Chapter 5: Barriers to Creativity

Commonly Identified Barriers

5.1 Commonly Identified Barriers

What is it that keeps children, teen-agers, or adults from exercising their creative potential? What is it about ourselves, about the way we think and feel, the way we live, the way we relate with other people and to the things that surround us?

***Fundamentally,* each individual must figure out what barriers to creative expression exist within him or herself.** We all need to discover whether those barriers are internal or external and which are real or imagined. Many barriers are self imposed. If we assume that we are incapable of some task for some reason or another, we will most likely not attempt it. Many children in schools, for example, who are convinced they will fail, for any of a myriad of reasons, will not try.

And, just as we make negative assumptions about ourselves, we make negative assumptions about others. This becomes a dangerous indictment if one is in a position of influence over others, particularly a teacher. In schools we have a tendency to classify students on a continuum from most capable to least capable. The expectations we have of others are usually the ones they'll live up to.

Barriers to utilizing creative potential can be categorized into historical, biological, physiological, sociological, and psychological barriers.

Historical Barriers

5.1.1 Historical Barriers

In the historical sense, the following examples might give reason for an individual or a society not to attempt the new, to seek another solution, to find a better way**. From the ancient Greeks**, for example, there was **Plato** maintaining that history repeats itself. He wrote so convincingly of the circles of civilizations repeating themselves that to many it has seemed futile to attempt any changes. Plato's concept would have us be totally fatalistic and powerless as individuals and as societies.

These are but a few examples of historical significance to illustrate external dominance over human thought. It is technological advances, in the recent past and in the present that leave average people feeling that they have little, if any, control over their own lives.

Biological Barriers

5.1.2 Biological Barriers

From a biological point of view, **some scholars insist that creative ability is a hereditary trait,** while others maintain that environment is the major factor. Inherited genes do play a role within the measures of any kinds of intelligence; but too often, in the case of creative intelligence, heredity seems to be more excuse than actual fact.

Physiological Barriers

5.1.3 Physiological Barriers

Physiological barriers **can exist through types of brain damage one might incur through disease, or accident**. Or one might have a physical disability of some sort that prevents certain types of productivity. Yet, **John Milton** was blind and **Beethoven** was deaf...

Sociological Barriers

5.1.4 Sociological Barriers

Most certainly **our social environment affects our creative expression.** A society is comprised of individuals organized in some manner for the protection and, supposedly, the advancement of its individual members. Problems arise when the organization takes on a life of its own and is responsible for dehumanizing its members, making them feel individually insignificant. **A society shares a set of morals and traditions and is characterized by collective activities, interests, and behaviours.** Often an individual member feels that it is immoral to deviate from the norm, to appear to differ with the written and unwritten laws of his or her particular group. Whether the society is a nation or a street gang, deviations of behaviour from the group's established patterns can evoke punishments or exclusion. Therefore, unique behaviour, suggested change, and the like, are considered subversive and threaten the stability and security that others derive from group affiliation.

History has demonstrated that when the individual loses a sense of power over his or her own life, a society is ripe for a leader with a dominant personality who advocates group norms and the need to protect those norms. Such appeals to "groupness" and the group's right to sustain itself have been obvious, for example, in Nazi Germany, Communist China, and several African nations.

Also, within a particular sociological setting, whether it is a family, a school, a bridge club, a ball team, there are class systems, designed to keep people in their place, on such bases as age, sex, appearance, ability, background, seniority, right-handedness, and so on.

Social environment is a major factor in our ability to use our creative potential and to express our own uniqueness. Creative expression involves personal risk. Negative reactions to our expressions from our own group can cause us to experience even

less self-significance. Often an individual will retreat in order to feel accepted. The implications here are strong for those who attempt to evoke creative behaviour through teaching.

Psychological Barriers

5.1.5 Psychological Barriers

Given the foregoing categories of barriers to creative productivity - historical, biological, physiological, and sociological - **by far the most signifcant and prevalent barriers are psychological.** Therefore, they are the ones that demand the most attention from teachers of creative behavior. If we define a barrier as a factor that impedes progress or restricts free movement and give that definition a psychological application, then we are talking about the heart of the teaching profession: What are those elements that impede growth and development and how can they be eliminated or, at least, reduced?

The categories of barriers that have been discussed thus far are, by and large, external factors. *They are imposed, for the most part, by forces outside us.* Many of them serve well for those who would find reason for not being productive. Some people, in fact, convince themselves that external forces will never allow them to exercise creativity. This in itself is a psychological barrier.

There are a number of psychological barriers which get in the way of the analytical and creative managers. The more important are:

Self-imposed barriers;
Patterns, or one unique answer;
Conformity;
Not challenging the obvious;
Evaluating too quickly;
Fear of looking a fool.

These are discussed below.

A) self-Imposed Barriers

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The self-imposed barrier is one of the more difficult barriers to recognise. We put it up ourselves, either consciously or unconsciously.

b) Conformity or Giving The Answer Expected

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The barrier of conformity follows the previous barrier in the sense that many managers feel they have to conform to the patterns established by their colleagues in the organisation in which they work.

c) Lack of effort In Challenging the Obvious

C) Lack of Effort in Challenging the Obvious

Another barrier is the lack of effort in challenging the obvious solution. **This barrier is, in fact, two barriers rolled into one**. When faced with problems, there is a tendency to go for the obvious answer, which is accepted without question. Maybe, we're just happy to have

found an answer to the problem, at all **Secondly**, having an answer we avoid challenging it, even though there may be other and better answers. There is an old problem-solving technique which suggests that whenever an answer to a problem has been found, the answer and the problem are put on one side for a day, or so. The answer is then challenged to test whether it is the right answer. More often than not, a period of conscious or unconscious thinking allows other answers to be found. These may be better, or at least may cast doubts on the original solution.

In general, managers tend to avoid following through ideas and suggestions which depart from the accepted state of affairs. The phrase, 'Why don't we ...?' is frequently answered in a negative way by working out the reasons why it cannot be done, or it would not work. For example, when we have to undertake a task which we do not very much like doing, we tend to **'put off the evil day'**, giving reasons why it would be better or more appropriate to tackle it at another time. If only we would buckle down and do it, the job would be completed in far less time than the time we spend finding excuses for not doing it!

An extreme statement of this barrier - lack of effort in challenging the obvious - is a response known as the automatic no'. **Any new idea is automatically rejected, almost without consideration.** The reason for the rejection may be that the **new idea came from a junior, a peer or even someone outside the department or section.** The rejecter has feelings of anger or jealousy at not thinking of the idea himself, and therefore rejects it out of hand.

d) Evaluating Too Quickly

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This barrier - evaluating too quickly - **is not an easy one to remove.** Everybody has a well developed capability of evaluating ideas, and this is applied almost instinctively when ideas are put forward. As with the ‘automatic no' response, we tend to analyse and too often reject ideas which are slightly offbeat or new: **'that's silly', 'that won't work' or 'we tried it last year and it didn't work** are common phrases. The idea is then buried and a chance has been lost to develop new approaches.

One way of understanding this barrier is to look at your hands. If the left hand represents idea production and the right hand represents idea evaluation, the two hands are not separate as in real life but are linked and linked very tightly indeed. **So much so, that an idea produced is immediately evaluated and possibly killed, e.g. by the phrase, 'that won't work'.**

Success in creative thinking demands that the two linked hands should be separated, and that the right hand (idea evaluation) should be put on one side, for the moment. All ideas are acceptable in a creative situation, regardless of their quality. They may be good, bad,

useful, useless, and illegal - it doesn't matter, for in a creative session all ideas are acceptable. Subsequently, the evaluation hand is brought back and at that stage a strange thing happens. Some of the ideas, which would have originally been dismissed out of hand, are looked at afresh, possibly with the comment: 'Wait a minute, there may be something in that idea after all'. The ideas are given a chance to develop and not rejected too quickly. While the original idea may be silly or useless, it may lead onto other ideas which are readily applicable. So evaluation has no part to play in a creative situation, and all ideas, however wild or silly are accepted. Later, at the end of the session one or two really wild ideas are examined afresh.

Linked to this barrier, is the phrase, **'suspend judgment'**. In the creative situation no evaluation or judgement is allowed, either of other people's ideas or your own. Judgment is suspended until later and all ideas are accepted.

e) Fear of Looking Like a Fool

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Fear of looking like a fool **is the biggest barrier of all and the most difficult to remove.** It is one of the oldest barriers in that it starts very early in life. The imagination and creativity injected into games played by very young children generate much laughter and enjoyment. Unfortunately, the laughter can be turned against an individual who then begins to say, **'they are laughing at me'**. Nobody likes being laughed at and, as a consequence, as we grow up we tend to avoid putting forward the silly or wild ideas, in case we are laughed at, or thought foolish. Another phrase applicable in creative situation is **'laugh with, not at, the wild ideas'.**

This barrier is heightened when managers from different levels in the organisation are working together to solve problems. The most junior member of the team will not put forward wild ideas in case his seniors regard him as a fool. He does not want to destroy his promotion chances and therefore, sticks with well-tried (i.e., analytical) routines. At the other end of the scale, the most senior manager seeks to protect the image he has built for himself. He says, **'I don't want to confirm junior in his opinion that I'm a silly old fool'.** As a consequence, he does not propose any wild ideas either.
This barrier has another aspect. Managers do not like going against universally accepted views, particularly when these are stated by prominent or notable people. There is a risk of being wrong, particularly if the new idea is radically different from common practice. Examples of this aspect abound in history, and are still found today. This aspect is also particularly strong when technological advance is present, and new skills are required to replace existing. **Examples of this aspect are:**

- **A cast-iron plough**, invented in 1797, was rejected by **New Jersey farmers** who said that it would stimulate the weeds and poison the plants;

- **The patent for a radio valve lapsed in 1907** as no one could find a use for it;
- **In 1906, a scientist**, **Simon Newcomb**, said that flying was quite impossible;
- **President Truman** was said to have been advised by **Admiral Leahy** that, 'Atomic bombs won't go off, and I speak as an explosives expert';
- **The railway builders in the early nineteenth century** were advised that speeds of 50 m.p.h. would cause nose bleeds, and that trains could not go through tunnels because people would be asphyxiated;
- **Brunel, building the SS 'Great Britain'**, now restored in dry dock in Bristol, was advised that, **'iron ships won't float'**. So unsure were the builders of the efficiency of boilers and propellers that they included sails as well;
- **In 1933, Lord Rutherford** said, **'The energy produced by breaking down the atom is a poor kind of a thing.** Anyone who expects a source of power from transformation of these atoms is talking moonshine';
- **In 1957, the Astronomer Royal, Sir Harold Spencer Jones**, commenting on the news of the first satellite, said that generations would pass before man landed on the moon, and that even if he did succeed, he would have precious little chance of getting back.

Statements like these made by eminent people, who really ought to know better, discourage others from trying new and unusual ideas. **Fortunately creative people are prepared to take risks** - it is they who lead the way into new technologies and procedures. They are not discouraged by criticism and, of course, are rightly acclaimed later when their ideas are found to be sound and workable.

Fear of looking foolish, or being proved wrong, *is a powerful barrier for the analytical and creative manager.* As has been suggested earlier, barriers have no place in a creative session and behavior, and should be left outside the room.

Thinking, Problem Solving and Creativity: An Overview

5.2 Thinking, Problem Solving and Creativity: An Overview

A review of the literature on thinking and problem-solving reveals a variety of theoretical orientations and a whole host of experimental investigations. To sift through this mass of data is a separate task in and of itself. Consequently, we shall focus on one specific aspect of the thinking-problem-solving dimension. This is the area referred to as creativity or creative problem-solving.

In order to orient ourselves, we must briefly consider the semantics of the word. At present, investigations reveal the existence of some 50 or 60 definitions and the list is expanding every day. **Sternberg**

examined the many definitions which have been offered, and classified them into six major groups or classes. These groupings are not mutually exclusive since each definition may contain elements which fall into different classes. The class into which a definition was placed was determined by the main theme of the definition.

The first class of definitions will be labeled **"Gestalt"** or **"Perception"** type definitions wherein the major emphasis is upon the recombination of ideas or the restructuring of a **"Gestalt"**. Certainly, **Wertheimer's** definition that creativity is the "process of destroying one gestalt in favor of a better one" belongs in this category. So also the definition of keep that it is "the intersection of two ideas for the first time" and **Duhrssen's** notion that it is the "translation of knowledge and ideas into a new form" belongs in this category.

The second class of definitions may be called **"end product"** or **"innovation"** oriented definitions. A representative member of this class is **Stein's** definition that "Creativity is that process which results in a novel work that is accepted as tenable or useful or satisfying by a group at some point in time". Even Webster's dictionary is oriented in this direction for "to create" is defined as "To bring into being", "To produce as a work of thought or imagination". **Harmon** prefers to speak of it **as "Any process by which something new is produced** – an idea or an object, including a new form or arrangement of old elements".

A third class of definitions can be characterized as **"Aesthetic"** or **"Expressive"**. The major emphasis here is upon self-expression. The basic idea seems to be that one has a need to express himself in a manner which is unique to him. Any such expression is deemed to be creative. Hence we have Lee's definition that **"The creative process can be defined as ability to think in uncharted waters without influence from conventions set up by past practices."** In this vein, he offers that "The creative process is the person, the creator, working through his creation". **Northrop** sees the essence of creativity as being the **"decision to do something when you are irritated". Thurstone** thinks of it in terms of problem sensitization and **Ghiselin** defines it as "The process of change, of development, of evolution, in the organization of subjective life".

A fourth class of definitions can be characterized as **"psychoanalytic"** or **"dynamic"**. In this group, we find creativity defined in terms of certain interactional strength ratios of the id, ego and superego. In this respect, **Bellak** assumes that all forms of creativity are permanent operant variables of personality and he subscribes to the notion that to be creative, the ego must regress in order for preconscious or unconscious material to emerge. Leading proponents of this type of definition are **Anderson, Kris and Kubie**.

A fifth class of definitions can be grouped under the classification of **"Solution Thinking"**. Here, the emphasis is upon the thinking process itself rather than upon the actual solution of the problem. Spearman, for instance, defines creativity in terms of correlates. That is, creativity is present or occurs whenever the mind can see the relationship between two items in such a way as to generate a third item. Guilford on the other hand, defines creativity in terms of a very large number of intellectual factors. **The most important of these factors are the discovery factors and the divergent-thinking factors.** The discovery factors are defined as the "ability to develop information out of what is given by stimulation." The divergent thinking factors relate to one's ability to go off in different directions when faced with a problem. This is similar to **Dunker's** notion that in order to solve a problem one often must move tangentially from common types of solution. Other proponents of this class of definitions are **Poincare and Wallas**.

The sixth and last class of definitions is labeled **"Varia"** simply because there **is no easy way of characterizing them.** There is, for instance, **Rand's** definition that creativity is the **"addition to the existing stored knowledge of mankind"**. **Lowenfeld** speaks of it as the result of our subjective relationship with man and environment. **Porsche** sees it as the integration of facts, impressions, or feelings into a new form. Read feels that it is that quality of the mind which allows an individual to juggle scraps of knowledge until they fall into new and more useful patterns and **Shepard** speaks of it as a destructive process much like Wertheimer when he spoke of creativity in terms of destroying one Gestalt in favor of another.

Integration and Conclusions: Creativity a Field of Creativity

5.3 Integration and Conclusions: Creating a Field of Creativity

Psychologists discussed creativity in many different ways. Different levels of analysis were used to address the concepts; within levels, different components were put forth; and even when similar components were discussed, differences were seen in how these components were defined and how crucial they were claimed to be for the larger concept of creativity. Given these differences, which are as varied as creative expression itself, one might ask if there is any consensus whatsoever, if we know anything at all about creativity, or if it is even a useful concept for scientific theory and research. Our response, parallel to those of the preceding authors, is that despite the differences, there exist major areas of agreement, and although many refinements are necessary, creativity is an essential concept for psychology and holds enormous potential for scientific investigation.

What we shall attempt to provide, therefore, is a consensual summary of these many varied explanations of creativity, listing the major agreements and highlighting some of the more controversial

issues. The organization of this summary will follow **Stein's** general approach to dissecting the problem of creativity. That is, views of creative processes, persons, products, and places (problem domains and socially organized fields of enterprise) will be discussed in detail.

Creative Process

5.3.1 Creative Processes

In general, psychologists have viewed creativity **as a process existing in a single person at a particular point in time.** Some other authors, however, present a new alternative to this view. **Csikszentinilialyi, Gardner, Gruber and Davis, and Hennessey and Amabile** represent the new view and discuss creativity as **existing in the larger system of social networks, problem domains, and fields of enterprise,** such that the individual who produces products that are judged to be creative is only one of many necessary parts. This systems view of creative processes does not preclude the individual view, however. Rather, it provides additional insights regarding creative persons and products and their function in society as a whole. Our initial focus, therefore, will be to outline some understandings of the process within the individual before going on to the systems approach.

By far the greatest amount of agreement is with the statement that creativity takes time. In fact, some authors believe that the very nature of creativity depends on **the time constraints involved and the opportunity to revise, or nurture, the outcomes once produced.** Although not all theorists emphasize time to the same extent, the creative process is not generally considered to be something that occurs in an instant with a single flash of insight, even though insights may occur.

Instead of focusing on instantaneous insights, then, **Barron** and **Torrance** compare the process of creativity to procreation and emphasize the long gestation period that is required after the initial conception of an idea. Another process to which creativity has been compared (which also emphasizes time) is the more general and even lengthier process of evolution, in which the surviving products are determined through natural selection from a multitude of random variations.

Barron, Csikszentiniilialyi, Gardner, Gruber and Davis, Perkins, Sternberg, and Walberg all suggest that creative processes involve an active search for gaps in existing knowledge, problem finding, or consciously attempting to break through the existing boundaries and limitations in one's field. On the other hand, **Feldman, Johnson-Laird, Langley and Jones, Simonton, and Taylor** suggest that creative products are outcomes of random variations at either the generative or selection stage in creative processes. A further alternative, intermediate between chance-dependent and completely intentional processes, is an approach that is also taken by

several of the authors. Specifically, creative processes may be seen as initiating from a previous failure to find explanations for phenomena or to incorporate new ideas into existing knowledge, or form a general drive toward self-organization through the reduction of chaos.

In addition to asking about origins, one might also ask about differences between the products of creative processes. Does the particular product or the domain in which creativity occurs affect the process itself, just as different children or different species may develop at different rates and perhaps go through unique series of stages? Although several authors claim that creativity is domain-specific, there are some claims for universals in creativity, as there are for development and evolution. Thus, several general characteristics of creative thinking, regardless of domain, have been proposed.

For example, creative thought processes, regardless of the problem on which they are focused, are claimed to involve the following: transformations of the external world and internal representations by forming analogies and bridging conceptual gaps; constant redefinitions of problems; applying recurring themes and recognizing patterns and images of wide scope to make the new familiar and the old new and nonverbal modes of thinking.

In addition to time requirements, some element akin to insight, and the generality of processes across domains, a further issue on which several authors agree is that different levels of creative expression may occur. Although not all authors have addressed the levels issue explicitly, the general belief is that the processes responsible for varying levels of creativity may differ, if not in kind, at least in degree; see **Feldman** for a more detailed discussion. Thus, both within a domain and within the same individual at different points in time, there may be differences with respect to the amount of creative processing in which individuals engage. **Einstein**, in this view, may have attained a high level of creativity, or often have engaged creative thought processes, whereas a less influential scientist in his time may not have achieved such a high level, or simply did not apply creative processes to the same extent that **Einstein** did. Different levels of creativity may exist, therefore, in an analogous fashion to the idea that species differ in their complexity along the phylogenetic scale. However, this issue of levels brings up yet another area of controversy: the availability and accessibility of creative processes, both between and within individuals.

First, let us address the availability question, as it pertains to different individuals. **Creativity,** according to some authors, occurs only in special individuals (the **Edisons, Einsteins, Freuds, Mozarts, and Picassos of the world)** at rare moments in time. Other authors believe creativity to be a much more normative process, available to

every thinking instrument - adult expert, growing child, or programmed computer. Thus, creative processes can be trained and improved, as far as Langley and Jones, Schank, Taylor, and Torrance are concerned, because their concept of creativity is in line with this latter, **"available-to-everyone"** view. Training is not an easy matter, however, according to the theories of authors such as Barron, Csikszentmilialyi, Gruber and Davis, and Hennessey and Amabile, who maintain that creativity is achieved only when the "right" combination of particular problems, skills, individual, and social milieu comes together.

Finally, there is controversy over the accessibility of creative processes within individuals. **Disagreement** on the accessibility issue ensues when the role of the unconscious and semiconscious elements in creative processing are brought up. As with insight, the expression of the unconscious is sometimes conceived of as the key to creativity (Feldman; Torrance). Thus, creativity, according to these authors, is accessible only by bringing unconscious elements into conscious awareness. In other views, however, the role of the unconscious and the question of accessibility are ignored completely. Once again, the consensus lies in between, with unconscious elements existing and being important for creativity, but not the essence of creative thought processes. Langley and Jones, for instance, provide a particularly interesting discussion of the unconscious in the memory-activation processes. In the Langley and Jones proposal, the memories relevant to a creative insight are not accessible until just the right cue activates them. Thus, they propose that such unconscious processes are involved in, but are not central or unique to, creativity.

The issues addressed when one considers creative processes, therefore, include the following: the time required for such processes; the role of insight and the sparks that set off creative thinking; how closely processes are tied to their products; general characteristics of creative thought across different domains; levels of creative processing; the need for the products of such processes to be unique in order for them to be labelled as creative; and how accessible and controllable the processes are in conscious awareness.

Creative Persons

5.3.2 Creative Persons

Descriptions of the creative person typically fall into three general categories: cognitive characteristics; personality and motivational qualities; special events or experiences during one's development. We shall discuss each category in turn.

It is generally acknowledged that **people are creative within particular domains of endeavor,** even though people who are creative in different domains may share common traits. Thus, one may be a creative biologist, but a very uncreative novelist, or vice

versa. This is a curious statement, given that when the issue of domain specificity occurs in discussions of creative processes, much less agreement ensues. Nonetheless, domain specificity is a major consideration when describing creative persons, and it goes along with other characteristics such as using one's existing knowledge in the domain as a base to create new ideas, being alert to novelty, and finding gaps in domain knowledge. Although, it is generally agreed that creative individuals are creative within limited domains, various explanations have been offered for why individuals differ in their propensities toward and abilities in their domains of specialty. Csikszentinitialyi, Gardner, Perkins, and Walberg, for instance, attribute such specificities to inborn sensitivities to particular types of information or modes of operation. Gardner and Gruber and Davis, however, discuss unique combinations of intelligences, whereas Walberg emphasizes highly practiced skills as a factor.

A list of cognitive characteristics that are shared by creative people, regardless of domain, can be grouped into three sets: traits, abilities, and processing styles that creative individuals use and possess.

First, there are the four traits that are commonly said to be associated with creative individuals: relatively high intelligence, originality, articulateness and verbal fluency, and a good imagination. **The next set of characteristics that have been used by creative persons includes the following cognitive abilities:** the ability to think metaphorically, flexibility and skill in making decisions, independence of judgment, coping well with novelty, logical thinking skills, internal visualization, the ability to escape perceptual sets and entrenchment in particular ways of thinking, and finding order in chaos. **Finally,** creative people may also be characterized by the way in which they approach problems (i.e., style); some of the most commonly mentioned processing styles include using wide categories and images of wide scope, a preference for nonverbal communication, building new structures rather than using existing structures, questioning norms and assumptions in their domain (asking “Why?”), being alert to novelty and gaps in knowledge, and using their existing knowledge as a base for new ideas.

The one characteristic that seems to prevail among creative people, however, is what seems almost to be an aesthetic ability that allows such individuals to recognize “good” problems in their field and apply themselves to these problems while ignoring others (**Perkins**; **Stemberg**; **Walberg**). What accounts for this sense of aesthetic taste and judgment? Perhaps it is some combination of the foregoing characteristics, perhaps it is better explained by the personality or motivational characteristics to be presented next, or maybe it is a separate factor altogether. Whatever the particular explanation, this aesthetic sense is clearly a pervasive feature of creative persons and one that is worthy of greater study, not just in the arts, in which we

think of aesthetics as being of primary importance, but in a variety of domains, including scientific areas, in which we do not usually think of aesthetics as playing an important role, at least when investigated superficially.

As with the cognitive characteristics, there is no one personality or motivational characteristic that is useful for attaching the label -creative- to a particular person. Rather, creative personalities are composed of a constellation of many characteristics, some of which may be present in one creative individual, but not in another, and thus mentioned by some authors, but not others. The most commonly mentioned characteristics include a willingness to confront hostility and take intellectual risks, perseverance, a proclivity to curiosity and inquisitiveness, being open to new experiences and growth, a driving absorption, discipline and commitment to one's work, high intrinsic motivation, being task-focused, a certain freedom of spirit that rejects limits imposed by others, a high degree of self-organization such that these individuals set their own rules rather than follow those set by others, and a need for competence in meeting optimal challenges; though often withdrawn, reflective, and internally preoccupied, creative individuals are also said to have impact on the people who surround them.

Additional characteristics that were mentioned less often yet are still considered to be important features of creative personalities, **were tolerance for ambiguity, a broad range of interests, a tendency to play with ideas, valuing originality and creativity,** unconventionality in behaviour, experiencing deep emotions, intuitiveness, seeking interesting situations, opportunism, and some degree of conflict between self-criticism and self-confidence.

In addition to the **conflict between criticism and confidence**, there appears to be a conflict or paradox between socially withdrawn and socially integrated tendencies; at least this appears to be the case when we consider the comments from those authors who discussed how creativity and creative individuals function in social environments. For instance, it was mentioned previously that creative people have impact on others in their immediate surroundings. However, **Feldman and Gardner,** both suggest that what distinguishes creative individuals is their lack of fit to their environment. Similarly, others have discussed creative people's need to maintain distance from their peers, an avoidance of interpersonal contact, and resistance to societal demands. Back on the other side, it has also been proposed that creative individuals have a drive for accomplishment and recognition, a need to form alliances, desire attention, praise, and support, are charismatic, display honesty and courageousness, are emotionally expressive, and are generally ethical, empathetic, and sensitive to the needs of others. The conflict between social isolation and integration, then, is yet another issue that would be brought into clearer focus if investigated directly.

The final light in which to consider creative individuals is with respect to their developmental histories. Such histories were primarily elucidated by **Gruber and Davis, Simonton, and Weisberg,** although some aspects of development were also discussed by **Csikszentinitalyi, Gardner, Perkins, Sternberg**, and **Torrance**.

Being a firstborn, having survived the loss of one or both parents early in life, experiencing unusual situations, being reared in a diversified, enriching, and stimulating home environment, and being exposed to a wide range of ideas are some of the early experiences and demographic characteristics that were mentioned by **Simonton**, **Csikszentinitalyi, Weisberg, Walberg**, and **Gardner**, respectively. Creative adults, while children, have also been cited as being happier with books than with people, liking school and doing well, developing and maintaining excellent work habits, learning outside of class for a large part of their 'education', having many hobbies, being omnivorous readers, and forming distinct and closely knit peer groups, yet perhaps also exhibiting marginality. Once again, the tension between social isolation and integration appears.

Having a future career image and definite role models, mentors, and paragons while in training are features put forth by **Simonton, Torrance, Walberg, and Weisberg** as important factors influencing the development of creators in many fields? Moreover, over the course of their careers, creative individuals exert sustained effort and hence enjoy enduring reputations, have contributions that demonstrate precocity and longevity publish early and get good jobs at the initial stages, and, overall, demonstrate voluminous productivity.

Studies of creative people, more than any other approaches to research in creativity, are in dire need of some good controls. Such control studies might, for instance, include experiments that examine people with differences in the relevant characteristics beforehand, not after their creativity has already been assessed.

5.3.3 Creative Products

Creative Products

Reflecting psychology's emphasis on laboratory studies, the most frequently discussed products of creative thought are solutions to problems, responses on creativity tests, and explanations for phenomena. Close behind come technological inventions and artefacts, novel ideas, and new styles, designs, or paradigms. Although of more interest to the layperson when thinking about creativity, the fine arts (painting, sculpture, and music) received only half as much attention from the authors as scientific and laboratory problem solving. There are the expressions of emotions and abstract ideas, the performing arts of dance and drama, occupations such as advertising and marketing, and other media such as photography and film.

An important question concerning products, as it is for processes, is whether or not any generalizations can be made about products that are judged to be creative across different domains. The most obvious statement is that creative products are novel - they are not imitations, nor are they mass-produced. Other requirements of such products are that they are powerful and generalizable, exhibit parsimony, cause irreversible changes in the human environment, may involve unusual sensory images or transformations, and are valuable or useful to the society, or at least the restricted domain, in which they were formed.

Some features that may be more relevant to scientific creativity and creative problem solving are that the products should show sensitivity to gaps in existing knowledge, cross disciplinary and within-discipline boundaries so that they are difficult to categorize, be surprising, and be correct, in that experts agree on the produced solution. In addition, they may be difficult, initially vague, or ill-defined and involve coherent syntheses of broad areas. Torrance's criteria, which include showing humour, fantasy, colour, and movement, in both literal and metaphoric senses, probably are more relevant to the arts and specific tests of creativity than they are to science.

5.3.4 Creative Places (Domains, Fields, and Contexts)

Creative Places (Domains, Fields and Contexts)

Three ways that a field can be thought of as affecting creativity are via the general contributions and resources available to individuals within the field, through the special effects a particular field may have on its domain and the nature of the creative expressions that result, and by containing specific characteristics that either promote or inhibit creativity.

Wealth an audience's attention, educational and employment opportunities, background knowledge, styles and paradigms, cues for insights, roles, norms, and precedents, and good teachers have all been cited as contributions relevant to the creativity expressed in particular domains, individuals, and processes. Further, fields provide peers to evaluate and confirm creativity in their domains while also protecting and freeing the development of creative products and individuals from the less congenial evaluations that may come from members of the general public. Stimulation and sustenance of creative processes, as well as preservation and selection of ideas have also been proposed as necessary components of any field in which creative endeavour occurs. According to **Hennessey and Amabile**, fields also affect the motivation of individuals working within them.

Csikszentinitalyi makes two claims that address a small part of the question regarding features of creativity-inducing fields, provided that evaluation of products is seen as important in creative expression. First, he suggests that a field's internal organization is

one factor that attracts interested neophytes to a particular field rather than others. Second, he claims that the ease of evaluation in various domains, and hence agreement among experts as to who and what are going to be defined as creative, is determined by the precision of notational systems within the domains. Other ways that a field can improve its likelihood of creativity, as suggested by **Torrance**, are by using sound effects to stimulate creative images and by providing warm-up exercises that are designed to free the imagination, although these techniques probably are more relevant to some types of creativity than to others.

Now look at the differences between the creative individual and creative organizations, see Table 5.1.

Table 5.1: The creative individual and organization

The Creative Individual	The Creative Organization
Conceptual fluency… is able to produce a large number of ideas quickly.	Has idea men Open channels of communication Adhoe devices: Suggestion systems Brain-storming Idea units absolved of other responsibilities Encourages contact with outside sources Heterogeneous personnel policy
Originality… generates unusual ideas	Includes marginal, unusual types Assigns non-specialists to problems Allows eccentricity
Separates source from content in evaluating information… is motivated by interest in problem… follows wherever it leads	Has an objective, fact-founded approach Ideas evaluated on their merits, not status of originator Adhoe approaches: Anonymous communications Blind votes. Selects and promotes on merit only
Suspends judgment… avoids early commitment… spends more time in analysis, exploration.	Lack of financial, material commitment to products, policies Invests in basic research; flexible, long-range planning Experiments with new ideas rather than prejudging on "rational" grounds; everything gets a chance
Less authoritarian… has relativistic view of life	More decentralized; diversified Administrative slack; time and resources to absorb errors.

Accepts own impulses… playful, undisciplined exploration **Independence of judgment**, less conformity Deviant, sees self as different Rich, "bizarre" fantasy life and superior reality orientation; controls.	Risk-taking ethos… tolerates and expects taking chances. Not run as "tight ship" Employees have fun Allows freedom to choose and pursue problems Freedom to discuss ideas Organizationally autonomous Original and different objectives, not trying to be another "X" Security of routine… allows innovation "Philistines" provide stable, secure environment that allows "creators" to roam. Have separate units or occasions for generating vs. evaluating ideas… separates creative from productive functions.

Innovative & Creativity at Work

5.4 Innovation & Creativity at Work

Organizations today are the **'primary crucible for human development'.** As such they have a great influence on humankind's future development, for better or worse. Much has been said and written about organizations from an external, structural point of view: how they should define their business mission, set their strategies for differential advantage, design their structures and objectify their tasks, to assure the efficient and successful attainment of their economic goals. Indeed, this is how we have tended to think of business: **as an external structured mechanical approach to attainment of tangible economic goals.** Recently, however, questions have been arising about the internal, less tangible side of our organizations: why does the organization have the purpose it does, what values are inherent in its purpose, how are these values manifested in its culture, and how does this culture affect the motivation and contribution of its employees to the company's purpose? This questioning has spurred the scientific inquiry by the behavioral sciences toward a better understanding of this cultural side of organizations.

At the same time as the above trend, the need to increase creativity and innovation in our organizations has emerged. Driven by the globalization of competition, and the increased pace of change in the situation around them, organizations are questioning whether their products or services are sufficiently innovative to meet the needs of the changing environment. On contemplation of the need to increase creativity and innovation, it becomes apparent that faster, smarter technology will not be enough. The creativity of the human being must be enhanced as well. Thus the question before the organization is

how do we increase the creativity of our employees?

These two streams of inquiry, how we can understand the contribution of our culture to the achievement of our company purpose, and how we can increase our creativity, come together in the question: how does the culture of an organization affect the creativity of its employees?

This question has been the focus of a research effort by **the Centre for Creative Leadership (CCL) and Dr Teresa Amabile of Brandeis University.** Dr Amabile is well known for her research into the effect of the social environment on the creativity of the individual. Her research has documented a **link between the social environment around an individual and the creativity of the individual's work output.** The link is the effect the social environment has on the intrinsic motivation of the individual. One does one's most creative work when one is primarily motivated by the enjoyment of the task itself, and not by extrinsic motivators. Thus the basic theory underlying the CCL research is that organizations can increase their employees' creativity by shaping a social environment that encourages the inner motivation of the employee to emerge and engage with the work task.

The CCL research has had two goals: to identify and measure the factors in organizational climates which affect employee creativity, and to provide an organizational intervention methodology which makes this information useful to organizations which desire to improve their climates for creativity i In this research design, Dr. Amabile provided the theoretical and empirical expertise, while CCL provided the client interface and the organizational intervention expertise, see Table 5.2.

Table 5.2: Centre for creative leadership: brief descriptions of the WEI factors with sample items from each scale

Stimulants to Creativity	**STIMULANTS TO CREATIVITY**
Coworkers	**Coworkers** Teamwork, willingness to help each other, commitment to the work, and trust with fellow workers. In my work group, people are willing to help each other. The people in my work group are committed to our work.
Resources	**Resources** Access to appropriate resources, including facilities, equipment, information, funds, and people. The facilities I need for my work are readily available to me. Generally I can get the resources I need for my work.
Challenges	**Challenge** Challenge due to the importance of the work and the intriguing nature of the task. I feel that I am working on important projects.

	The tasks in my work call out the best in me.
Freedom	**Freedom** Freedom in deciding how to accomplish the task. A sense of control over one's work and ideas. I have the freedom to decide how I am going to carry out my projects. In my daily work environment I feel a sense of control over my own work and my own ideas.
Supervisor	**Supervisor** A manager who gives support to subordinates, communicates effectively, and sets clear goals. My supervisor clearly sets overall goals for me. My supervisor values individual contributions to project(s).
Creativity supports	**Creativity supports** Encouragement and support for creativity from top management; mechanisms for developing creative ideas in the organization. In this organization top management expects that people will do creative work. People are encouraged to take risks in this organization.
Recognition	**Recognition** The existence of rewards and recognition for creativity in the organization. People are recognized for creative work in this organization. People are rewarded for creative work in this organization.
Unity and cooperation	**Unity and cooperation** A shared vision within the organization and a cooperative and collaborative atmosphere. There is a generally cooperative and collaborative atmosphere in this organization. Overall, the people in this organization have a shared 'vision' of what we are trying to do.
OBSTACLES TO CREATIVITY	**OBSTACLES TO CREATIVITY**
Insufficient time	**Insufficient time** The lack of time in which to consider alternative ways of doing the work. I have too much work to do in too little time. We do not have sufficient personnel for the project(s) I am currently doing.
Status quo	**Status quo** The reluctance of managers or co-workers to change their way of doing things, a generally traditional approach. There is much emphasis in this organization on doing things the way we have always done them. Management avoids controversial ideas in this organization.
Political problems	**Political problems** Lack of cooperation between areas of the organization, and battles over turf issues. People in this organization are very concerned about protecting their territory.

Evaluation pressure

There are many political problems in this organization.

Evaluation pressure

Perceived inappropriate evaluation or feedback systems or environment focused on criticism and external evaluation.

People are quite concerned about negative criticism of their work in this organization,

People in this organization feel pressure to produce anything acceptable, even if quality is lacking.

CRITERION SCALE (OVERALL RATING BY EMPLOYEES)

Creativity

Productivity

CRITERION SCALE (OVERALL RATING BY EMPLOYEES)

Creativity

How creative the organization is overall.

Overall my current work environment is conducive to my own creativity.

My area of this organization is creative.

Productivity

How productive the organization is overall.

My area of this organization is effective.

Overall this organization is productive.

Can organizations Show Creative Characteristics ?

5.5 Can Organizations Show Creative Characteristics?

During recent years, ***Caluin W Taylor*** *has given numerous speeches on whether organizations can show creative characteristics.* In his writings, **he has asked many questions such as: Should we ask organizations to display the same creative characteristics that are found in creative individuals?** For example, should organizations be alert and responsive to opportunities? Should they sense problems that haven't been sensed before and face up to these problems and try to do something about them, especially in the way of a diversity of fresh attempts toward better solutions, rather than ignore or postpone them for future generations ?

Can an organization learn to set the climate so that the inner resources of its people may be more fully developed and utilized? Can an organization have the characteristic of welcoming long strides of progress instead of only being able to tolerate inching ahead? Can an organization learn to adjust to ideas from its people so that both will work together, or will they tend to pull in different directions with the result that many of the good ideas may get killed and, as a result, the organization may also show signs of dying?

As an organization grows older, does it lose some of its potential by building into itself certain self-imposed restrictions and limitations in the process of developing its own set of intellectual and personality characteristics? Or does it develop creative characteristics so that it retains its creative potential and even increases its effective creative

mind power? Does it develop the characteristic and principle that its system is made for man, or is its guiding principle that man is supposed to be made for the system? Does it require its workers to adjust to its organizational environment, or does it allow and even encourage workers to adjust their own environment and build a better climate and organization for creative work?

Here are some answers of these questions

Here are some answers of these questions

Taylor says: "I have often wondered who the greatest killers of creativity were. At present, my strong conviction is that the person himself is the greatest killer of his own ideas. But if he doesn't kill his own brain-child and sends it out into the world, there will be plenty of other people ready to finish the job by killing it for him. One also wonders which is more effective in destroying ideas within itself: an individual or an organization."

While Richardson states that: "The new-idea man may have to exert pressure and strain on the system in order for the system to change enough to allow the new idea in; otherwise, inertia will tend to cause the system to settle back into its old rut. I was fascinated to hear that an organization was planning a meeting to lean how to avoid settling into ruts and, instead, to keep itself young and alive and thriving. They have dubbed this proposed meeting as a "dry rot" conference."

Since the crucial part of organizations are the people in them, one of **Taylor's** recent hunches is that an organization will be no more flexible than its least flexible link (of importance), and that it will be no more creative than its least creative link (of importance). In other words, one inflexible person in the right place can level the entire organization down toward his low degree of flexibility. Likewise, one uncreative person in a key position will tend to lower the creativity of the organization to his own level.

Richardson's idea, about keeping an organization alive and thriving, is that you must have a system which will spot and cultivate and insist upon having creative minds continue to rise to the top. One of his staff reported that there are four stages in the life of an organization as it starts out like a newborn baby with all the potential in the world. It is formed by (1) a group of leaders who could be called "**innovators**", who, in turn, tend to be replaced by (2) a group of leaders called "**developers**", who, in turn, make their contribution and tend to be succeeded by (3) a group of leaders called "**consolidators**", who, in turn, tend to prepare the organization and deliver it into the hands of (4) a group called "**undertakers**". The last dying gasps of a corporation are when its leaders decide to write "a bigger and better rule book". Under the reign of consolidators, what chance do creative minds have of giving the organization the "lifeblood of tomorrow" and of helping the organization not only to stay in the mainstream today,

but even create the mainstream of tomorrow? That is, when an organization is in the hands of consolidators, "what chance does a creative mind have to rise to the top?" And what chance would anyone ever have of reversing the above trend across leader types?

In case a person encounters some hindering features in the organization that were built-in earlier by someone else in order to get control over other creative individuals, he may encounter resistance in trying to get these restricting rule or features removed. He can inquire as to when they were built-in and how did it all happen? He could ask what would be necessary to restore the organization to its earlier state where it still had potential to do all these things. But if he can get rid of the hindrances, the workers might be able to do even better work than at present. To bring about the changes he may have to keep a strain on the system that will only relax when he leaves or when it changes – and it will sometimes bitterly resist the latter. Some key people, unfortunately, may see this pressure as a power struggle, rather than a struggle for ideas to get a chance. A struggle between people for power is distinctly different from a struggle "for ideas to have a hearing." This is like the difference between a person in revolt and a revolutionary. One is after power and the other is after having his ideas heard. If the ideas are given a good hearing, the latter one, but not the former may relax the pressure.

To show the various reactions of leaders to different types of workers, Taylor have sometimes described persons in leadership positions as falling into one of four types. The first type he calls a "creative leader", in the sense that he has all the creative characteristics and is blazing new trails and opening new fields so many people can follow into these new fields to work – he is really a pioneer. A second type is not quite this kind, but at least he might be called a creative leader in the sense of being a catalyst and thus being somewhat of a party to, though not the real creator of, the new ideas generated in others. So he does enter into the process as a catalyst and deserves credit for an assist. The third type is a creative leader in another sense; he can at least allow or tolerate or even encourage creativity in others around him and thereby create a more favorable climate. And the fourth type, he calls "none of the above".

Taylor also classifies workers into four types to set the stage for another point. **One type** may be a worker with hardly any ideas, so that what he does is almost entirely what he is told to do. The **second one** may be someone with lots of ideas and he tries them out but quickly realizes that ideas are not "welcome here". So he goes underground with his own ideas and becomes, in effect, a "yes man". A **third type** is one who tries his ideas out and, when he finds that they aren't welcome, explodes and quits. But the question is where does he go or where can he go? He goes someplace else and great creativity may occur when the administration explains why he left. He probably leaves some psychological scars behind, so that thereafter

the chances are reduced for idea persons like him ever being hired into that organization again. The **fourth kind** of worker is one who has ideas that he believes are needed for the organization to survive and thrive. He, therefore, stays and fights for his ideas.

Organizational Creativity and Innovation

5.6 Organizational Creativity and Innovation

Creativity and innovation (C&I) are widely recognized as important aspects of human functioning at all levels - individual, group, organizational, and societal. Over the last four decades, researchers and theorists from psychology **(e.g., Guilford),** sociology **(e.g., Merton)**, economics **(e.g., Mansfield)**, and many other disciplines have written about the causes and consequences of C&I in a variety of settings.

C&I are generally considered important for a healthy national economy and for increasing the quality of life. To meet the future needs facing the world, large investments of resources will be required to produce and implement creative solutions. However, because of the way societies are structured, much of the impetus for C&I will have to originate within complex organizations.

Of all the areas studied in relation to C&I, complex organizations have received considerable attention. Much of this attention can be attributed to the needs and values of organizational researchers. However, organizations themselves clearly have a stake in C&I research. Organizational growth and even survival can be tied directly to an organization's ability to produce (or adopt) and implement new services, products or processes.

The literature is replete with case studies detailing how organizations that ignored new technological advancements, for example, began a slow death spiral. Starbuck describes one case involving a manufacturer of mechanical calculators that refused to acknowledge the competitive impact of electronic calculators. The result was predictable: profits declined steadily until the company was bought out and restructured to emphasize electronic calculators.

In spite of the importance attributed to organizational C&I, the empirical research has been somewhat spotty and less than conclusive. After reviewing close to 100 major books and articles on organizational C&I, ***Gundy found that at least ten general conclusions can be drawn:***

1. The terms **"creativity"** and **"innovation"** often are used interchangeably, thus making comparative distinctions difficult. Publications that do make a distinction frequently lack agreement on how to define creativity and innovation.

2. **The majority of the empirical research literature deals exclusively with organizational innovation.** The literature identifying itself with organizational creativity is largely nonempirical and concerned mostly with prescriptions for needed climate variables (e.g., Cummings, 1965). The majority of empirical creativity research is limited to studies of intragroup creativity (e.g., the literature on brainstorming) and personality traits and characteristics of individuals.
3. **Most of the research on organizational innovation deals either with the adoption or individual diffusion of innovations.** Very few large-scale studies of entire innovation process exist.
4. **The focus of most innovation research** has involved correlating structural aspects of organizations with composite measures of innovation.
5. **Unitary models of innovation** have dominated previous research. This research has largely ignored the existence of organizational C&I occurring within different organizational subsystems at different times. Instead, some research studies seem to assume that organizations are either innovative or they are not.
6. **Innovation typically** is considered to be a positive attribute of organizational functioning. Although this view probably reflects die values of many researchers, the negative aspects of innovation also are important for understanding the innovation process.
7. **The broad study of organizational innovation** as a process similar to all organizations is giving way to the study of specific innovations in specific organizations.
8. **In most organizations**, the innovation process is more evolutionary than revolutionary. Most innovations are diffused, and implemented at a relatively slow pace. Radical innovations are rare, but do occur when conditions warrant them (e.g., during situations perceived as survival threatening, or what **Knight** refers to as "distress innovations").
9. **Organizations designed along bureaucratic lines** are highly resistant to innovations and often fail to foster conditions conducive to creativity. Alternative organizational structures (such as matrix systems) and new managerial philosophies, however, are helping to counteract this resistance.

Creativity versus Innovation

5.7 Creativity versus Innovation

A distinction needs to be made between creativity and innovation to clarify some differences that exist in the literature. Except for a few researchers, definitions of organizational innovation have excluded any mention of creativity or idea generation. ***For example,*** organizational innovation has been defined as "first or early use of an idea by one of a set of organizations with similar goals", “the adoption of means or ends that are new to the adopting unit", the adoption of a

change which is new to an organization and to the relevant environment, "an idea, practice, or object that is perceived as new by an individual or other unit of adoption", and "adopted changes considered new to the organization's environment".

Reviewing these definitions and others suggests that organizational innovation is: (1) change perceived as new to an organization, (2) something new that is adopted for use by an organization (with the implication often being that implementation will follow adoption automatically), and (3) relative to the organization adopting and using something new; what is innovative for one organization may not be innovative for another.

Organizational creativity, on the other hand, often is used to mean the same thing as organizational innovation. This usage is especially evident in the nonempirical writings on organizational creativity. Most of this work neglects to define organizational creativity precisely. However, it usually can be inferred that the writers view organizational creativity as representing the sum total of the creative traits, abilities and actions of all the organization's members. It also can be inferred from this literature that an organization will be creative if the proportion of creative individuals (and their creative acts) exceed the proportion of "noncreative" individuals.

It can be assumed that **all individuals in organizations are creative and vary only in the degree of their creativeness,** and then all organizations must be considered creative. Furthermore, just as some individuals are more creative than others, some organizations should also be more creative than others. It would then follow that a creative organization is likely to be more successful at innovation than a less creative organization. That is a highly creative organization should be better able to initiate, adopt, and implementt new products, services, or processes.

As conceptualized by many writers in the field, creativity might be viewed more realistically as a problem solving process with identifiable stages. One of these stages happens to be idea generation. But achievement of creative solutions cannot always be accomplished through idea generation alone, other activities such as data-finding and problem-finding also are important.

It probably is most realistic to **view creativity as a process that cuts across all aspects of the innovation process**. Idea generation may be used in some stages of the process at different times and within different subsystems of a particular organization. However, other stages of the creative problem-solving process also may assume equal or greater importance depending upon the needs and perceptions of individual innovators within an organization.

In some instances, an organization may generate idea proposals internally or it may decide to adopt externally-generated proposals. In either case, some degree of creative problem solving may be involved. For example, a decision to adopt an externally-generated proposal may produce new problems for an organization, any of which may require development of creative solutions. Thus, innovation and creative problem-solving processes are closely intertwined. It is very difficult to consider one without considering the other.

For our present purposes, the innovation process will be viewed as consisting of the following stages: (1) problem awareness and identification, (2) idea proposal, (3) idea adoption and (4) idea implementation. **Such a process is very similar to the basic Osborn-Parnes five-step creative problem-solving model of fact-finding, Problem-finding, Idea-finding, Solution-finding, and Acceptance-finding**.

Based upon this four-step model, organizational innovation will be defined as the process of proposing, adopting, and implementing an idea (process, product, or service) new to an organization in response to a perceived problem. **This definition emphasizes that innovation: (1) is a continuous, dynamic set of activities (2) deals with the concept of newness relative to a particular organization and (3) is stimulated by a perceived gap in performance (a problem).**

The act of proposing an idea can involve idea conception (generation of an idea new to the organization) as well as the act of recommending that a borrowed idea be considered for adoption. In either instance, the idea may be new to the organization. The only difference is the source of the idea.