CREATIVITY: CONCEPT, FACTORS AND PROCESS - STRATEGIES FOR FOSTERING CREATIVITY

INTRODUCTION TO CREATIVITY

Creative Thinking:

- Generating new ideas

- Combining concepts in novel ways

- Finding unique solutions to problems

Creativity vs. Intelligence:

- Independent abilities Highly creative individuals often have high Iqs High IQ does not always indicate creativity

CONCEPT OF CREATIVITY

Meaning of Creativity

Ancient Greek Perspective:

- No specific word for "create"
- Used "poiein" (meaning "to make")
- Creativity seen as divine inspiration

Latin Influence:

- "Creatio" – Latin word for "creating"
- Adopted during the rise of Christianity
- Creativity refers to **a person's ability to think differently** or **novel,** which means **originality of ideas**, **usefulness of the ideas to the society and nation at large**.

DEFINITIONS OF CREATIVITY

- Creativity is the ability to produce work that is both novel (original) and high in quality, effectiveness, or usefulness.

  -(Henriksen & Mishra, 2015)

- Creativity is the process of using existing knowledge and personal insight to create something original and meaningful.

  -(Henriksen & Mishra, 2015)

THE NATURE OF CREATIVE THINKING

Measuring Creativity:

- Various tests developed to assess creativity
- Guilford's Study (1967) introduced key concepts.

Two Types of Thinking:

1. Convergent Thinking

- Focuses on a specific end result
- Uses problem-solving rules to find the correct solution
- Often leads to solutions already discovered by others
- Not the primary mode of creative thinking

THE NATURE OF CREATIVE THINKING

2. Divergent Thinking:

- Involves generating multiple ideas
- Encourages varied and novel solutions
- Essential for creativity

Role of Other Thinking Styles:

- Autistic Thinking: Free association of ideas, leading to unexpected insights
- Convergent Thinking: Used as a foundation for gathering information

Creative Thinking Process:

- Combines elements of divergent, autistic, and convergent thinking
- Helps generate unique and innovative solutions

FACTORS INFLUENCING CREATIVITY

According to **Amabile & Pillemer**, Creativity arises from the interaction between personal attributes and the surrounding environment.

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FACTORS INFLUENCING CREATIVITY

Individual Factors Influencing Creativity

**Key Individual Factors:**

1. ☐ **Intelligence** – Necessary but not sufficient for creativity

2. 💡 **Thinking Skills** – Both divergent (generating ideas) and convergent (evaluating ideas) thinking are essential

3. 📚 **Knowledge & Expertise** – A deep understanding of a subject enhances creativity

4. 🎭 **Personality Traits** – Willingness to take risks, perseverance, and self-efficacy foster creativity

5. 🔥 **Intrinsic & Task-Focused Motivation** – Drives creativity, though extrinsic motivation can sometimes help with persistence

6. 💪 **Self-Efficacy / Self-Belief** – Confidence in one's creative ability encourages innovation

7. 📌 Creativity thrives when individuals combine intelligence, skills, motivation, and confidence in their abilities.

Social-Environmental Factors Influencing Creativity

Key Social-Environmental Factors:

1. 🌍 **Stimulation from People & Materials** Exposure to diverse ideas, experiences, and resources enhances creativity

2. ⬜ **Support from Adults, Peers & Culture** Encouragement from mentors, friends, and society fosters creative expression

3. ☝ **Influence of Significant Others** Actions of teachers, parents, and leaders shape intrinsic vs. extrinsic motivation

Graham Wallas' Model of the Creative Process

1. 📖 **In The Art of Thought (1926),** English social psychologist Graham Wallas described a **five-stage model of creativity**.

2. 🎓 Co-founder of the London School of Economics, Wallas developed his model through interviews and studies of outstanding creative thinkers.

1. **Preparation**
2. **Incubation**
3. **Illumination**
4. **Evaluation**
5. **Implementation**

Graham Wallas' Model of the Creative Process

Stage 1 - Preparation (Creative Process)

Key Elements of the Preparation Stage:

📝 **Defining the Problem:**

❖ Initial analysis and understanding of the problem

❖ Set the foundation for solution

📚 **Gathering & Analyzing Information:**

1. Collecting relevant facts and materials
2. Formulating a plan of action

🔄 **Working & Modifying the Plan:**

1. Continuous effort toward solving the problem
2. Adjusting strategies if initial methods or data don't work

PROCESS OF CREATIVITY

Stage 2 - Incubation (Creative Process)

Key Elements of the Incubation Stage:

🗯 **Fading of Interfering Ideas:**

❖ Distractions and irrelevant thoughts begin to fade away

🌱 **Unconscious Thought Processes:**

❖ The mind works subconsciously, processing ideas and clues

🔍 **Experiences as Clues:**

❖ The thinker may have encounters that unknowingly provide hints for solving the problem

🎯 **Path to Inspiration/Illumination:**

❖ If the thinker is fortunate, this leads to a breakthrough idea or realization

📌 Incubation **allows unconscious processes to work**, often leading to unexpected insights.

Stage 3 - Inspiration or Illumination (Creative Process)

Key Elements of the Incubation Stage:

💡 **The "Aha!" Moment:**

❖ Sudden insight or breakthrough realization

✸ **Idea Emerges:**

❖ The solution idea spontaneously rises to consciousness

📌 Inspiration strikes unexpectedly, leading to the clarity needed to move forward.

Stage 4 - Evaluation (Creative Process)

Key Elements of the Incubation Stage:

🔍 **Testing the Solution:**

❖ The apparent solution is tested to see if it satisfactorily resolves the problem

✖ **Initial Disappointment:**

❖ Often, the insight turns out to be unsatisfactory, and the thinker returns to earlier stages

🔧 **Refinement:**

❖ Sometimes, the solution works but needs modification or resolution of minor issues to become a "good" idea

📌 Evaluation involves critical testing and refinement to transform insights into practical solutions.

Stage 5 - Revision (Creative Process)

Key Elements of the Incubation Stage:

🔍 **Testing the Solution:**

🔄 **Ongoing Modification:**

❖ Creative solutions are not always perfect at firstThe process is open for essential modifications and revisions

⚙ **Continuous Refinement:**

❖ Even after the solution is found, revisions may be necessary to perfect the idea

📌 Creativity is a fluid process that allows for adjustments at any stage to improve the final outcome.

STRATEGIES FOR FOSTERING CREATIVITY

Promoting Creativity in Education

❖ **The Importance of Creativity:**

🎨 **Creativity in the Arts & Beyond:**

❖ Creativity is not limited to the arts; it is essential in all subjects

☐ **Triarchic Theory of Intelligence:**

❖ Teaching should promote creative thinking to support successful intelligence

❖ Creative thinking forms the foundation for achievement in school and life

📚 **Educational Experts Agree:**

❖ Teachers should prioritize fostering student creativity as a core instructional goal

STRATEGIES FOR FOSTERING CREATIVITY

Strategy 1 - Create a Sense of Mastery in the Domain

❖ **Key Insight from Csikszentmihalyi (1996):**

🏆 **Mastery of a Domain:**

❖ Creative individuals first achieve mastery in a specific area of knowledge or skill

💡 **Importance of Mastery:**

❖ Without mastery, divergent thinking is less likely to result in creative outcomes

❖ 📌 Mastery provides the foundation for creativity to flourish in any domain.

STRATEGIES FOR FOSTERING CREATIVITY

Strategy 2 - Create a Safe Learning Environment

Key Points for Fostering Creativity:

☐ Safety for Nonstandard Ideas:

- ❖ Students must feel safe to share their divergent thoughts and take risks

☐ **Respect for All Perspectives:**

- ❖ Foster an environment that values and respects all ideas and viewpoints

⊘ **Minimize Evaluation:**

- ❖ Provide activities where students are not judged or evaluated on their creativity

🌍 **Inclusive & Multicultural Approach:**

- ❖ Particularly important in diverse classrooms to encourage every student's voice

STRATEGIES FOR FOSTERING CREATIVITY

Strategy 3 - Create an Autonomy-Supporting Learning Environment

Key Elements of an Autonomy-Supporting Classroom:

🍼 **Encourage Student Choice:**

Students are more motivated when given choices and input in their learning

🙋‍♂️ **Value Student Opinions:**

❖ Teachers should solicit students' perspectives to make them feel valued

✖ **Avoid Controlling Environments:**

❖ Controlling classrooms undermine creativity by sending the message that student opinions don't matter

📌 A safe and respectful environment encourages creative thinking and risk-taking.

Strategy 4 - Encourage Brainstorming

Key Elements of Brainstorming:

💡 **Group Brainstorming:**

❖ Students share any ideas that come to mind to solve a problem

☐ **Benefit of Group Interaction**:

❖ Exposure to diverse perspectives can enhance creativity

☐ **Solitary vs. Group Brainstorming:**

❖ While individual brainstorming may generate more ideas, group brainstorming fosters idea exchange and collaboration

STRATEGIES FOR FOSTERING CREATIVITY

Strategy 5 - Model Creativity

Key Elements of Modeling Creativity:

👀 **Learning by Observation:**

❖ Students learn through o

❖ bserving others' creative behaviors (Bandura, 1986)

🎨 **Teachers as Role Models:**

❖ Teachers can demonstrate their own creative skills to inspire students

👥 **Sharing Creative Examples:**

❖ Highlight creative behaviors from others in the classroom to reinforce the value of creativity

Strategy 6 - Demonstrate the Value of Creativity

Key Elements of Demonstrating Creativity's Value:

💡 **Model Enthusiasm for Creativity:**

❖ Teachers should show excitement and appreciation for creative work

🏆 **Recognize Creative Thinking:**

❖ Design classroom activities where students are credited for their creative ideas

📌 When teachers demonstrate the value of creativity, it encourages students to value and develop their own creative abilities.

Strategy 7 - Allow Time for Creativity

Key Elements of Demonstrating Creativity's Value:

💡 **Model Enthusiasm for Creativity:**

☐ **Avoid Rushing Creative Processes:**

❖ Creativity requires time and should not be rushed

☐ **Give Students Time to Reflect:**

❖ Allow time for students to relax, explore their thoughts, and engage with others' ideas