

# **Creativity Survey**

*a quantitative report*

*Prepared for  
Niagara College of Applied Arts & Technology*

*By James Kershaw  
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## 1 Focus

This quantitative survey explores the realm of creativity. The individuals who helped me with this project freely validated my academic and professional life. Communication with adults from many backgrounds was at the heart of the learning process. A psychometric tool as a questionnaire measured the survey responses. From February to April of 1996, the project developed as a self-directed approach to adult learning. This report also describes the objectives and learning outcomes.

### *Introduction*

Originally, productivity alone measured creativity. Even today, we have not developed a definition of creativity, which addresses the expanse of human experience. Some contemporary tests for measurements include the following: The Torrance tests, the Remote Associates Test (Mednick, 1962), the Stark weather Originality Test (1974), The Group Inventory for Finding Creative Talent (1980), The Barron Welsh Art Scale and other relating scales and surveys.

I offer the following definitions to describe the experience of creativity:

...a man's natural abilities are derived by inheritance, under exactly the same limitations as are the form and physical features of the whole organic world. (Galton)

Creativity is more than mere imagination. It is imagination inseparately coupled with intent and effort. (Osborn, *Applied Imagination* p.68)

Creativity is . . . the ability to see, to be aware and to respond. (Fromm, in Mooney & Razik 1967 p.44)

### ***In Support of Creativity***

Innovative approaches in business and education have become universal. In business development or the training of individuals for employment, dealing with change is a crucial factor for success. (Merriam, p.8) In *Bringing It Home*, Wendy Priesnitz urges that entrepreneurs generate new ideas, brainstorm, and ask themselves basic questions concerning health, organization, and take risks when solving problems. (Priesnitz, 1995)

Webster's dictionary defines "innovation" as the ability to make changes, introduce something new, or renew. In the same fashion, "creativity" which is a part of curiosity, works hand-in-hand with "innovation." Approaching a task with "creative techniques" can make the job easier and more enjoyable. (De Bono)

This survey evolved out of the 1995/96 inaugural year of the Interactive Multimedia Post Diploma program at Niagara College. For the most part, the course was a subject-oriented learning program geared to some hands-on approach limited to software use and assigned projects in a classroom space. (Merriam, p.29) The college calendar asked that "creativity" be a prerequisite for enrolment. During my second term, I felt a strong desire to express myself in ways not supported by my usual classroom computer environment. I recall one instructor who has a similar background as mine wrote, "Multimedia is about creativity not computers." I understood that "creative" learning involved many different approaches, hopefully without coercion or manipulation. As an adult, at the beginning of a significant journey (McLeish, 1983) I finally asked what every traveler must ask, "What is the assumption here? Is there another way? Am I asking the right questions? Where am I going?" If creative learning is that important, I realized, it would have to develop from a personal perspective with the individual setting his or her course.

To begin my journey, I started a journal. Eventually, the scope of the subject began to assume boundaries, which extended beyond the college setting and into the community at large. The idea that a questionnaire would initiate a response relating to "creativity" ideas and experience was appropriate for this. Professor Dave Robinson provided feedback for the initial ideas.

### ***Objections to a Creativity Survey***

Many artists feel that a survey on creativity is often self-defeating because of the feeling of intimidation and the "psychoanalytic" approach of such questionnaires. With this method it is felt that a survey stifles creativity and loses its spontaneity. In the Olympics, a runner must pay attention to his health, which is a key factor for achievement. The attention his or her doctor must pay to blood pressure, muscle tone, posture, and a host of other physical, psychological, and spiritual determinants are important to athletes. The trainer must make accurate notes and do a thorough analysis. These activities cannot by themselves inhibit the runner's performance. In fact, the quality of the relationship between trainer and athlete can often be a crucial factor in determining success or failure. In the same way, this survey looks at points of reaction to a set of distinctive questions that address a particular area. We hope that the exercise might open areas of knowledge and awareness that will allow appropriate communication between student and client.

***Self-directed and Consumer-oriented***

Learning Contract: Creativity Survey by James Kershaw			
Learning Objectives	Learning Resources & Strategies	Evidence of Accomplishment	Criteria & Means of Validating Experience
Analyze existing assumptions about adult learning	Compare & implement creative ideas with other instructors & adult students. Read Cranton and De Bono	Produce a creativity survey sample suitable for publication	Rating as to: broad range of ideas, scope, perception, brevity, client appeal
See opportunities and make choices	Decide who & what groups will participate	List of seven groups with occupational codes	Rating by professor as to feasibility and the measure of self-directedness
Understand and use effective interpersonal communication skills	Develop presentation of idea for public use read class notes on ENGL045	Create a small announcement sign give a talk to ENGL045 class on "creativity"	Completion of "c" course ENGL045 rating by facilitator according to my understanding and participation
Innovate and solve problems interdependently with flexibility	Organize time, set cutoff date, select clients, distribute, and gather samples. Use faxes, E-mail, telephone, letters	Set up a log of contacts and phone numbers, code surveys when completed and keep track of quantities	Professor's rating of conceptualization, awareness, responsiveness, enthusiasm, and commitment to self directed approach
Develop higher level of personal comfort in an unfamiliar milieu	Develop meaningful interview styles Use clear instructions, voice, facial expressions, brevity	Create a satisfying and flexible repour with a client who completes and responds with survey samples	Rated by survey clients who might comment and generate opinions through receiving a report on a survey
Develop tolerance and patience for self expectations while setting realistic goals	Compile results by Apr. 1 and complete presentation by Apr. 19	Document proof read and printed week of Apr. 15-19	Verification with coordinator as per completion of this phase
Become resourceful with a sense of community awareness	Investigate becoming a volunteer. Read Merriam	Make new friends and contacts, develop appreciation of others' life situations.	Rating by peers according to my support, empathy, and listening skills

## 2 Methods

### *Approach*

Most surveys offer the convenience and expense of stamps and self-addressed stamped envelopes. The rest is easy; just relax and wait for a 60% return on the questionnaire.

Here, the student carried out the survey on a person-to-person basis with a near 100% return. This was accomplished by concentrating on a local geographic area and by designing a questionnaire, which was short, and to the point. The survey work offered opportunities to meet many interested and enthusiastic individuals. The student gained permission to distribute and obtain an interview with the survey before hand. If it were agreeable, and as time permitted, the student negotiated the assignment of as many as 25 samples to a company or agency. Its employees or clients completed the questionnaires. Most refusals came from people who perhaps were too busy or for some cultural or social communication block refused to respond. In a few cases, inexperience, inadequate preparation, or an unsuitable "lead in" led to embarrassment and a feeling of encroachment. In spite of this, the importance on freedom and a "no pressure" approach was crucial. A phone call or a visit followed up information. The overall approach took the following format:

"as a student at Niagara College he is engaged in a study of creativity and would like to study various occupational groups and information from members of this group would be valuable for the purposes of this survey because.... "

A student identification card was available, and usually the student attached or held a cover sheet in view. This sheet described who the student was, the reason(s) for the survey, the overall goals of the assignment, and the student's phone number.

### 3 Sample

#### *A Community Cross-section*

The occupational groups were selected from the following categories:

1. (SE) **Service** (service providers such as health care professionals, counselors, dry cleaners, servers, cooks, librarians, consultants, employment officers, doctors, police officers)
2. (MG) **Management** (teachers, business owners, self-employed business owners)
3. (AR) **Arts** (craftspeople, sculptors, musicians, tattoo artists, hair dressers, potters, ceramicists)
4. (TE) **Technical** (accountant, tradesmen, technicians, engineers, electricians, plumbers, opticians, orthodontists, hearing specialists)
5. (ST) **College Students** (sampled from Niagara College only)
6. (UN) **Unemployed Workers** (employment centres)
7. (SR) **Seniors and Retired** (retirement homes, churches)

Sixty questionnaires were prepared for each of the seven occupational groups (30 for each gender) making a total sample of 420. A fax modem, a word processor, and a telephone were used to:

- Give the client a chance to look over the sampler (see p.8) before he or she committed himself to completing it (a fuel and time saver too),
- Communicate with those individuals providing academic support,
- Create a database using input program provided by a peer tutor,
- Maintain a log to itemize sources of samples.

SAMPLE Creativity Survey **by James Kershaw**

Some people believe that "creativity" is producing artwork, or playing a musical instrument, or inventing a new type of soap. Certainly, these activities are creative; however, some people might construe even everyday tasks as creative. Activities such as doing homework, repairing a car, or just arranging one's furniture might be considered creative tasks.

For the following statements choose the option which best applies to you.

1. When an idea becomes uppermost in your mind everything else is secondary.	1 never	2 seldom	3 often	4 always
2. Your ideas sometimes seem "crazy" because they are so different from everybody else's.	1 never	2 seldom	3 often	4 always
3. You experience a sense of readiness, tension, or a long period of searching before a "problem" gets solved.	1 never	2 seldom	3 often	4 always
4. When faced with a creative task you panic.	1 never	2 seldom	3 often	4 always
5. You experience a sense of well-being and precision when you perform a task.	1 never	2 seldom	3 often	4 always
6. You can recall examples of a project to which you have added an extra dimension beyond the established norm.	1 never	2 seldom	3 often	4 always
7. You have a sense of accomplishment and relaxation after a task is complete.	1 never	2 seldom	3 often	4 always

In consideration of the above statements please indicate when you would prefer to undertake a creative task.

(Morning)      (Afternoon)      (Night)      (No preference)

Occupation or specialty:

Age group.    (18-25)    (26-40)    (41+)      M    F

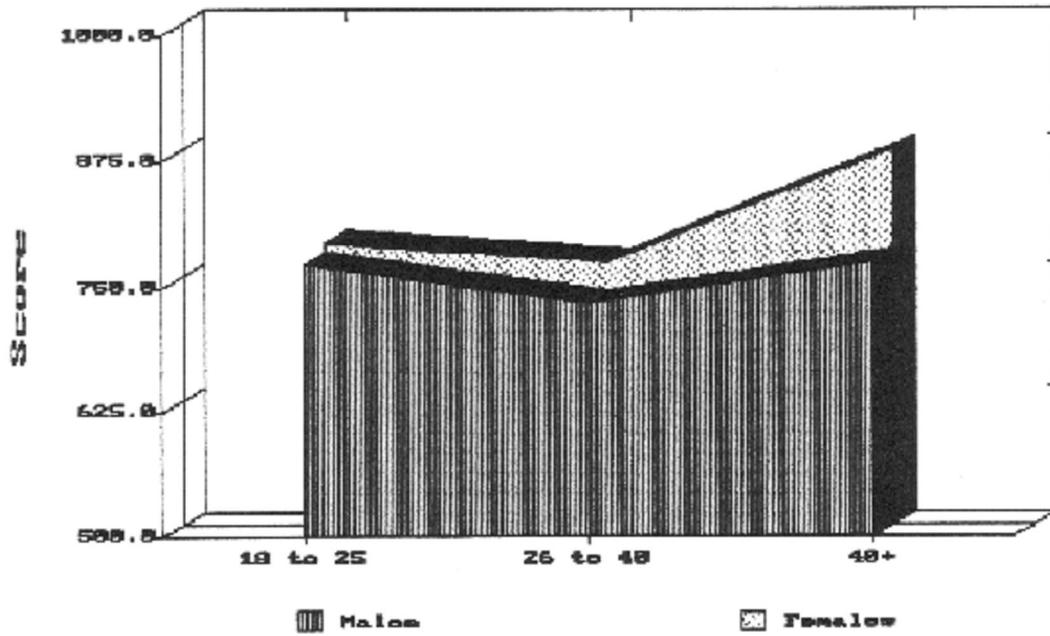
Comments:

## 4 Synthesis

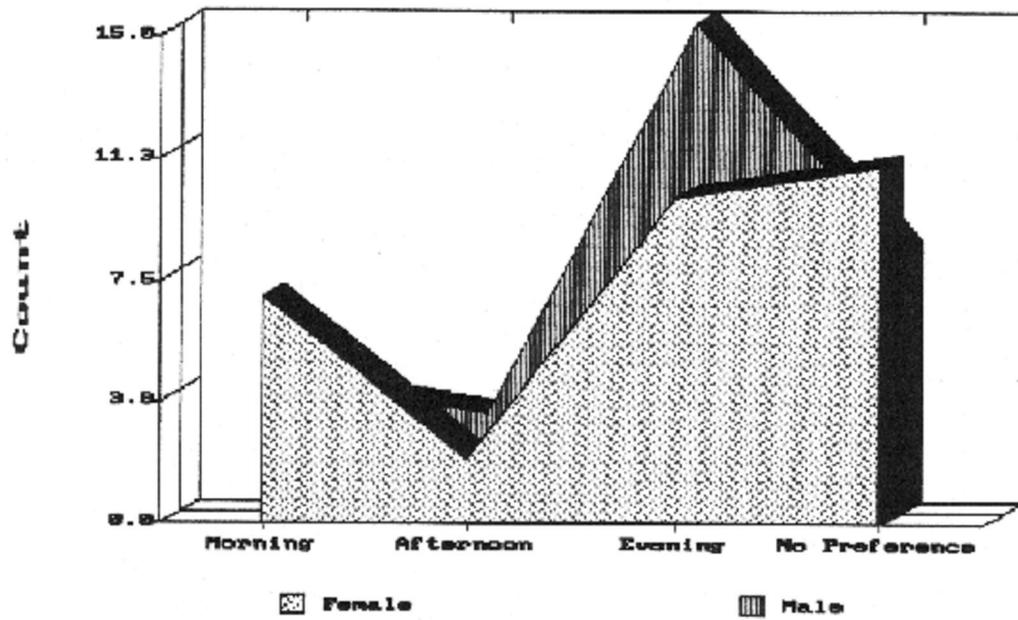
### *All Age Inclusive Count for Responses*

Variable	Never	Seldom	Often	Always	Total	Gender
<i>Question #1</i>	8	59	107	36	210	M
	5	44	124	37	210	F
<i>Question #2</i>	13	92	85	20	210	M
	10	90	84	26	210	F
<i>Question #3</i>	22	75	90	23	210	M
	13	78	88	31	210	F
<i>Question #4</i>	88	93	26	3	210	M
	79	95	22	14	210	F
<i>Question #5</i>	1	11	126	72	210	M
	2	6	104	98	210	F
<i>Question #6</i>	7	53	123	27	210	M
	7	45	137	21	210	F
<i>Question #7</i>	3	9	77	121	210	M
	0	6	59	145	210	F

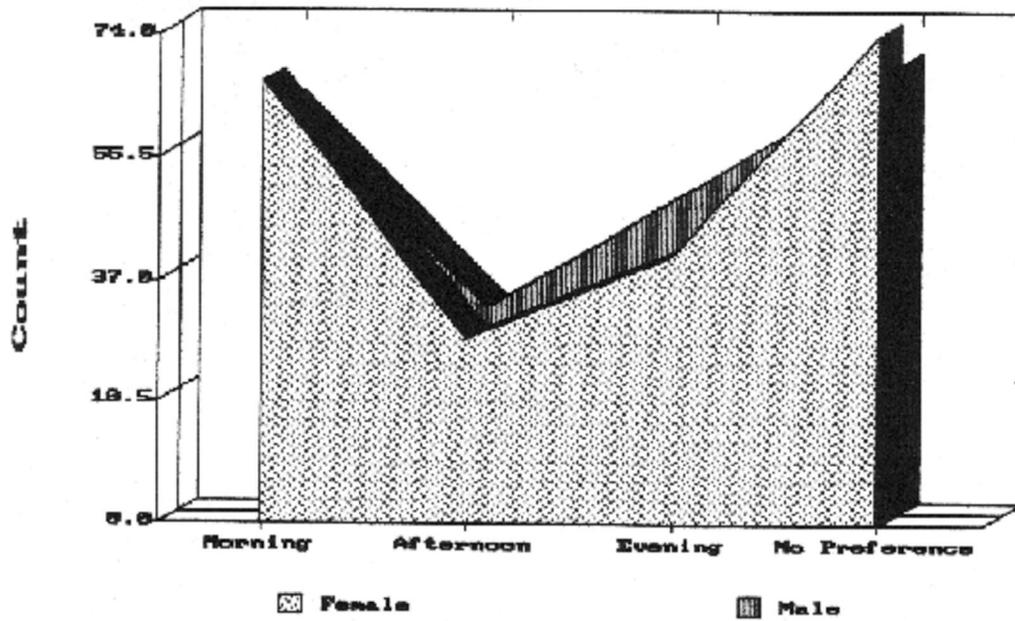
**Life's Journey on the "Creative Wall "**



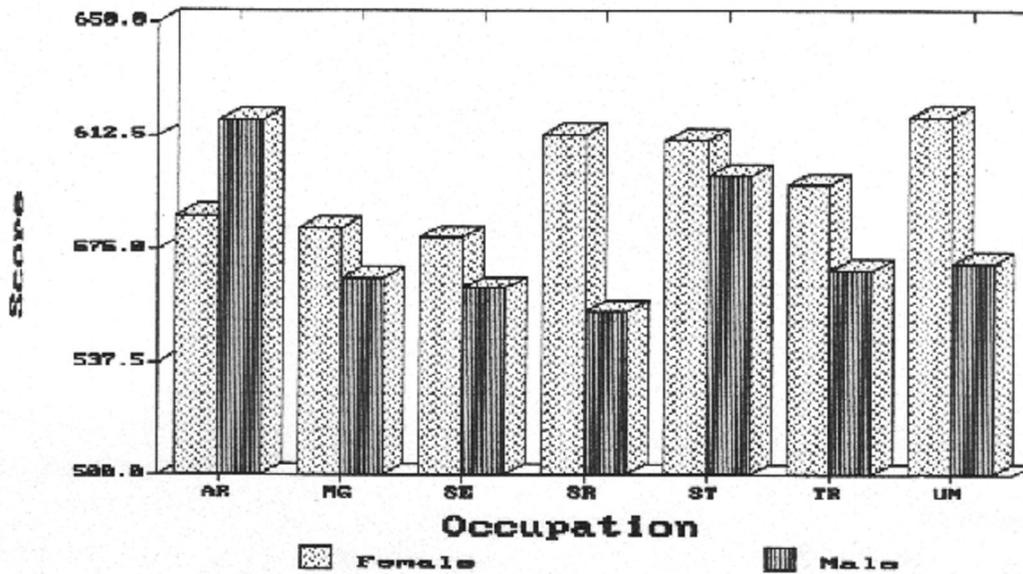
**Time of Day and Student Creativity**



**Time of Day and Population Creativity**



**Scores by Occupation & Gender**



## 5 Conclusions

### *Table Overview (page 9)*

The responses indicate a fairly balanced count in the popular choices. For the question "When an idea becomes uppermost and everything else is secondary", 50% of males and 59% of females chose "often." Eighteen percent of the males and females chose "always". Four percent of males and 2% of females chose "never" for this. Forty percent of both males and females often thought their ideas seemed "crazy." Nine percent of males and 12% of females always felt their ideas were crazy. Forty-three percent of males and 42% of females often experienced a sense of readiness or tension when working at creative tasks. Twelve percent of males and 10% of females often panicked when faced with creative tasks. Forty-two percent of males and 38% of females said they never panicked. Seven percent of females said they always panicked but only 1% of males admitted they always panicked. Sixty percent of males and 50% of females said they often experienced a sense of well-being and precision when tasking. Thirty-four percent of males and 47% of females chose "always" for this question. Fifty-nine percent of males and 65% of females could recall examples of a project to which they added an extra dimension. Fifty-eight percent of males and 69% of females said they always had a sense of accomplishment after finishing a creative task.

### *Essential for Survival*

If creativity is critical for survival, there can often be external as well as internal forces with which to contend. (Siv Petterson, 1996) A soon-to-be published book *Transnistria Remembered* recalls holocaust camps in the Ukraine. It describes how the ability to be ingeniously inventive greatly increased chances of survival. Under extreme stress, maintaining a positive outlook on how to get food, barter, organize, and maintain hygiene, brought out a heightened sensitivity and ability to perform creatively. Under normal conditions these qualities would be minimal. Furthermore, individuals who were the strongest or the most affluent were the first to expire. Those who came from poorer population segments seemed more able to assimilate creative survival skills more effectively. When finally freed many of these people went on and chose to live successful productive careers. By their experience, they acquired creative problem-solving skills. Now "every hill has a down hill" is a simple example of a positive mental attitude used in handling difficult tasks.

### ***Women and Creativity***

It doesn't take much of a stretch of the imagination to realize the historic and generational consequences that have resulted from the treatment of women over the thousand years of civilization, as we know it. Subservient to men in their roles in society, ancient times, especially, assumed a woman's role as water fetcher, cook, and child bearer. Girls are still taught to be nice, sit properly, and show manners whereas boys are freer to express themselves openly.

"This may conflict with the characteristics which are necessary for girls with high creative potential to evolve into women whose creative potential is manifested in adult productivity...ability to challenge convention, to question authority, and speak out for change."

Even to this day, literature, fine art, grant recipients, chief executive officers, and managers are written up on society's list, which is proudly dominated by males. Through stereotyping, women are forced to mature into more supportive advisory roles as managers, parents, and mothers.

"This has a profound effect on both the quantity and direction of their creative output"

At this point, it's probably safe to say that without the presence of two genders in the world, nobody would excel in his or her individual human spirit.

A story is told about an experiment that took place somewhere in the eons of time. A group of a hundred men and one woman were sent to an island and told to fend for themselves. Another group of a hundred women and one man were sent to live on an island somewhere at another distant location. Ten years passed. The authorities decided it was time to check on the state of affairs at these two habitations. At the first location, a very polite man dressed comfortably in elegant attire greeted the inspector. The visitor was escorted in a homemade vehicle along a smooth pathway to a palace with high bamboo walls and a neat thatched roof. Surrounding the palace, were numerous cottages and playgrounds with fresh water running in gardens pools and spas. The woman promptly emerged from the palace dressed in a silk gown adorned with jewellery and flowers. She greeted the inspector who congratulated her on such richness and abundance everywhere.

"To what do you attribute the success of your community?" he asked.

She explained carefully. "Every man here will have me to love and in order to organize things, each man has a number. For example, it's pretty certain that number fifty-one will make love to me in the foreseeable future, but until then, if he doesn't measure up, or if his work is unsatisfactory, I will tell him personally that he is now number 99 and he will just have to wait longer and work more before he can love me."

The inspector was satisfied with this and went on to the second island. As he approached the shore, he could find no clearing where he could dock his boat. Everything was grown over with trees. He was about to give up when he spotted a woman with long knotted hair wearing filthy rags waving at him from a perch on a rock. He threw the anchor overboard and waded to shore.

Suddenly, the woman began screaming, alerting the others. Soon, a large group of wretched starving women gathered around, curious about this visitor, for no one had visited them since they were brought here ten years previous. Nothing was organized. Makeshift

grass huts provided little shelter even from the rain. In a clearing, a smoky acrid fire burned with a rusty pot suspended over it. You'd never want to guess what was cooking. The inspector could smell no flowers nor could he see anything beautiful. There was sadness everywhere.

"Where is the man that was sent with you?" The inspector asked.

A woman replied, "A couple of girls are looking for him now. Would you like to help us find him?"

The search party trudged through the jungle to a large tree where two angry women stood looking up. High above, a man sat on a limb smoking, oblivious to what was going on below him. Now curious about this situation, the inspector asked why he refused to come down.

One woman gripped the stick on which she was leaning and snarled, "His half hour break is over, but he is taking fifteen minutes more, without permission!"

The Occupation & Gender bar graph (p.8) and Question Table (p.7) show in most cases women excelling in the scores.

In the beginning, I wasn't totally clear about what kinds of things I wanted from the survey. However, being naturally curious about the response to the questions, I was surprised to see that the answers were all different. I went on to look at the dynamics of the approach and the questioning and discovered that in almost all cases, performing a creative task involved a feeling of "tension" followed by a state of relaxation and satisfaction. The desire to share a creative task (such as my offering of the questionnaire) is pervasive; especially to gain a sense of affirmation. Offering a report to the client is a compliment and reinforcement to the creative learning process.

Seniors scored highly in this survey. One gentleman emphasized that his thinking, imagination, and ideas were continually active but the internal problem was that he just couldn't get his body parts to do what he wanted them to do. A ninety-two-year-old lady was the only person in a retirement home who wanted to go on a field trip, but she was frustrated that none of the younger women in the home would go with her.

In closing, creativity is a universal experience, which has its locus of control within the individual. Creativity cannot be turned on and off as a light switch. It's a spark that has the potential to become a flame; people from all walks of life carry it in the more or less ideal environment of their experience. Creativity can blossom under stressful situations or at the onset of a career change. Men and women interact as individual creative entities bringing together their unique histories.

## 6 Outcomes

### *Project Fostered Interdependence with Goal Seeking*

It began the desire to manage, organize and develop a task interdependently.

It sustained a sense of motivation because the student was pleasing himself and not the instructors.

The anxiety around the issue of marks and grades diminished because of a deeper awareness of realistic outcomes not explicitly stated or experienced in an instructional classroom setting.

The student's chosen subject matter reflected his own interests, preferences, background, and talents. The result was a "tailored" program based on the student's unique strengths and abilities.

From his perspective, the student proved that self-directed learning facilitated the application of this educational experiment through the involvement of risk-taking. This factor reinforced a positive self-image.

It involved more time for self-valuation in the comfort of his home during and after completion of the actual survey. The attention to a singular project lifted the pressure to complete many unrelated assignments. Consequently, the focus was directed to a clear, specific, and an immediate goal.

It initiated critical thinking styles through introspection, questioning, experimentation, and consultation with other learners in and out of the college setting.

Writing by hand in a journal encouraged the practice of recording first impressions for future reference and reflection.

It provided potential opportunity to use the skills gained from this experience in a future situation.

The student is of the premise that a practical application of "multimedia" is an education. An application develops from a variety of experiences and resources. Creating multimedia art involves the interaction of many people with many skills. In the same way, this project provided the flexibility and means to appreciate that many creative people form an important part of life's big picture.

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**Siv Petterson**  
**Suzette Taylor**

**My Classmates**  
**The People of Niagara Region**  
**My Parents**

### ***Bibliography***

Priesnitz, Wendy. *Bringing It Home*. St. George: The Alternate Press, Ontario Canada, 1995.

De Bono. Edward. *Serious Creativity*. Harper Collins, c1992.

*Edward De Bono's Smart Thinking*. Audio Tape. Prod. Audio Renaissance Tapes. 1988. 90 min.

Cranton, Patricia. *Understanding and Promoting Transformative Learning. A guide for Educators of Adults*. San Francisco: Josey-Bass Publishers, 1994.

McLeish, John, A.B. *The Ulyssean Adult*. Vancouver: Douglas, 1983.

Gretz, Karl F. and Steven R. Drozdeck. *Empowering Innovative People*. Probus Pub. Co., c1992.

Merriam B., Sharan and Rosemary S. Caffarella. *Learning In Adulthood*. San Francisco: 94104. Josey-Bass Publishers. 350 Sansome Street, Headington Hill Hall, Oxford OX3 0BW, 1991.

Cranton, Patricia. *Planning Instruction for Adult Learners*. Wall and Thompson, Six O'Connor Drive, Toronto, Ontario Canada M4K 2K1, 1989.

Knowles, Malcolm and Hulda Knowles. *Introduction to Group Dynamics*. New York: Association Press, 1913.

Petterson, Siv. *Personal Interview*. 14 April 1996.

## Comments

My creativity involves sleep & dream & constant thinking while asleep • Good luck on your project. • My philosophy on creativity is based on society's idealism of insanity. • Many great minds have been once thought of as insane. • In my mind creativity is socially unacceptable unless it benefits the norm. • The idea being uppermost in one's mind on aid in solving a problem can only be effective if the intensity is kept up. • Good survey very interesting • Thank you for your letter we experienced a survey short ago and do not like to go through another one this year. • Sorry not to give you a positive answer kind regards. • I would enjoy the opportunity to exercise my considerable creative skill particularly in radio and tv broadcast writing. • It should also be happy sad depressed and anger also inspires creativity. • Think about it. • Very interesting and creative idea. • Find what you do best and do your best at it. • This survey is mentally challenged. • Standardized surveys undermine creativity. • Is it not a paradox to attempt to plug creativity into supervised systems indifferent to the creative activities you're striving to investigate? • As far as undertaking a creative task anytime is good. • Creativity is an ongoing process in one's life. • If we are not being creative what are we being? • Interesting comment at top I just read it as I finished answering your questions. • Survey taps some elusive aspects of creativity in a very succinct way. • Great possibilities for this search! • Keep going • Creativity cannot be defined in my opinion. • Interesting survey • Answers could be numbered 1 to 4. • The gap between seldom and often is too large. • Sometimes would be more appropriate choice for me for many of these questions. • Some problems demand more research than others tension can be good or it can be unconstructive. • You need to distinguish between practical problem and intellectual • It's the energy lack not the impulse • I assumed seldom = occasionally & often = frequently. • Very good idea • A great deal depends on what particular thing I have achieved. • Living today as happy as I can. • Time is often a factor when a project is approached. • As I am over 85 enjoying doing crafts or things that pass the time as a day with nothing to do is a long day. • Excellent survey