

Connecting the Aspects and Advantages of Creativity to Management Practice: An Executive Summary of Gaulin's 1985 Master's Project.

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Introduction/Overview

Managers can use an environment for creativity to enable the development of motivated employees. This is the key theme of John Philippe Gaulin in his master's project "Creativity: Unlocking the Productive Work Environment" (Gaulin, 1985). He examined the connection between creativity, motivation and management practice. Through an analysis of creativity and management literature, Gaulin created a list of Aspects and also of Advantages of the creative work environment. He then verified this list by creating and using an instrument called the *Facilitative Environment Affect Tally (FEAT)* to assess participant agreement with the Aspects and Advantages of creativity. Gaulin found that the elements of creative environment were endorsed by the participants. Gaulin provided ideas for further research and concluded with a set of recommendations for managers to help establish a creative work environment.

Pertinent Background/Context

Why do people work? In his project, through the review of literature on the topic Gaulin built a case to say that employees desire the characteristics of self-motivation. He tied together the need for motivated employees in the workforce with the ability for creative environment to enable workers to attain that motivation. He also tied management practices to quality groups and showed how the creative environment in these groups can facilitate motivation.

Gaulin used Maslow's (1954) theory of ranked needs as a model for describing why people are motivated to work (see Figure 1). In Gaulin's view the physiological and safety needs

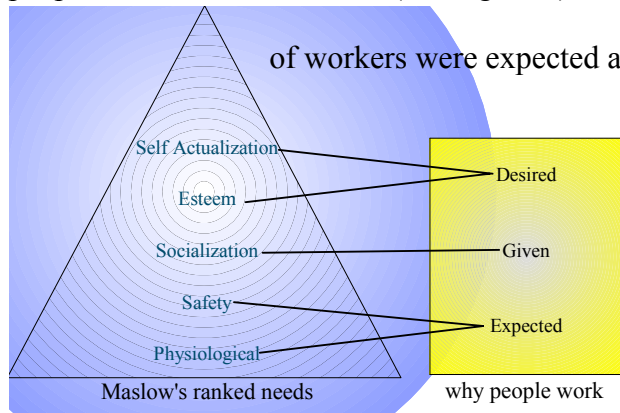


Figure 1. Gaulin's analysis of why people work. Adapted from Gaulin, 1985, p. 6.

of workers were expected as the baseline of any work in the modern world.

In addition he stated that socialization occurs in most jobs and therefore does not serve as a source of motivation for workers. Esteem and self-actualization were the significant

motivators for people to work and to work well.

These needs were considered to be internal

motivators. They could not be imposed from outside, but they could be allowed to grow and develop in an individual given the proper environment.

Gaulin pointed out that external motivators are lower down in Maslow's (1954) order of ranked needs. An example of external motivation would be if people worked only for the money. In this situation, the commitment to quality might end with the paycheck. He discussed the literature in which basic needs must be met in order to prevent dissatisfaction, but noted that basic needs are not motivators for increased positive results (Herzberg, Mausner & Snyderman, 1968; Scanlan, 1974). The challenge for Gaulin then became ... How to allow employees to be intrinsically motivated?

Here he introduced the field of creativity as a possible source of insight on how to create

$$P_1 + P_2 \neq P_3$$

It is not enough to say that a creative person using a creative **process** produces a creative product. You need **Press** or **environment** to make the other components work well together.

an environment that is conducive to intrinsic motivation in employees.

Gaulin used Rhodes (1961) model of

Figure 2. Gaulin's representation of the need for environment. Adapted from Gaulin, 1985, p.14.

creativity to describe the need for the consideration of environment in order for creativity and its benefits to be achieved (see Figure 2).

In his exploration of the literature on environment, Gaulin distinguished between internal environment and external environment. Internal environment includes aspects such as those indicated by the style measures of Kirton (1978) and the use of the Myers-Briggs Type Indicator (Myers & McCaulley, 1985). Two internal environment measures related specifically to the work environment, Blake and Mouton's (1964) *Managerial Grid* and Fiedler's *Least Preferred Co-Worker* (Fiedler, Chemers & Mahar, 1976), were also discussed.

External environment included mention of Alex Osborn (1963) and the use of the guidelines for brainstorming to control the environment for a period of time. Literature was also cited (Gibb, 1972) to describe management behaviors that enhance or inhibit creativity in the workplace. High trust, flow of communications and clarity were examples of management behaviors leading to creativity in the workplace. The importance of psychic income in the form of responsibility, privilege, information and recognition were also noted (Pollock, 1971).

Gaulin tied together the idea of participative management (Mayo, 1945) and Quality Circles (Cole, 1979) as creating a managed environment that fosters motivation. Management theory evolved from a scientific management approach where workers were viewed as one more element of production to a more participative approach where the needs of the employees are considered. The Hawthorne studies (Mayo 1945) and the Michigan studies (May 1959) are used as examples of a more progressive approach where high production and low turnover are maintained through focus on the needs of employees.

Quality Circles were seen as an example of participative management. In a Quality Circle, a small number of employees gather together to take on work related problems. In his

discussion of these groups, Gaulin described their environmental needs which included a participative management style, a cooperation between labor and management, management support, training and problem solving skills.

Here Gaulin made a connection between the factors needed for creativity to flourish in the work environment and the attributes of a successful Quality Circle. Some of these attributes included the centrality of creative function, members as generalists, reduction of status barriers and the reduction of intermediaries (Crosby, 1968). Gaulin set out to capture a description of this environment and its advantages and then to validate that description.

Description of Population and Method

The key questions posed in Gaulin's project were:

A. How does one go about establishing a small group environment conducive to creative growth and development of its members? (Small group is defined as between 6 and 16 members.)

B. What are the possible advantages of establishing such an environment? (Gaulin, 1985, p.69).

There were two basic parts to the study that Gaulin conducted. First, he did an analysis of the literature and created a list of Aspects and of Advantages of a creative environment that is conducive to employee growth and development. Second, he examined these lists further through the use of an instrument that he designed and administered to a working Quality Circle team.

Gaulin used a Quality Circle group that he had started in a steel warehouse to address concerns with low morale. This group consisted of thirteen front office workers all performing related tasks. Gaulin described the need for this group as having emerged from a situation of environmental deprivation. Business results had been poor and morale had been low. Management agreed to the establishment of the group in the hopes of achieving benefits

including improved morale, establishing a sense of ownership and for skill development.

Expected benefits also included the fact that this could be done at no added cost and that it might free up some management time for other duties. .

To establish the lists of Aspects and Advantages, Gaulin conducted a search of the literature in the fields of creative environment, participative management and motivation. With the help of two expert judges, he compiled a list of thirteen aspects and a list of thirteen advantages of a creative environment (see Figure 3). Aspects relate to characteristics of the environment such as the free flow of information and support for risk taking. Advantages describe some of the possible results of a creative environment including team spirit, self-improvement and self-motivation.

ASPECTS	ADVANTAGES
<ol style="list-style-type: none"> 1. Recognition of other's ideas and accomplishments. 2. A free flow of information. 3. Flexibility in people's attitude toward other's thoughts. 4. Support for risk-taking. 5. Quiet place to work. 6. Tolerance for uncertainty. 7. Participation in the decision making process. 8. Organized, sequential activity. 9. No one direction which all must follow. 10. Education in the innovative process. 11. Suspension of critical judgment for some period of time. 12. Positive reinforcement. 13. Decentralized decision-making. 	<ol style="list-style-type: none"> 1. Encourages self-improvement. 2. Fosters cooperation among employees. 3. Enhances team spirit. 4. Is a catalyst for departmental cooperation. 5. Facilitates innovation. 6. Promotes the effective management of change. 7. Encourages communication of company needs. 8. Identifies specific goals. 9. Lends itself toward self-motivation. 10. Assists improved worker performance. 11. Expands personal capabilities. 12. Is a relatively friendly environment. 13. Generally sets higher standards of performance.

Figure 3. Gaulin's list of Aspects and Advantages of a creative environment. Adapted from Gaulin, 1985, p.120-121.

Gaulin used these lists to build a two-part instrument called *the Facilitative Environment Affect Tally (FEAT)*. The first part called "Facilitation and Encouragement" consisted of twenty-six items, one for each of the Aspects and Advantages. Respondents were asked to indicate their degree of agreement to each of these twenty-six items. Scoring was done on a scale of one to five with five being very high agreement with the item. Mean and range scores were computed.

The second part of the instrument called "Feelings" consisted of open-ended questions about these same items. Four judges, two from the Quality Circle and two experts in the field of creativity, placed the comments from the questions in categories of like comments and then applied these categories to the list of Aspects and Advantages. The percentage agreement among judges was computed.

Findings

Range and mean range scores were reported showing that in general the subjects agreed with both the Aspects and Advantages of the creative environment although agreement was stronger for the Advantages. Where a score of 5 would indicate high agreement and 1 low agreement, the range of scores for Aspects was from 3.7 to 4.7 (mean range = 2.0) while the range of scores for Advantages was from 4.3 to 4.8 (mean range = 1.9).

For the open-ended part of the instrument, over 250 comments were categorized by the judges. Comments were grouped into 13 categories for Aspects and 11 categories for Advantages. Another 19 categories were created that were then related to Descriptors and 8 categories for General. Judges agreed 97% of the time on the categorization of the comments and they agreed 91% of the time in the support of these categories for the Aspects and Advantages.

Gaulin's conclusion was that this high level of agreement was an indication that key aspects of a creative environment had been identified and that there was agreement on the advantages of such an environment. He went on to discuss how these various elements may be at work in a creative environment. For example in regard to Aspects, the recognition of others' ideas and accomplishments may give self-confidence. Flexibility in people's thoughts toward others' thoughts may lead to acceptance and the deferral of judgment. The Advantages are also discussed, including the notion of shared ownership fostered via self-improvement and self-motivation.

Gaulin pointed to a number of questions raised by this project for further research. Does the small sample size effect the results? What is the effect on the profitability of the organization? What concerns might managers have and how can they be alleviated? Among other suggestions for further research are to see if the results apply to managers, teachers and children.

Gaulin believed that practical application can be made of the findings of his project. He included a list of ten strategies that a manager might use to begin to establish a creative work environment. His work lends support for the creation and use of a creative environment in the workplace.

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