



Educational Studies



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▶ **Creative Thinking Techniques**

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Module (4)

Innovation



Innovation

➤ Objectives:

After completing this topic, you should be able to:-

- ✓ Identify The Meaning of Innovation as A Way of Applying A Creative Thinking.
- ✓ Identify The Difference between Change, Creativity and Innovation.
- ✓ Identify How to Test The Innovation.

What Innovation as A way of Applying Thinking

- The term innovation means a new way of doing something.
- It may refer to radical and revolutionary changes in thinking, products, processes, or organizations.
- The process of coming up with new ideas or new uses for old ideas.
- To be innovative the ideas must add value.
- Innovation is an important topic in the study of economics, business, technology, sociology, and engineering.

What Innovation as A way of Applying Thinking

- innovation is also considered a major driver of the economy, the factors that lead to innovation are also considered to be critical to policy makers.
- Those who are directly responsible for application of the innovation are often called pioneers in their field, whether they are individuals or organizations.
- Innovation is bringing something new into existence.
- A company that fires half its workforce in order to cut costs has undertaken a major change.
- But a company that finds a fundamentally new way to reach and serve its customers has achieved an innovation.

The Distinction between Change, Creativity and Innovation

- **Change:** To alter, make different, move from one state to another.
- **Creativity:** The state or quality of being creative. The ability to create.
- **Innovation:** The act of introducing something as a novelty.
- **Conclusion:** creativity is a starting point for innovation.
- Innovation means taking creative ideas and making them real, implementing them.

The Distinction between Change, Creativity and Innovation

- Innovation is not just releasing new products.
 - ✓ Implementing new business processes.
 - ✓ Fresh ways of doing things.
 - ✓ New routes to market.
 - ✓ New business strategies.
- Uncontrolled creativity without any discipline or process of innovation is at best distracting and at worst harmful to the organization.

The Distinction between Change, Creativity and Innovation

- Creativity needs to be focused on the corporate goals and must serve as a funnel into the innovation process.
- Innovation means taking the most promising ideas and testing them for real. Not all will succeed; many will fail.
- Despite some failures along the way, the people in a truly innovative organization are always looking for new and entrepreneurial ways of achieving their goals.👤

What is Innovation to you?

- 1- Something new.
- 2- Growth.
- 3- Incremental change.
- 4- Leading.
- 5- Efficiencies.
- 6- Ideas.
- 7- Creativity.
- 8- Radical change.
- 9- Entrepreneurial.
- 10- Services

The Goal of Innovation

- The goal of innovation is positive change, to make someone or something better.
- Innovation leading to increased productivity is the fundamental source of increasing wealth in an economy.
- Most of the goals could apply to any organization be it a manufacturing facility, marketing firm, hospital or local government.

The Goal of Innovation

➤ The systematic programs of organizational innovation are most frequently driven by:

- 1- Improved quality
- 2- Creation of new markets
- 3- Extension of the product range
- 4- Reduced labor costs
- 5- Improved production processes
- 6- Reduced materials
- 7- Reduced environmental damage
- 8- Replacement of products/services
- 9- Reduced energy consumption
- 10- Conformance to regulations

The state of Innovation

- Innovation must be customer-centric: How do we create value for our customers? Many organizations are still very product-centric.
- Look beyond product and service innovation: Business model innovation is a big source of potential innovation for many firms.
- More connections = more innovation.
- Diversity leads to a greater number of perspectives.

The state of Innovation

➤ To seek out connections both within and outside of their organizations. Proctor & Gamble's "Connect & Develop" initiative is a prime example: it mandates that 50% of its innovations must come from outside the company (through trusted business partners, for example).

The state of Innovation

Proctor & Gamble's products



The state of Innovation

➤ Emerging markets = innovation labs:

✓ When you're selling products to emerging markets (such as 3rd world countries), your products must be low-priced, of course. But the process of getting to that low price point forces organizations to rethink the core value of their products, an exercise that can be quite revealing for its primary markets, too.

The state of Innovation

- Creative recombination trumps the "new":
 - ✓ There are very few totally new, never-before-seen innovations today. Most successful innovations are the result of combining existing products and attributes in new ways. This approach carries a lower level of risk and investment than "blue sky" innovation initiatives
- Blue skies innovation activities:
 - ✓ Innovation based on scientific research in domains where "real-world" applications are immediately apparent.
 - ✓ Or Innovations based on "research without a clear goal"

Drivers for Innovation

To maintain
current business
turnover

To grow the
business
through new
products and
services

To better service
customer
expectations

To adapt to and
use the new
technologies
available

To meet new or
changed
regulatory
requirements

Drivers for Innovation

To compete with organizations as a result of global markets

To work more efficiently
To work more efficiently

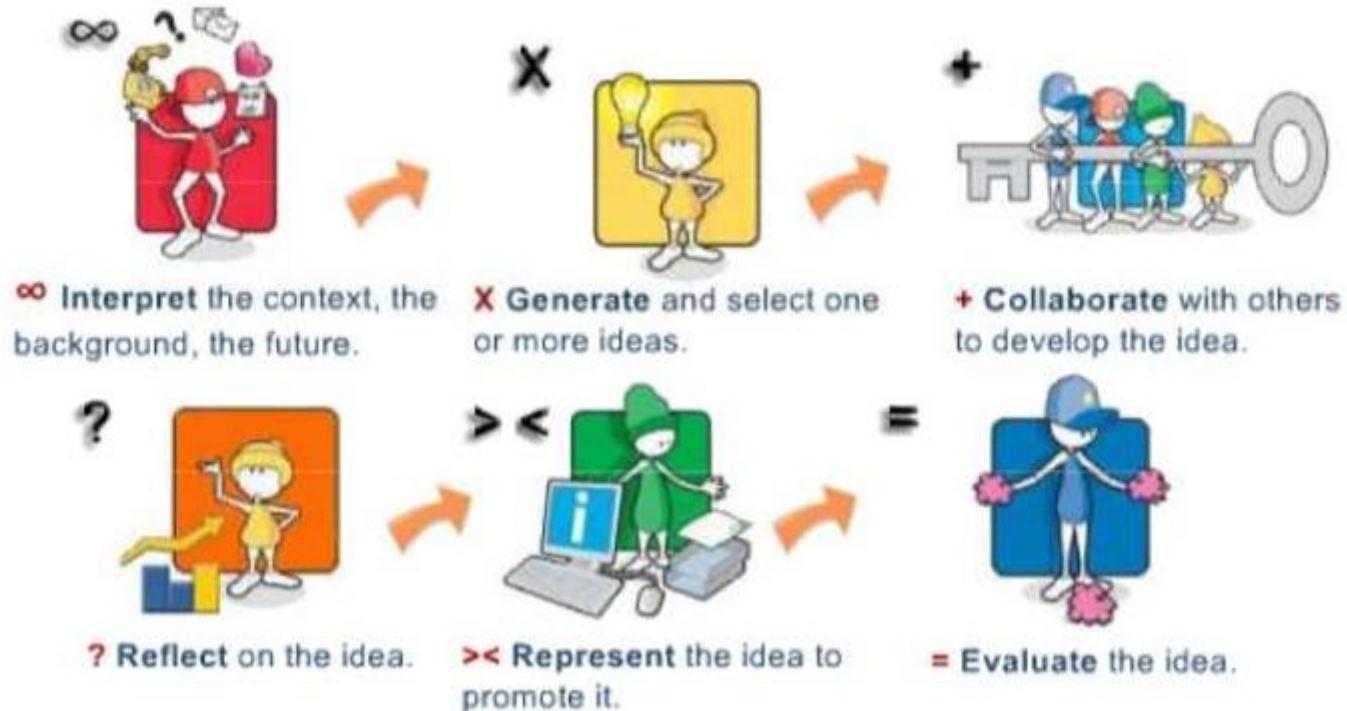
To work in a more environmentally friendly way

To adapt to changing social and community expectations

Applying The Innovation Techniques Skills

List the six steps followed to train your brain?

Skills Training Your Brain



Applying The Innovation Techniques Skills

➤ Axes of Innovation:

Skills

People have skills /
tools for innovation

Environment

Working conditions,
culture, physical
workplace

Leadership

Managers
believe in
innovation

Systems and processes

Innovation system

Applying The Innovation Techniques Skills

➤ Leadership

- ✓ Managers believe in Innovation.
- ✓ Encouragement and reward.
- ✓ Participation/team development.
- ✓ Balance freedom with order.
- ✓ Modeling.
- ✓ Challenging work.
- ✓ Workgroup support.

Applying The Innovation Techniques Skills

➤ Environment

- ✓ Culture (Behaviors, Symbols and Systems).
- ✓ Conditions, contracts.
- ✓ Objectives.
- ✓ Working Arrangements.
- ✓ Physical working environment.

Applying The Innovation Techniques Skills

➤ Systems and Processes

- ✓ Strategic planning.
- ✓ Knowledge management systems.
- ✓ Training and education systems.
- ✓ Performance management systems.
- ✓ Systems for capturing ideas.
- ✓ Systems for allocation resources to ideas.
- ✓ Systems for reward and recognition of ideas.
- ✓ Management and work systems

The Innovation Test

How to check your innovation?

➤ To check your innovation level try answering these questions about your organization

Question	Strongly disagree	Moderately disagree	Moderately agree	Strongly agree
1- Everyone understands the overall goals and direction of the organization.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2- Fresh ideas are encouraged and tried out.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3- We often have brainstorming or other creative workshops.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4- People are trained in creativity and innovation.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5- People are praised and rewarded for being creative	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The Innovation Test

Question	Strongly disagree	Moderately disagree	Moderately agree	Strongly agree
6- We deliberately copy and adapt good ideas from outside our field	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7- We appoint teams from different departments to solve specific problems.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8-When we are looking to solve a problem we generate a lot of ideas before choosing one or two to try.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9- We often build prototypes or pilots to test a new idea rapidly before a production version.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10- To solve a problem in one department we would call for ideas and help from other departments.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11- We identify current products and processes that are due for retirement and replacement.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The Innovation Test

Question	Strongly disagree	Moderately disagree	Moderately agree	Strongly agree
12- We set goals for innovation including the introduction of new products and processes.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13- We have a 'not invented here' attitude to ideas from outside.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14- People are scared to take too many risks for fear of failure.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15- The boss's ideas carry the greatest weight.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16- We are too busy fixing today's problems to spend much time thinking about the future.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17- New ideas stand little chance of being carried out if they are not in the budget.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The Innovation Test

- Add together your scores for questions 1 to 12 and then subtract your scores for questions 13 to 17. Your overall total is your innovation index. How did you do?
- Over 33: you are working in a very enlightened organization where innovation and communication levels are high.
- 25 to 32: there is a good atmosphere for innovation and new ideas are welcomed but there is still scope for improvement.
- 18 to 24: you are a little better than average but there is a long way to go to reach the innovation levels of the best organizations.

The Innovation Test

- 11 to 17: you are below average and need to work on improving your climate for innovation and creative problem-solving.
- 5 to 10: significant barriers exist to your organization coping with change or adapting to new conditions. This could be dangerous and needs a major program to address.
- 4 or below: you have deep-seated resistance to change and new ideas are not encouraged or rewarded. The culture of your organization needs a major long-term program of change if it is to survive.



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THANK YOU FOR WATCHING

QUESTIONS?

