

## 4 CHIMAE CUPSCHALK

### ASSESSING THE RECONNECTION TO CREATIVE STRATEGIES IN NONTRADITIONAL LEARNERS

#### Introduction

While a great deal of emphasis is placed on 21<sup>st</sup> century skills for K-12 students, nontraditional learners in today's workforce are seeking ways to maximize their opportunities to explore and exercise creative process strategies such as fluency, originality, risk taking, inquisitiveness, adaptability, intrinsic motivation, ambiguity, complexity, and self-reflection. The facilitation of creative behaviors allows for growth resulting in greater opportunities and increased job performance in nontraditional learners' professional environment (Driver, 2001). This research is significant because reconnecting with creative processes affords the nontraditional learner the ability to positively contribute to our diverse, global workforce (Khair, Amabile, 2008). In addition, fostering an inclusive and supportive classroom provides nontraditional learners with a creative process staging area to practice convergent and divergent methodologies often undervalued in a work environment.

#### Description of Program

Cedar Crest College (CCC) is a liberal arts college for women located in Allentown, Pennsylvania. The CCC curriculum is designed to integrate and develop critical thinking, leadership skills, creative strategies, technological literacy and social awareness (Cedar Crest College, n.d.). The Studio Art classes are one example of the kind of environment where nontraditional learners can foster personal growth and development preparing them for life in a global community. The focal point of *Structures in Book Arts* instructional plan features Metiri's Rubric on Creativity (Metiri Group, 2009) comprised of ten creative strategies: fluency, originality, expertise, risk, inquisitiveness, adaptability, intrinsic motivation, ambiguity, complexity and maturity of personality, and self-reflection. To successfully transition creative process skills from the classroom to their professional life, students needed clear and specific feedback on their work, guidance in the conception and completion of projects and examples sharing how the creative process could be applied in their organizations. Using Metiri's rubric throughout the class offered a

framework to gauge the success, progress and application of the creative process.

Problem solving skills and taking risks are two components equally critical in developing creative processes in the classroom and work environment. Both of these elements comprised 60% of what nontraditional learners used as a foundation for the other creative process components. Self-reflection and developing a vocabulary for expression were ranked at 10% each and exploring interconnectedness was weighted at 20%. Successfully re-connecting with creative processes utilized 40% of the Instructors time to provide concise feedback. Project guidance amounted for 33% of the classroom time. 15% of studio time was used to provide clear project demonstrations and 12% of class time focused on providing examples of how the creative process could be applied on the job. This research has taken responsibility for expanding awareness along with providing as much detail about the processes, procedures, challenges and successes as possible. In addition, data findings provided in this evaluation offers a complete picture and includes any contrasting perspectives. Finally, the resulting action plan garnered the commitment from the CCC Art Department Chair and faculty and included a living, comprehensive activities list and Creative Strategies Instructional Plan that has been applied throughout Art electives courses. Use of a creative strategies rubric in classes has provided measureable and achievable objectives for the CCC Art Department, faculty and nontraditional learners. In addition, policy changes within the Art Department reflected updates made to instructional plans, rubrics and class activities designed for each Art electives class.

### **Purpose of Evaluation**

The purpose of this evaluation was to determine if nontraditional learners have successfully reconnected with creative strategies introduced in a classroom setting and could transfer these skills to their professional work environment. In addition, the evaluation measured the value Studio Art classes lend in assisting nontraditional learners explore “how” and “why” decisions about problems and challenges are made in conjunction with “what”, “where” and “when” allowing for a greater depth of self-discovery, reflection and exploration.

### **Evaluation Matrix**

An evaluation matrix assisted in the consideration of the most appropriate and useful data collection methods and information sources for the guiding questions identified in the reconnection to creative strategies evaluation plan. Three key questions guiding this evaluation design included:

### Questions

1. How has the creative process affected the nontraditional learner professionally?
2. What are the nontraditional learners' perceptions of *Structures in Book Arts* course in terms of what has been enhanced due to the creative process?
3. How are the nontraditional learners applying the creative process in their professional lives?

### Methods

This evaluation included four types of data collection methods: observations in a natural setting, pre and post class survey, archival data and an optional interview. The qualitative data sources collected for this evaluation provided invaluable insight and understanding into the behaviors of the nontraditional learners creative process strategies.

### Information Sources

Twelve nontraditional learners enrolled in the *Structures in Book Arts* class served as the primary information source for evaluation. Work samples collected captured each students' creative strategies progression throughout the course.

### Data Collection

The Instructor was responsible for observing, documenting, guiding students and collecting data from the appropriate information sources beginning the first day of class. In addition, individual interviews resulting from the 90 day post class survey were administered. Collected data showed the progression in students' self-expression and involvement in the creative process when facing challenges normally unfamiliar to them. Nontraditional learners classroom comments showed an understanding of parallels and similarities found in creative and work processes. Observable high levels of project engagement and collaboration signified the attainment of a "flow" experience when it came to designing, problem solving and creating their books (Csikszentmihalyi, 1990).

### Observations in Natural Settings

The purpose of qualitative observations in natural settings was to capture student's interactions and application of creative strategies within the classroom. An obser-

vation form was used to collect information about the student, classroom environment and efficacy of coursework. Metiri's Rubric on Creativity (Metiri Group, 2009) was used as a gauge to measure the progress of each student.

### Surveys

The Instructor conducted two surveys for the class using a Likert-type scale design with options ranging from: strongly disagree, somewhat disagree, undecided, somewhat agree and strongly agree. The initial survey was filled out by the student the first evening of class to establish a base line of the student's understanding of creative strategies. The Instructor distributed and reviewed Metiri's Rubric on Creativity, explaining the purpose of the pre class survey and collected it for review. The 90 day post class survey assisted in determining whether or not the reconnection to creative strategies transferred to the nontraditional learners work environment and offered an option for an informal interview with the course Instructor.

### Individual Interviews

Nontraditional learners had the option to take part in an informal phone interview with the course Instructor. Specifically, the phone interview allowed the Instructor to gain insight as to whether or not there had been a successful reconnection to creative strategies after *Structures in Book Arts* class ended.

### Archival Data

Student papers, project photographs, models and final projects comprised the list of artifacts collected and reviewed for evaluation. This data provided additional qualitative information and determined whether or not the class had afforded students the opportunities needed to successfully progress through projects requiring the application of creative strategies.

A two-page narrative was submitted at the end of class and captured what inspired the student along with an explanation of how reconnecting with the creative process had affected them personally and professionally. Project photographs provided visual documentation of students' progress throughout the course as they incorporated creative strategies to work through individual projects.

The use of models to rough out book projects encouraged nontraditional learners to step through the process of bookbinding. Creating a perfect book was not the goal, instead, mistakes were encouraged and used as a tool to strengthen and expand on creative strategies. Projects eliciting high levels of engagement or "flow" were documented for further exploration (Csikszentmihalyi, 1990).

The completion and presentation of a final project provided nontraditional learners a way to share how they had used creative strategies for the design and execution of their projects. Students had an opportunity to discuss materials, ideas, problem solving, challenges and successes as they presented their projects. A question and answer portion of the presentation encouraged the class to take part in their peers' creative learning journey.

### **Data Analysis**

Data was collected and analyzed from observations in natural settings, surveys, individual reviews and archival data in order to provide as much detail as possible for expanding awareness, improving the nontraditional learners classroom experiences, classroom tools for linking creative strategies to existing curriculum for faculty and connecting the CCC Art Department with the policies, vision and mission statement of CCC.

The ages of the nontraditional learners ranged from 18 to 60 with 33% of the class between 21 and 30 years of age and 8% of the students at age 51 or above. Of the 12 nontraditional learners attending this class, 42% were Nursing majors, 25% of the students were majoring in Business, Education also ranked at 17% with the remaining students were 8% were either English majors and another 8% were undecided. In addition, two female class members were exchange students from Africa. The professional backgrounds of these nontraditional learners included nursing at 43%, art collection liaison for a local university, Instructor in the nursing profession, a business owner, bartender, financial analyst and adults in transition taking classes to improve current job skills.

Observation in a natural setting captured qualitative data and focused on language and comments nontraditional learners used in the classroom, social interactions and level of engagement. The narrative data associated with each class meeting showed nontraditional learners reconnecting to creative strategies outlined in Metiri's Rubric on Creativity (Metiri Group, 2009) in the way students discussed, planned and executed their models and final projects. For example, Tunnel and Carousel books are models used to tell stories possibly indicating a preference for dialogic learning. In other words, telling a story about the model appeared to help work through any creative process challenges faced by the nontraditional learner.

In addition, observations in natural settings showed a progression in the way in which projects of increasing complexity were assessed and completed. Students were observed individually and as a team. Nontraditional learners grades were provided as a percentage based on the classroom rubric showed the level of proficiency attained by the conclusion of class.

The twelve questions on the pre and post class surveys offered insights into how the nontraditional learner viewed creative process strategies in their professional

environments, how comfortable nontraditional learners felt applying creative strategies on the job and if their professional experience had changed since reconnecting with creative strategies. Pre and post class surveys were compared to show increases, decreases or whether the respondents had no changes in their perception. 42% of the nontraditional learners enrolled in *Structures in Book Arts* responded to the 90 day post survey. The final analysis of this evaluation proved the ability for nontraditional learners' to successfully reconnect to creative strategies in a classroom environment and transfer these skills to their professional environment.

The overall results indicated 33% of the nontraditional learners "strongly agree" on the value and implementation of creative problem solving at work and "agree" they feel creative on the job and some risk taking at work is acceptable in both the pre and post class surveys. 67% of the nontraditional learners responses indicates a lift in their perception, application and affects of the creative process demonstrating a reconnection to creative strategies in their professional lives 90 days after taking *Structures in Book Arts*.

Average rating increased based on a scale of 1 to 5 where "1" means "Strongly Disagree" and "5" means "Strongly Agree" 8% of the 90 day post survey respondents showed a .2 increase for: *I feel I am rewarded for creative thinking at work*. The majority of lift occurred for categories pertaining to the application and affect of creative strategies in the workplace where 42% of the respondents noted a .4 increase from their pre class surveys. A significant increase when comparing pre and post survey responses for: *I often receive positive feedback about my creative approach* showed a .6 increase and: *I do not feel pressured to conform to what others think or do at work* resulted in a 1.0 overall increase from the pre class survey.

An informal interview held on Thursday, May 26 at 3:00 pm in the afternoon with a nontraditional learner who is employed as an Art Department Liaison resulted in the following information:

**Question:** Please share how the creative process strategies you reconnected with in *Structures in Book Arts* have affected you professionally.

**Response:** *"It's obvious in my profession it's important to have a good understanding of different book structures. I realize I don't need to know everything about the various structures just feeling comfortable seeing connections."*

**Question:** What are your perceptions of *Structures in Book Arts* course in terms of what has been enhanced due to the creative process?

**Response:** *"You know once I relaxed and just let things happen every-*

*thing fell into place. I wasn't afraid to make mistakes and I began to see other possibilities with my projects. It was OK not to have to know everything up front and I really wanted all the details right away but I can see I feel more comfortable not having to control every detail."*

**Question:** How are you applying the creative process in your professional life?

**Response:** *"I'm much more willing to take risks and trust my instincts than I had been before class. I'm also more comfortable making judgment calls at work. Probably the biggest change is accepting ambiguous situations and knowing I'll make the right choices."*

**Additional Comments:** *"I feel much more confident about the choices I make at work and being able to think about different possibilities has afforded me more responsibilities. My manager sees my confidence and she trusts my decisions. If there was something I'd like to be able to do more easily I wish I could implement more creative strategies in my daily life or just revisit a creative space."*

The creative strategies action plan proposed can be used in conjunction with individual studio art curriculums. In other words, professors are able to augment their studio art class with an action plan on creativity. The results from this evaluation along with the implementation of a creative strategies action plan allowed nontraditional learners to reconnect with creative strategies yielding positive results. Providing a new way to approach current classes, with the added focus on creativity, helps professors show adult non-Art majors how they can successfully incorporate creative strategies in their professional lives.

### **Utilization and Action Planning**

The CCC Art Department Chairperson has helped faculty understand the importance of including creative strategies in their existing curriculum. An outcome of this research has resulted in the Art Department faculty incorporating a rubric to gauge creative strategies, content, and abilities of their non-Art major adult learners. The rubric measures the creative strategies from novice to advanced allowing professors to measure students' progress. In the future, faculty may engage in brief weekly meetings to share ideas, offer suggestions, discuss what went well in class and what changes they can make to address creative learning areas of opportunity. Collecting and discussing data, as demonstrated in *Structures in Book Arts* course, could assist in establishing changes within existing traditional classroom environments where nontraditional learners begin their holistic journey interconnecting

Studio Art triumphs and challenges with their professional lives.

### Summary

Nontraditional learners often share that they feel Art electives hold little or no value when compared to their core requirement courses. However, individual and collaborative problem solving, ambiguity, quick turnaround time, and risk taking are just some of similarities shared between Studio Art classes and 21<sup>st</sup> century work environments. Faculty can successfully augment their existing curriculums with instructional plans and rubrics geared to support creative learning environments while using classrooms as staging areas for practicing creative strategies. In addition, taking part in weekly collaborative meetings to share successes and challenges allows for a greater depth and understanding of how best to implement creative strategies in Studio Art classes. Finally, it's necessary to continually revise best practices and procedures in the classroom to meet the needs of the nontraditional learners. Studio Art classes provide a vehicle to build valuable skills which can be utilized to encourage collaboration, risk taking, flexibility, meaning and competence while ensuring a reconnection to creative strategies and the transference of these skills to the nontraditional learners professional work environments.

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### References

- Beghetto, R. (2006). Creative Justice? The Relationship Between Prospective Teachers' Prior Schooling Experiences and Perceived Importance of Promoting Student Creativity. *JOURNAL OF CREATIVE BEHAVIOR*, 40(3), 149-162.
- Csikszentmihalyi, M. (1990). *Flow*. New York: Harper & Row.
- Coates, J. F., & Jarratt, J. (1994). Workplace Creativity. *Employment Relations Today*, 21(1), 11.
- Cole, D., Sugioka, H., & Yamagata-Lynch, L., (1999). Supportive Classroom Environments for Creativity in Higher Education. *JOURNAL OF CREATIVE BEHAVIOR*, 33(4), 277-293.
- Driver, M. (2001). Fostering Creativity in Business Education: Developing Creative Classroom Environments to Provide Students with Critical Workplace Competencies. *Journal of Education for Business*, 77(1), 28.
- Kaufman, J. C., & Beghetto, R. A. (2009). Beyond Big and Little: The four C Model of creativity. *Review of General Psychology*, 13(1), 1-12. doi:10.1037/a0013688.
- Khair, M., & Amabile, T. (2008). Creativity and the role of the leader. *Harvard Business Review*, 86(10), 142.



CREATIVITY: PRODUCT, PROCESS, PERSONALITY, ENVIRONMENT AND TECHNOLOGY

Metiri Group. (2009). Dimensions of 21<sup>st</sup> Century Learning. Retrieved from <http://creativity-innovation.metiri.wikispaces.net/Rubric>

Sternberg, R. J. (2007). A Systems Model of Leadership: WICS. *American Psychologist*, 62 (1), 34-42. doi:10.1037/0003-066X.62.1.34.

Sternberg, R. (2002). Creativity as a Decision. *AMERICAN PSYCHOLOGIST*, 57(5), 376-376.

**Appendix**

***Continuum of Progress: Creativity***

*Creativity is the act of bringing something into existence that is genuinely new, original, and of value either personally (of significance only to the individual or organization) or culturally (adds significantly to a domain of culture as recognized by experts)*

| Unique Ideas   | Novice   | Basic  | Proficient  | Advanced   |
|--|--|--|---|--|
| Original, unique, and cogent ideas, phrasing, and products | The student does not produce unique and cogent ideas. Most ideas and products are mundane and predictable.   | The student occasionally produces unique and cogent ideas or products, but only with significant guidance and encouragement.   | The student often produces unique and cogent ideas and products with a minimum of support.  | The student frequently sees links between seemingly unrelated ideas. He/she is able to independently produce results that are fresh, unique, original, and well developed.   |
| Expertise  | Novice   | Basic  | Proficient  | Advanced   |
| Expertise in at least one domain                           | The student is not expert in any domain.   | The student has expressed a focused interest in a specific domain and is beginning to independently learn the fundamentals of that domain.   | The student is independently researching and learning about a chosen domain. With encouragement, he/she is beginning to reach mastery in narrow components of that domain.  | The student is recognized by peers and teachers as expert in a special niche within a domain. The student is intrigued by and tremendously interested in the subject area and continuously explores aspects of that area independently.          |
| Risk   | Novice   | Basic  | Proficient  | Advanced   |
| Risk-taking despite mistakes                               | The student sees mistakes as serious personal deficiencies rather than as learning opportunities. As a result, he/she is not willing to take risks that might result in mistakes—especially ones that might be public. | The student conceptually understands that mistakes are learning opportunities, but emotionally still views them as personal failures. He/she weighs the odds of failure carefully before taking on challenging problems or publicly sharing ideas or concepts. | The student has enough confidence in his/her abilities to see that mistakes are not personal failures. With encouragement, he/she does take on challenging work. Once invested in such work, the inherent risks become intrinsically motivational to the student. | The student sees mistakes as learning opportunities. He/she at times advocates unconventional or unpopular positions, and is willing to tackle extremely challenging problems without obvious solutions, despite the high potential for failure. |

*Continuum of Progress: Creativity*

| <b>Inquisitiveness</b>   | <b>Novice</b>   | <b>Basic</b>   | <b>Proficient</b>  | <b>Advanced</b>  |
|--|---|--|--|--|
| Exhibition of curiosity, inquisitiveness, wonder, openness, and excitement | The student seems uninterested in new topics and avoids becoming involved in novel experiences.   | The student expresses interest in novel situations or ideas, but is not motivated to explore such ideas or situations further. | The student openly expresses interest and wonder at new phenomena, and with encouragement actively pursues such interests.   | The student is motivated, even driven, to know about objects, events, and people. He/she continually attempts to learn about new, unknown, or unexplained phenomena.   |
| <b>Flexibility</b>   | <b>Novice</b>   | <b>Basic</b>   | <b>Proficient</b>  | <b>Advanced</b>  |
| Flexibility and adaptability   | The student lacks flexibility, stubbornly maintaining positions and points of view in spite of new information and changing conditions. | While still fairly inflexible, the student can be guided to reconsider some positions and points of view.                      | The student is often able to independently envision new responses to varying situations. When supported or encouraged, he/she is able to easily adapt responses to fit the situation.      | The student is able to see multiple ways of reacting to changes in conditions. He/she can independently monitor and adjust his/her own positions in response to change.  |
| <b>Intrinsic Motivation</b>  | <b>Novice</b>   | <b>Basic</b>   | <b>Proficient</b>  | <b>Advanced</b>  |
| Immersion in challenging learning for intrinsic reasons                    | The student is not intrinsically motivated and makes little or no effort to find "hooks" for interest in new topics encountered.        | The student is still motivated extrinsically but can be guided to develop specific interest in some topics.                    | The student is able to motivate him/herself in selected topics of interest within the curriculum. With guidance, interest in most topics can be developed.                                 | The student is intrinsically motivated. He/she has developed the habit of seeking out "hooks" for interest in any topic. The activity is autotelic—enjoyed for its own sake and not because it leads to later goals. The "flow" experience often causes student to lose all sense of time. |
| <b>Ambiguity</b>   | <b>Novice</b>   | <b>Basic</b>   | <b>Proficient</b>  | <b>Advanced</b>  |
| Tolerance of and response to ambiguity                                     | The student is not comfortable with open-ended tasks or situations.   | The student tolerates ill-defined situations, and at times responds with spontaneity and ingenuity.                            | The student is sometimes comfortable with open-ended situations, and with encouragement is willing and able to let discovery, exploration, and spontaneity take him/her in new directions. | The student enjoys operating in open-ended or ill-defined situations, responding with spontaneity and ingenuity that leads him/her to discovery and exploration of new ideas.  |

Source: Dr Fredricka K. Reisman