since I enjoy watching and reading science fiction stories, I automatically started to think what if it was an alien life form? And then I had my "ah ha" moment! I would find a science fiction short story for students to read and work in groups to create something new and applicable for this alien world.

Even though I was looking a plant and actively taking pictures; I was continuing to think about the group assignment. I feel that as a creative problem solver, often I will come to solutions that could be sufficient in a short amount of time, but if I wait and let my ideas incubate I will find myself coming up with a much more creative solutions by making a connection that sometimes seem to be a little too obvious.

"Me Time" – As part of my creative journey creating the course I have found the artist dates to be the most beneficial to the development of my creativity. The Artist Date is an activity developed by Julia Cameron from the *Artist's Way*. In this assignment, students will engage in the "Me Time" activity (based on the Artist Dates) on a weekly basis. Students will set a block of time, at least two hours, in which they will do something they enjoy by themselves. Students may choose to go to a movie, go for a walk, play an instrument, go shopping, but anything they choose, they must do alone. Students will summarize their weekly "Me Time" experiences in a paragraph or two each week using the online Journal tool in Bb. The "Me Time" activities provide an opportunity for self-intimacy. Often when we are feeling creatively blocked it is because we are doubting our potential to create. The "Me Time" activities provide a positive avenue to do something you enjoy for yourself and your creativity. They will re-connect students with their inner artists and will be helpful in helping students to become mindful of what makes them happy and content.

Formerly, the "Me Time" activity was titled its original name "Artist Dates". However I then received some feedback from my reader Luanne Witkowski who suggested the term artist may be intimidating to the students who will be taking the course and I agreed.

Reflection Assignments – The course will contain a number of opportunities for students to reflect. In addition to weekly reflections on the *Online Discussion Board* reflecting on course readings and video assignments, students will engage in *My Journal Assignment* to allow them to reflect on their own creativity - for in order to rediscover your creative self, you first need to find it. In the *My Journal Assignment*, students will improve their understanding of their own creative process and reflect on what strategies work and what strategies do not work for them. They may choose to purchase a physical journal or create a digital one in Blackboard to

write down their ideas, reflections on readings, drawings, etc. I will advise them to keep their journal (physical or digital) accessible to them as much as possible during the semester in order to write down any ideas they have, at any time, about anything, and anywhere. This is an easy way to help them become aware of their own creative process, new ideas, and provide a simple way to return to their ideas later. The journals will be handed in at the end of the semester and graded primarily on volume, not quality. Writing is required for the journal, however sketching, drawing, doodling, diagramming is also encouraged.

Even though I sometimes resist this activity myself, when I completely engage I am not only productive in solving problems, but I also come up with creative solutions to solving problems. I often look back at what I have written and sometimes I'll remember something I wrote from months before. In addition to helping capture everything you are thinking about, the act of writing down your thoughts provides an avenue for transferring your knowledge into long term memory. Sometimes when I am listening or engaging in a thoughtful conversation, if I do not write the important information down and reflect on what it means to me then I often will not remember. Reflecting on meaning and making connections to what students already know is an important part of the process of learning and reflection is an excellent means of doing this.

Problem of Personal Interest Project (PPIP) One long-term project in this class will be the identification of a problem of personal interest to the student. This may be a business problem, an academic problem, or a problem related to the students' personal creative process or unique interest. Students will approach this problem in stages over the course of the semester helping them to identify a practical problem requiring a creative solution while working through a variety of activities designed to help understand and boost their creative processes.

This assignment will be chunked into four sections that are aligned with four of the five units in the course. In unit 2, students will work through activities that will help them identify their passion. In addition to finding their passion, they will engage in activities that nourish their creativity and identify what values are important to them. Finding your Passion theme paper will be a reflective paper that will talk about their process in finding their passion and the importance of participating in projects that are important to them. I believe letting the students identify their own problem to solve will increase motivation and engagement in the activity.

In Unit 3, students will read and discuss the nature of creativity and the impact of positivity and ways of thinking that nurture creativity. They will also engage in activities to help them look at their problem through different lenses and perspectives. Students will continue to be exposed to different types of activities to boost their creativity. In this section of the PPIP they will write about the different types of activities they are using to solve their problem and how change in perspectives and thinking styles are impacting the way they look at problems.

In Unit 4, students will be exposed to ideas regarding nurturing spaces and incubation; by engaging in discussion and activities they will discover the spaces and learning styles that encourage their creativity and flow. Students will continue to participate in activities to boost creativity, including working in groups and making decisions as a group. In this section they will write about how they manage their own creative process and how they came up with the solution to their problem.

Finally in Unit 5, students will reflect on their process and choices while developing creativity plan for the future. After writing their creativity plan, students will take each section of

the PPIP writing assignments and create one paper or Problem of Personal Interest Project paper. To do this they will need to connect the sections by writing some transitions and additional insights. In the end the paper should be in substantial in length and, considering the demographics of the community college students who may be taking this course, the paper will constitute a significant academic as well as personal achievement boosting both their confidence and creative thinking abilities.

Online Delivery Format

When it was first suggested that I put Creative Thinking online, I was not sure it was the right idea. While I understood the reasoning that a new, untested course for a new certificate program would be more likely to get the necessary enrollments to run if it was available to the widest population of students, I had not initially pictured my course as online. My own study of creative thinking in CCT had been primarily face-to-face, and I had found it to be engaging and effective. Also, when I mentioned to people that I would be teaching the course online, it was not uncommon for me to hear responses such as, "Really? Do you think *this* course can be taught online?" Fortunately, I do.

For a large part of my career at Middlesex, I was part of the team that worked with faculty to put their courses online. I collaborated with over a hundred instructors from a variety of disciplines to help them with the not only the mechanics, but also the pedagogy of online instruction. The online learning program at Middlesex started in 1996 and from its beginning was rooted in social constructivist learning theory. Over the years of working in that program, I participated in many helpful professional development programs for teaching online that have provided me with a framework for the kind of online instruction that is effective with community college students. Online courses that work well with our students are highly engaging, ask

students to apply course content to meaningful contexts, and allow for social interactions around course topics to help students to develop more complex understandings.

To make the course successful online it must be engaging to students. I need to make it clear to students why studying creative thinking will be of interest to them. Therefore, the online assignments have been to be connected to contexts that the students find understandable, interesting and important. Also, to keep students involved and to develop a sense of community and positive social context for creative thinking work, students will be required to interact with me and with each other multiple times each week. Students will be required to respond to each other in online discussions, engage in group work using the group tools in Blackboard, and provide peer feedback on major assignments. Finally, whenever possible, I have tried to connect to interesting information presented on websites in a variety of formats. This is done through the use of TED Talks, online videos, NPR articles to supplement course readings.

Continuing the Journey: Next Steps

Evaluation

In reflective practice we are continually thinking about our thinking, not only looking objectively at what has transpired, but also including personal reflections or relevant experiences from our work or personal lives, possibly from different contexts that apply to the current situation. Most importantly, these reflections should be continually used to develop and improve the practice. I believe if you develop a habit or reflective process that works for you, you should continue to review your practice whether you are learning new ideas, looking at your daily work environment and actions or your personal interactions with people. This habit will help you grow and become more mindful. As part of my continuing journey, I plan to make new connections with Jan Arabas, Professor of Art and Robert Fera, Professor of Psychology, at Middlesex Community College. I am hoping to meet with both of these people at least once a month during the fall semester while teaching the course and feel they will provide an avenue for me to discuss and provide support for problems I may be facing as I deliver the course material and students respond to the materials.

One thing I know about myself as a learner is that I need to think and process information for a while before I can write it down. Talking with other people helps me to process my own thoughts. Through the Critical and Creative Thinking Program (CCT) I have become aware that these aspects of my process are practicing what are called mindfulness activities. Moreover, through my work I recently attended a Positive Psychology seminar which inspired me to begin practicing meditation. It was explained in the seminar that you can practice a form of meditation during physical activity. This idea intrigued me, reminding me of the Taoist emphasis on breathing exercises to lead to the state of *ching*, and I decided to try to practice some form of meditation combined with physical activity.

Recently, I discovered that I enjoy running and during my runs, usually first thing in the morning, I now take the opportunity to meditate and reflect. While running I just listen to the sound of my feet patter on the pavement as I silently take in the natural beauty of my surroundings. I am fortunate to live on the edge of a large state forest, and the scenery is inspiring at all times of the year. I think about interactions I have had with people or particular projects I am working on at work or for school. While running, I often make new connections or even come to an 'ah-ha' moment and need to rush home to write them down, or I will continue to ponder them. It is interesting how, before the Positive Psychology seminar, which influenced the activities of this course, I was not conscious that I was practicing meditation during my runs;

however now that I am, I consciously make an effort to reflect on my practices while running. These are the types of insights I hope students taking my course will discover.

As I was developing the course objectives, unit activities and completed my research, a vision for my project emerged with a clear understanding of the type of creative thinking course I wanted to develop. It was through writing and dialogue that I had achieved this goal. By sharing my thoughts on the course with faculty in the Psychology Department at Middlesex Community College, the Assistant Dean of the Business Division, my classmates and other interested parties at my work I was able to redefine my goals for the project and include the Positive Psychology framework that I had not realized before was informing my thinking.

The process of communicating my ideas to the class for the work in progress presentation was helpful for me to articulate my thoughts coherently. Also, the feedback I received was invaluable to my project. During that process one classmate, through a plus delta activity (Taylor & Szteiter, 2011), suggested I talk about my passion for creativity. It was evident to her that finding your passion was a major component to the course; however, my passion for the subject had not come through in the presentation. The other valuable feedback was that it was not clear which creativity theoretical framework was informing my project. Looking back at this I realize I had not embraced one theory, but had been taking pieces from different theories; therefore, my objectives were not clear. This feedback forced me to think harder about my objectives and it was at that time that I realized Positive Psychology was a major influence in my thinking while developing this course.

Reconnecting with Myself as an Artist

The Artist's Way (Cameron, 2002) was another major influence in the development of this project, and after participating in the program I realized it too is connected to the Positive Psychology framework. The Artist's Way is a twelve-week course that not only deems that all people have creative potential, but it also considers social factors that inhibit creative possibilities. For example, conditioning, family, friends and educators may discourage us from pursuing ourselves as creative thinkers; *The Artist's Way* provides strategies to overcome these negative influences in order to develop a more contentment and healthy way of thinking about ourselves and our creative process.

According to Julia Cameron the primary purpose of *The Artist's Way* is to put people in touch with the power of their own internal creativity (Cameron, p 207). My intention when I began the twelve-week course was to engage in the program as an artist and experience the program by developing my creativity through expressing myself through photography. During the process I discovered; (1) even though I was taking pictures on the Artist's Dates, I was thinking and making new connections for the development of my course instead of developing and unblocking as an artist. This was a powerful realization for me, creativity needs focus and attention. My attention was focused on the development of the course and not as an artist; (2) I came to realize that creative confidence is something most everyone struggles with. It is a normal feeling and through reflection exercises I can put my censor in check; (3) even though I did not rediscover my creativity through photography I did re-identify as a creative person by developing new ideas and activities for my course while participating in the twelve-week

program; and lastly (4) I identified through reflection and discussion with Peter Taylor, Advisor of my synthesis a need for a support network while teaching the course.

As I begin to teach this course and students react to the assignments, I will continue to make changes and reflect on the parts that are working and not working so well. In addition, I plan to continue to practice the tools I learned in *The Artist's Way* and change my focus to my photography so that I can experience the program as an artist as well as a thinker. This continued work as an artist and thinker will provide me with the experience and a depth of knowledge about creativity and the creative process that will continue to enlighten me and provide guidance for my students.

Bibliography

- Baer, J. (1998). Point and Counterpoint: The Reason for Domain Specificity of Creativity. *Creativity Research Journal*.
- Cameron, J. (2002). *The Artist's Way A Spiritual Path to Higher Creativity*. New York: Penguin Putnam Inc.
- Chang, C.-y. (2011). Creativity and Taoism A Study of Chinese Philosophy, Art and Poetry. London, Philadelphia: Singing Dragon.
- Compton, W. C. (2005). An Introduction to Positive Psychology. Wadsworth.
- Csikszentmihalyi, M. (1990). Flow: The Psychology of Optimal Experience. Harper Collins: New York.
- Csikszentmihalyi, M. (1996). Creativity: Flow and the Psychology of Discovery and Invention. New York: Harper Collins.
- Csikszentmihalyi, M. (1999). Implications of a Systems Perspective for the Study of Creativity. In R. J. Sternberg, *Handbook of Creativity*. Cambridge: University Press.
- de Bono, E. (1970). Lateral Thinking . New York: Harper Perennial.
- Dominowski, R. L. (1995). Productive Problem Solving. In S. Smith, T. B. Ward, & R. A. Finke, *Creative Cognition Approach* (p. Chapter 4).
- Gallo, D., & Witkowski, L. E. (2012, January). CRCRTH 602 Creative Thinking Online Syllabus.
 Retrieved February 6, 2013, from University of Massachusetts Boston Critical and Creative Thinking Program : CRCRTH 602 Creative Thinking
- Gardner, H. (1993). Intelligence Reframed. New York: Basic Books.
- Gardner, H. (2006). Multiple Intelligences. New York: Basic Books.
- Kahneman, D. (2011). Thinking, Fast and Slow. New York: Farrar, Straus and Giroux.
- Kaufman, J. C., & Sternberg, R. J. (2010). *The Cambridge Handbook of Creativity*. New York: Cambridge University Press.
- Kozbelt, A., Beghetto, R. A., & Runco, M. A. (2010). Theories of Creativity. In J. C. Kaufman, & R. J. Sternberg, *The Cambridge Handbook of Creativity* (pp. 20-47). Cambridge: University Press.
- Lubart, T. I. (1999). Creativity Across Cultures . In R. J. Sternberg, *Handbook of Creativity*. Cambridge: University Press.

Marguilis, D. (1992). *The Mind At Work; The Mind At Play.* Bedford, MA: Middlesex Community College.

- Michalko, M. (2006). Thinkertoys. New York: Random House.
- Michalko, M. (2011). *Creative Thinkering: Putting Your Imagination to Work*. Novato: New World Library.
- Moore, M. T., & Murdock, M. C. (1991). On problem-solving and problem-finding research. *Creativity Journal Research* 4, 290-292.
- Nickerson, R. S. (1999). Enhancing Creativity. In R. Sternberg, *Handbook of Creativity* (pp. 392-430). Cambridge: University Press.
- Robinson, K. (2010). *Changing Education Paradigms*. Retrieved October 29, 2012, from TED Talks: http://www.ted.com/talks/ken robinson changing education paradigms.html
- Seely Brown, J., & Thomas, D. (2011). A New Culture of Learning: Cultivating the Imagination for a World of Constant Change.
- Seligman, M. E. (2011). Flourish: A Visionary New Understanding of Happiness and Well-being. New York: Free Press.
- Shekerjian, D. (1990). Uncommon Genius. New York: Penguin Books.
- Sternberg, R. (2003). *Wisdom, intelligence, and creativity synthesized*. New York: Cambridge University Press.
- Sternberg, R., & Lubart, T. I. (1999). The Concept of Creativity: Prospects and Paradigms. In R. Sternberg, *Handbook of Creativity* (pp. 1-15). Cambridge: University Press.
- Taylor, P. J., & Szteiter, J. (2011). Taking Yourself Seriously. Arlington: The Pumping Station.

Appendices

Appendix A: Summary of Theories of Creativity

Category	Summary	Six P's Focus	Level of Magnitude
Developmental	Creativity develops over time. (from potential to achievement); mediated by an interaction of person and environment	Person, Place, Potential, & Product	Mini-c to Pro-c
Psychometric	Creativity is measured reliably and validly.	Primarily Product	Little-c to Big-C
Economic	Creative ideas and behavior are influenced by market forces, and cost- benefit analyses.	Person, Place, Product & Persuasion	Little-c to Big C
Stage & Componential Process	The creative process proceeds through a series of stages or components.	Primarily Process	Mini-c to Big C
Cognitive	Specific types of thought processes characterize creative people and accomplishments.	Person & Process	Little-c to Big C
Problem Solving & Expertise Based	Creative solutions to problems result from a rational process, relying on cognitive processes and domain expertise.	Person, Process & Product	Little-c to Big C
Problem Finding	Creative people proactively try to discover problems to solve.	Process, Person, & Potential	Primarily Mini-C

Category	Summary	Six P's Focus	Level of Magnitude
Evolutionary (Darwinian)	Eminent creativity is evolutionary in process, involving blind generation and selective retention.	Person, Process, Place & Product	Primarily Big C
Typological	Creators vary according to key individual differences.	Primarily Person; but also Process, Product, and Place.	Little-c to Big C
Systems	Creativity occurs within a complex system of interacting and interrelated factors.	Varying emphasis across all P's.	Little-c to Big C
* Enom "The C	ambridge Handbook of Creativity " edited	d hy Igmag C Kaufa	an and Dobaut I

* From "The Cambridge Handbook of Creativity," edited by James C. Kaufman and Robert J. Sternberg, 2010, Cambridge University Press, pages 27-28.

Appendix B: Syllabus

PSY 108-30 – Creative Thinking Course Syllabus Fall 2013

Instructor: Noreen McGinness Olson

Course Description

This interdisciplinary course will increase students' understanding of the nature of creativity and creative problem solving. It provides students with an introduction to skills and techniques designed to increase their creativity and ability to develop innovative solutions to meaningful problems. Students will analyze the creative process from a variety of theoretical perspectives and participate in activities that develop capacities to generate original ideas. Topics include modern theories of creativity from psychology and allied fields, environments that enhance creative functioning, techniques to promote divergent thinking, and case studies of creativity will be explored and practiced. Knowledge and skills gained in this course are applicable to solving business, scientific, and environmental problems, as well as the arts and sciences and other areas of personal interest. Prerequisites: Eligibility for ENG 101

Institutional Student Learning Outcomes (ISLOs) Critical thinking, Written and Oral Communication, Personal and Professional Development (ISLOs)

Learning Outcomes

Upon completion of this course students will be able to:

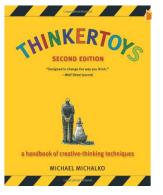
- Demonstrate a deep understanding of the nature of creativity and its relationship to other psychological concepts and cognitive processes;
- Define creativity and creative problem solving and explain the significance of developing creative solutions;
- Discuss creative thinking and creative problem solving from a variety of theoretical perspectives;
- Relate the concept of creativity to other psychological concepts and cognitive processes;
- Explain the significance of several case studies of creative problem solvers to understanding the nature of creativity, the creative process, and novel idea production;
- Observe clearly, generate ideas and alternatives, overcome blocks, recognize and solve problems, and assess results;
- Explain how values, frames of reference, and codes of ethics influence problem solving and decision making;
- Recognize creativity and the ability to generate creative solutions to meaningful problems within oneself;
- Identify and practice a variety of idea generation and creativity boosting techniques; such as: including: goal setting, brainstorming, reflection, pattern recognition, lateral thinking, values

- clarification, concept mapping and problem solving.
- Apply psychological concepts about creativity from the course to explore and expand their own creative processes;
- Construct, present and evaluate, and creative solutions to problems that are important to them;
- Create and assess a practical plan to identify problems, overcome blocks, develop creative solutions, and assess results in their lives.

Grading

- Weekly Assignments (Artist Dates, Theme Papers and Activities) 20%
- Creativity Definition 15%
- Discussion Board Participation 20%
- Weekly Journal 20%
- Problem of Personal Interest Final Submission 25%
- Total 100%

Course Materials and Texts



ThinkerToys, 2nd Edition MichaelMichalko ISBN-13: 978-1580087735



Uncommon Genius Denise Shekerjian **ISBN**-13: 978-0140109863

Late Work

Assignments must be completed by assigned due dates. Late work will not be given full credit.

Academic Honesty

Plagiarism will result in a grade of zero on the assignment and possible course failure. Cheating on examinations, tests or papers will result in a grade of F. That being said, I know that in an online class it is easy to copy and paste information directly from the web, but you must always take the extra step of putting the information in your own words. This is for two reasons: 1) putting the information into your own words will help to make sure you really understand it (and help you to know what you may still not understand) and 2) it is just not right to take other people's work and present it as your own. Okay?

Student Conduct

In this class, you are expected to behave in ethically and ways that are consistent with the requirements of the MCC Student Handbook and MCC Honor Code. You can find the MCC Student Handbook at

http://www.middlesex.mass.edu/studenthandbook/ MCC also has an Honor Code you can view at

http://www.middlesex.mass.edu/deanofstudents/downloads/hcodeflyer.pdf

Course Communication Policies

Discussion is an integral part of this course. You should be prepared to become involved in every class discussion, provide feedback to others, and maintain collegiality. Each week there will be discussion board activities. You will be asked to post a response to a question, article or video clip. In most cases, you will be asked to reply to at least one other classmate's post. After the required posts are made, you are free to make as many additional posts as you like.

Keep in mind that in a collegial atmosphere discussion and collaboration are encouraged. I will require you to adhere to proper etiquette on the discussion board. Please do not say anything that may be offensive or inappropriate. Foul language and slang are not acceptable. Let's keep it professional, people. The discussion boards are worth 20% of your grade. I will not be grading each individual post. Instead I will give you an overall grade for each class discussion. Grades are based on the frequency and content of your posts and how much you have added to the class discussion.

Feel free to email me with individual questions, but be sure to review the unit folder before emailing. I will make every attempt to respond to your email within 24-48 hours. Be sure to use correct email protocol:

- 1. identify yourself in the subject line
- 2. write clearly
- 3. use proper spelling and grammar (including capitalization)

I know all of this may sound picky, but we will communicate mainly through writing, and taking short cuts in spelling and grammar may confuse what you mean to say and lead to miscommunications or possibly conflict with others.

How to Get Help

If you need help working on your assignments, Middlesex provides free academic tutoring both faceto-face and online. You can find more information at the Academic Support website

(http://www.middlesex.mass.edu/tutoringservices)

If you are experiencing technical problems, please call the Presidium Learning Helpdesk at 1-866-669-6140. Help is available 24 hours a day, 7 days a week.

Completion Schedule

TOPIC	READING/VIDEO ASSIGNMENTS	MAJOR
		ASSIGNMENTS
Unit 1: What is	Week 1	<u>Week 1</u>

Creativity? Week 1-2 • Defining Creativity • Theoretical Perspectives on Creativity	Listen to Podcast: Creativity and the Everyday Brain (On-Being) <u>http://www.onbeing.org/program/creativity-and-</u> <u>everyday-brain/1879/audio?embed=1</u> Read: Unit Synthesis in Blackboard In the Beginning, pp. xi - xxvi in Uncommon Genius Chapters 1 & 2, pp. 3-21, - Thinkertoys What is Creativity Anyway?	Ongoing Activities - Reflective Journal - Me Time - Weekly Discussion Board Weekly Activities - Imaginary Lives - Collage - What are my interests?
	http://www.huffingtonpost.com/jan-phillips/what- is-creativity-anyway_b_610014.html Week 2 Watch: TED Talk: Ken Robinson - <u>Do Schools Kill Creativity</u> Short Film: <u>Creative Problem Solving and the College</u> <u>Student</u> by Noreen McGinness Olson Steve Jobs Graduation Speech - <u>http://www.youtube.com/watch?v=D1R-jKKp3NA</u> Read: Unit Synthesis in Blackboard Part One, pp. 1-15 in Uncommon Genius NPR - More than 50 years of Putting Kids Creativity to the Test <u>http://www.npr.org/2013/04/17/177040995/more- than-50-years-of-putting-kids-creativity-to-the-test</u>	<u>Week 2</u> Ongoing Activities - Reflective Journal - Me Time - Weekly Discussion Board - Creativity Definition Weekly Activities - Finding Your Passion - Design Autobiography Book Cover
Unit 2: How Am I Creative? Week 3-5 • Nourishing Your Creative Side • Values Clarification • Finding Your Passion • Change in Perspectives • Problem Identification	Week 3 Watch: TED Talk: How to Build Your Creative Confidence by David Kelley Using Your Whole Brain http://ecorner.stanford.edu/authorMaterialInfo.ht ml?mid=2104 Do What You Love http://ecorner.stanford.edu/authorMaterialInfo.ht ml?mid=2105 PBS New Heroes - Fabio Rosa http://www.youtube.com/watch?v=LfmFEBRmgLU Read: Unit Synthesis in Blackboard Thinker Toys -Chapter 8, pp. 66-71 Mind Mapping A Change in Perspective, pp. 99-114 in Uncommon	Week 3 Ongoing Activities - Reflective Journal - Discussion Board - Me Time Weekly Activities - Paying Attention - Create a Mind Map of a "Me Time" using <u>http://bubbl.us</u> - Meditation Activity
	Genius Week 4 Watch: Thinking Like a Traveler <u>http://ecorner.stanford.edu/authorMaterialInfo.ht</u> <u>ml?mid=2099</u> Field Observations with Fresh Eyes <u>http://ecorner.stanford.edu/authorMaterialInfo.ht</u> <u>ml?mid=2100</u> Dina Abdel Wahab Schools for the Disabled Egypt <u>http://www.youtube.com/watch?v=VgarVV7dHPI</u> Read: Unit Synthesis in Blackboard	<u>Week 4</u> Ongoing Activities: -Reflective Journal -Discussion Board -Me Time Weekly Activities: -Squeeze the Challenge Activity Problem of Personal Interest (PPI) Stage 1 - How am I creative and What am I Passionate About?

	Taking on Risk, pp. 16-31 in Uncommon Genius Challenges, pp. 22-34 in Thinkertoys <u>Week 5</u> Watch: Recognizing Opportunities in the Rain <u>http://ecorner.stanford.edu/authorMaterialInfo.ht</u> <u>ml?mid=2791</u> Weird or Just Different? <u>http://www.ted.com/talks/lang/en/derek_sivers_we</u> <u>ird_or_just_different.html</u> Kawasaki - Making Meaning in Your Company <u>http://www.evancarmichael.com/Entrepreneur-</u> <u>Advice/352/Interview-of-Mohammad-Yunus-of-</u> <u>Grameen-Bank.html</u> Read: Unit Synthesis in Blackboard NPR Five Ways to Boost Your Creativity <u>http://www.npr.org/2012/06/21/155369663/5-ways-</u> <u>to-spark-your-creativity</u> Take the Via Strengths Finder <u>http://www.viacharacter.org/www/</u>	<u>Week 5</u> Ongoing Activities: -Reflective Journal -Discussion Board -Me Time Weekly Activities -Creativity Definition Expansion - Reframing Activity
Unit 3: Understanding Creativity Week 6-9 • Flow and Positivity • Ways of Thinking (Thinking Styles) • Motivation and Resilience • Risk-taking • The Role of Play	Week 6 Watch:ED Talk: TED Talk, Creativity, fulfillment and flow: Mihaly Csikszentmihalyi Creativity and Flow http://www.pbs.org/thisemotionallife/blogs/flow Never Sorry http://aiweiweineversorry.com/ Reframing Matrix http://www.mindtools.com/pages/article/newCT_05 .htm DeBono's Thinking Hats http://www.debonogroup.com/six_thinking_hats.ph P Read: Chapter 4 and Chapter 20, Thinkertoys; Sustaining Concentration and Drive, pp. 129-145	Week 6 Ongoing Activities: -Reflective Journal -Discussion Board -Me Time Weekly Activities - False Faces Activity - Learning Styles Activity - Adapt & Combine Activity
	Week 7 Watch: Objectified http://www.objectifiedfilm.com/stream/ http://www.youtube.com/watch?v=nUHROAtyGlg Read: Building Resiliency, pp. 195-210 Uncommon Genius Staying Loose, pp. 32-44 Uncommon Genius Week 8	<u>Week 7</u> Ongoing Activities: - Reflective Journal - Discussion Board - Me Time Weekly Activities - Idea Grid - Theme Paper 2 - PPI Stage 2 - Problem Identification paper Week 8
	Watch: Tim Brown - Creativity and Play <u>http://www.ted.com/talks/tim_brown_on_creativity</u>	Ongoing Activities: -Reflective Journal -Discussion Board

	<u>_and_play.html</u> Read:	-Me Time Weekly Activities
	Unit Synthesis in Blackboard When Adults Play <u>http://www.huffingtonpost.com/dr-tian-</u> <u>dayton/when-adults-play_b_666145.html</u>	- Share with a partner your problem and strategies for solving your problem
		Week 9 Ongoing Activities: - Reflective Journal - Discussion Board - Me Time Weekly Activity - Playful Activity - Creativity Definition Project
Unit 4: Managing Your Creative Process Week 10-13 • Creative Spaces • Incubation • Creativity in Groups,	<u>Week 10</u> Watch: Wangari Maathai <u>http://www.youtube.com/watch?v=koMunNH1J3Y</u> Read: Unit Synthesis in Blackboard SCAMPER pgs 72-108 in Thinkertoys	Week 10 Ongoing Activities - Reflective Journal - Discussion Board - Me Time Weekly Activity - Creative Person Paper Due
 Groups, Processes and Making Decisions Learning Through Doing 	Week 11 Read: Unit Synthesis in Blackboard Tony Hsieh, Zappos.com's chief executive, said he did not want employees to work from home. http://bits.blogs.nytimes.com/2013/03/06/engineer ing-serendipity/ GroupThink http://www.newyorker.com/reporting/2012/01/30/1 20130fa_fact_lehrer A Shift in Scenery, pp. 115-128 in the Uncommon Genius	 SciFi Scamper Part 1 - Group Invention Project Week 11 Reflective Journal Discussion Board Me Time Weekly Activity SciFi Scamper Part 2 - Group Invention Project Week 12 Reflective Journal Discussion Board Me Time Group Creativity Definition Week 13 Reflective Journal Discussion Board Me Time Group Invention Project Peek 13 Reflective Journal Discussion Board Me Time Group Invention Project PPI Stage 3 - Solving the Problem/My
Unit 6: Putting it	Week 14	Creative Process Week 14
All Together Weeks 14 and 15 • Your Personal Creativity Plan	Read: Unit Synthesis in Blackboard For the Love of It, pp. 211-222 in <i>the Uncommon</i> Genius Crafting an Elevator Pitch	- Elevator Speech Assignment -Oxfords "One Word" Exam Week 15

http://www.m	hindtools.com/pages/article/elevator-pitch.htm Plan
	- Final Reflective
	Journal
	- Final Expanded
	Creativity
	Definition

Creativity Definition Assignment – Students will define three of words associated with the concept of creative thinking: creativity, originality, usefulness. After doing readings on the topic of creativity, you will be asked to expand your definition to include additional detail and specific examples. I will provide feedback on your evolving definitions prompting you to think about course concepts as you expand your understanding of these important topics.

Course Theme Papers – The course will contain three Course Theme Papers. These papers should be two pages in length and address each of the course themes (Creative People, Creative Process, Conditions for Creativity). The Oxford "One Word Exam" will serve as one of the Course Theme Paper prompts.

"The creation of something new is not accomplished by the intellect but by the play instinct acting from inner necessity. The creative mind plays with the objects it loves." - C. G. Jung

"Me Time" Assignment

What is Me Time? Essentially, it is a block of time you put aside for yourself each week. I'm going to ask you to put two hours a week aside for your "*Me Time*." This time is committed to nurture your creative consciousness and your inner artist (which we all have!). You must do this alone; it is an excursion for you and your inner child. If you think this is silly or you don't feel you can make time to do this, you should think about this behavior as your subconscious attempt to resistant to your own creativity. I understand that this kind of introspection can be scary, but it is important.

For your "*Me Time*" you can go to a movie, go for a walk in the country or to a new ethnic neighborhood, or go shopping and look for interesting gadgets. You can do anything you want, but during this time you will want to pay attention and take everything in, what you see, what you taste, and what you hear. Most importantly listen to what you are thinking. If you're criticizing your choice to go to a museum because it is too serious, then embrace that. Try something more fun and playful next time!

This assignment is on-going every week and all you have to do is write at least one paragraph about your "*Me Time*" each week. Some weeks you may have a lot more to share, but if you

don't that's okay too. Just commit yourself to the time each week and watch you grow and cultivate your creativity.

Weekly Discussion Board Assignment: Each week there will be a group conversation held on the class discussion boards. I will post the first message and ask each of you to post an individual response. Acceptable postings will (1) be clear and easy to understand using good English grammar and (2) incorporate supporting information from the relevant modules in the course text and/or websites I have provided to support your ideas. While it can be useful and interesting to include your relevant personal information in discussion board posts, before talking about personal experiences, please discuss the specific facts and ideas from the course readings and related websites.

In each online discussion you are also required to respond to at least two other students. When responding you may agree or disagree (politely) but your message should advance the conversation in some way providing additional specific information from the readings, videos, or related personal experiences.

"Journalling helps you, grow and flow. It helps you get in touch with who you really are...your essence. It helps put you in touch with the Dreamer in you. It nourishes your dreamer. Journalling provides clarity, discovery, and authentic expression." Susan Castle

My Journal Assignment - In order to re-discover your creative self, you will need to find it! One strategy to improve your understanding of your own creative process is to reflect on what strategies work and what strategies do not work for you. You can purchase a physical journal or create a digital one to write down your ideas, reflections on readings, drawings, etc., and your journal (physical or digital) should be kept accessible to you as much as possible during the semester in order to write down any ideas you have, at any time, about anything, anywhere. This is an easy way to help you become aware of your own creative process, new ideas, and provide a simple way to return to your ideas later. The journals will be handed at the end of the semester and graded primarily on volume, not quality. Writing is required for the journal, however sketching, drawing, doodling, diagramming is also encouraged.

Be aware:

Physical Journals without a digital version must be mailed or dropped off in my mailbox at the following address:

Noreen McGinness Olson Middlesex Community College Academic Resources Building 594 Springs Road Bedford, MA 01730

Digital Versions of Journals can be created by the following applications:

Blackboard - My Journal - In the journal you can customize your text, add images, audio content, videos and links to other resources. However I would suggest using this tool if you are planning to write and upload images. Video and audio content is not as easily uploaded and accessed using this tool.

Weebly (http://www.weebly.com/) - Free online blogging software. This is an easy to use tool that allows you to add video and audio content. It also has several design options to choose from.

Wordpress (http://wordpress.com/)- Some of you may already be familiar with this tool. Middlesex uses Wordpress for Student ePortfolios. Wordpress is free and can also customize text, provide cool designs to choose from, upload image, audio files and video files, and links to other sharing sites like YouTube or Facebook.

Also, if you are more familiar with different blogging software and would prefer to use that one, just email me the name and link. As long as I can access the content you are free to use it!

SciFi Scamper Group Invention Project – In this assignment you will work together in small groups to develop a creative idea with application to an alien context. In this case, I am being very literal when I say "alien" context. You will be developing a creative idea for a product or service that would be useful to the residents of the fictional planet Gethen. Gethen is an alien world described in detail in the award winning science fiction novel, *The Left Hand of Darkness* by Ursula K. LeGuin. In this folder you will find details of the assignment as well as resources to help you understand more about Gethen the Gethenians who live there.

Your group's challenge is to design something useful for the people of Gethen. You may choose to develop a product or tool, or you may design a service, clothing, food, art, or something else that would enrich the life of the average Gethenian.

Problem of Personal Interest Project (PPIP) – One long-term project in this class will be the identification of a problem of personal interest to the student. This may be a business problem, an academic problem, or a problem related to the students' personal creative process or unique interest. The assignment will approach this problem in stages over the course of the semester. You will first identify a practical problem requiring a creative solution while working through a variety of activities designed to help you understand and boost your creative processes.

The PPIP will be chunked into four sections that are aligned with four of the five units in the course. In units 1 & 2, students will work through activities that will help them identify their passion. In addition to finding your passion you will engage in activities that nourish your creativity and identify what values are important to you. Finding your Passion theme paper will

be a reflective paper that will talk about your process in finding your passion and the importance of participating in projects that are important to you.

In Unit 3, you will read and discuss the nature of creativity and the impact of positivity and ways of thinking that nurture creativity. You will also engage in activities to help you look at your problem through different lenses and perspectives. You will also continue to be exposed to different types of activities to boost your creativity. In this section of the PPIP you will write about the different types of activities you are using to solve your problem and how change in perspectives and thinking styles are affecting the way you look at problems.

In Unit 4, students will be exposed to ideas regarding nurturing spaces and incubation; by engaging in discussion and activities. You will discover the spaces and learning styles that encourage your creativity and flow. You will continue to participate in activities to boost creativity, including working in groups and making decisions as a group. In this section, you will write about how you manage your own creative process and how you came up with the solution to your problem.

Finally in Unit 5, you will reflect on your process and choices while developing a creativity plan for the future. After writing your creativity plan, students will take each section of the PPIP writing assignments and create one paper or Problem of Personal Interest Project (PPIP) paper. To do this, you will need to connect the sections by writing some transitions and additional insights. In the end, the paper should be in substantial in length and represent a significant achievement of your creative process and creativity plans for the future. Assessments of the PIPP will be based on their problem identification and solutions provided, but it will also be based on your own assessment of originality and applicability.

Appendix C: Course Screen Shots

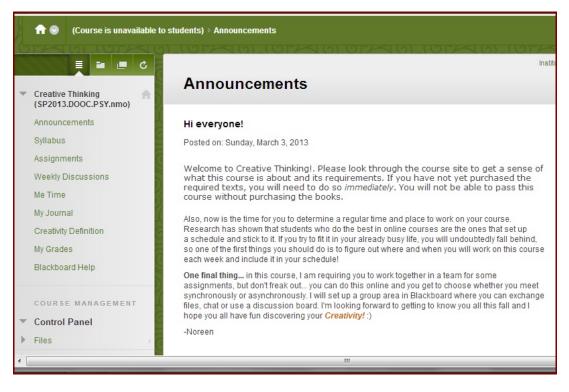


Figure C.1 – This figure shows the introductory announcement to students.

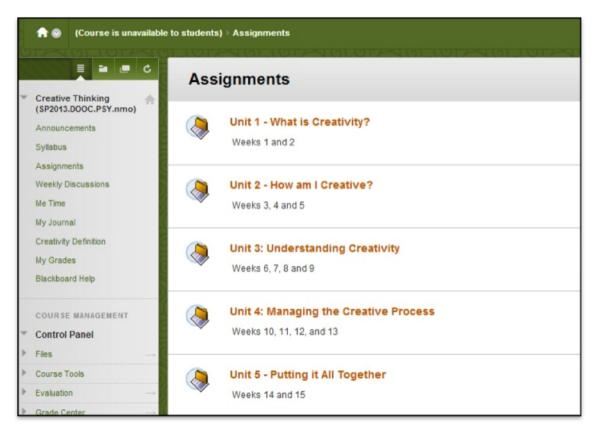


Figure C.2 - This figure shows a screen shot of the top level of "Assignments" section of the course illustrating the course unit structure

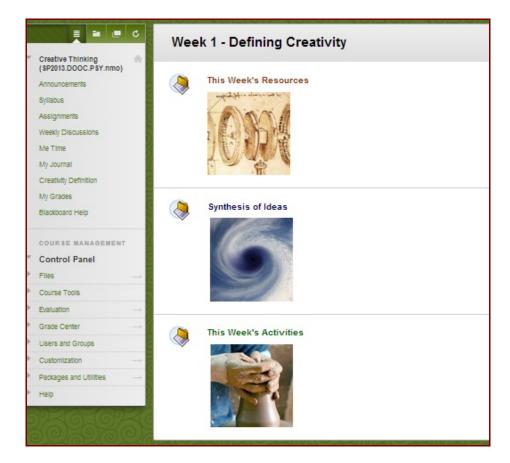


Figure C.3 – This figure illustrates the weekly folder structure. The same graphics will be repeated each week to allow students to develop familiarity and routine.

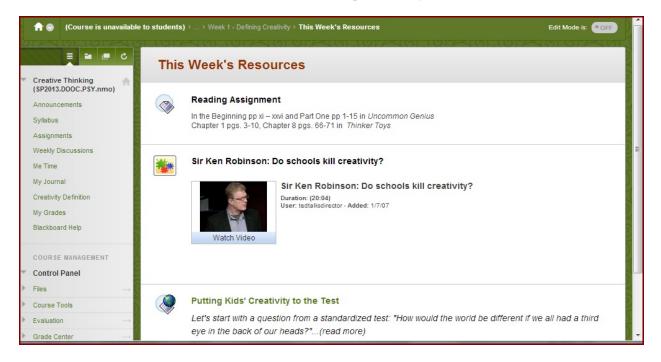


Figure C.4 – This figure illustrates example reading and viewing assignments.

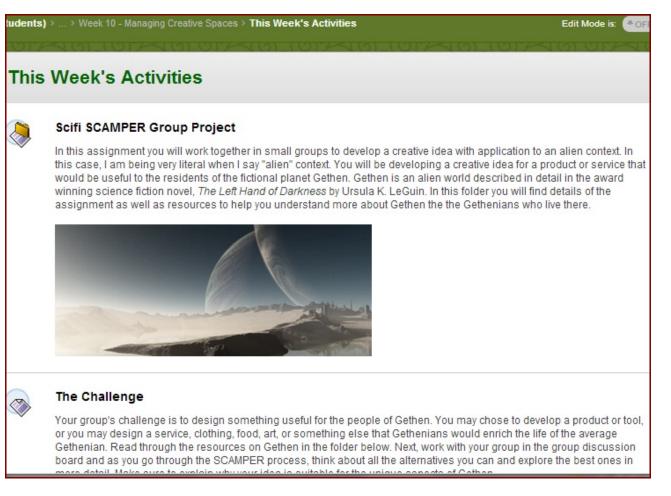


Figure C.5 - This figure shows the introduction to the Scifi SCAMPER activity in week 10

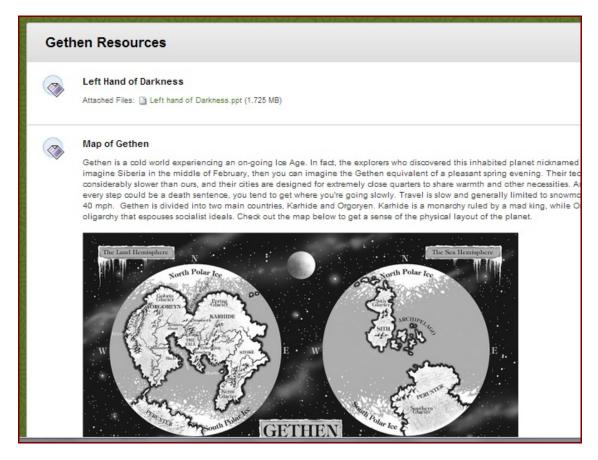


Figure C.6 - This figure shows part of the Gethen Resources in the Scifi SCAMPER in week 10