

The Logical Relationship Between Determinism and Pragmatism: Implications for Creative Education

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ABSTRACT

Education, as a value-laden activity, is rooted in philosophical assumptions about human nature, knowledge, and truth. Despite considerable scholarly attention to determinism and pragmatism as independent philosophical theories, most studies tend to present determinism as a rigid system of universal causal laws, and pragmatism as an experience-based philosophy that emphasizes change and the practical utility of ideas. However, insufficient attention has been given to clarifying how these two concepts intersect or complement each other in relation to creative education. This paper, therefore, explores the logical relationship between determinism and pragmatism in order to examine how they interact in fostering creativity. To achieve this, the paper begins with an exposition of the logically necessary conditions of these concepts, demonstrating how they are interconnected in such a way that each concept relates meaningfully to the other. The methodological approach adopted is philosophical, aimed at drawing out the implications for creative education. The paper argues that the relationship between determinism and pragmatism allows for flexibility and can be understood as complementary within the framework of creative education. It further highlights that creative education flourishes and innovation emerges at the intersection of determinism and pragmatism, rather than in their separation. The study affirms that a synthesis of deterministic awareness and pragmatic orientation provides a balanced philosophical foundation for fostering creativity in education. Finally, the paper recommends that educators and curriculum designers should recognize the influence of natural laws while promoting experimental learning approaches to enhance creativity through innovation and critical thinking.

Keywords: Determinism, Pragmatism, Creative education, Experimental learning, Creativity

INTRODUCTION

The paper explores the logical relationship between Determinism and Pragmatism and their implications for creative education. This study arises from the observation that despite extensive discussions on Determinism and Pragmatism, limited attention has been given to examining the logical relationship between these two philosophical perspectives. Most existing studies on Determinism and Pragmatism focus primarily on issues such as human behaviour, causality, heredity, experiential learning, and practical approaches to teaching and learning. Consequently, there exists a noticeable gap in the literature regarding how these philosophical orientations can be integrated to support creativity and innovation in education.

Education, as a knowledge-based activity, necessitates the promotion of creativity, innovation, and critical thinking as essential outcomes rooted in human experience and natural laws. Education is not merely concerned with the transmission of knowledge; rather, it seeks to develop and energize human rational capacities for solving problems of adaptation within society. Human learning is deeply influenced by philosophical thought and rationality, while creativity itself is rooted in both natural law, as emphasized by Determinism, and human experience, as emphasized by Pragmatism.

According to Ojo (2018), the National Policy on Education places significant emphasis on creativity and creative education by stressing the development of creative thinking, problem-solving abilities, critical thinking, innovation, and entrepreneurship. Furthermore, one of the major educational goals stated in the national objectives of education is the development of a self-reliant and dynamic economy. The policy also supports educational programmes and subjects that help learners develop imagination, practical skills, innovation, and talent development (NPE, 2023). One may therefore observe that the educational objective of creating "a just and egalitarian society" requires citizens who are creative, innovative, and productive. Similarly, Ayeeni (2018) asserts that the spirit of inquiry and creativity can be inculcated in children through exploration of nature and interaction with the local environment. Child learning should begin through activities such as play, artistic engagement, and musical experiences. This suggests that educational policy aims at producing individuals who can think independently, solve problems effectively, innovate, and contribute meaningfully to national development.

Within the context of Pragmatism, the educational goal emphasizes that the curriculum should consist of activities that correspond with changing life experiences and the realities of society. In support of this view, John Dewey, (1938), stated that the educational process is one of continual organizing, reconstructing, and transforming experiences, and that education has no final end beyond growth itself. This perspective highlights that education is a continuous process of change and development, which aligns with the concept of creativity and creative education. Effective education should therefore go beyond the mere transmission of knowledge and strive to reorganize ideas, reconstruct experiences, and transform learners in ways that enable them to contribute positively to society through creativity and innovation. The paper therefore examines the logical relationship between Determinism and Pragmatism and discusses their implications for creative education. To eff

ectively pilot the path of creativity within the framework of Determinism and Pragmatism, both natural laws and experiential learning should serve as important points of reference in teaching and learning processes. It is against this backdrop that this paper examines the logical relationship between Determinism and Pragmatism and its implications for creative education.

Conceptualization of the Problem

It appears that despite the transformative power of education in promoting creativity, innovation, problem-solving abilities, and addressing contemporary societal demands, there is a need for educational programmes to pay serious attention to the philosophical foundations that guide teaching and learning in order to foster critical thinking, creativity, and innovation. The problem is conceptualized around understanding how the theories of Determinism and Pragmatism are logically related and how such a relationship influences creative education.

Despite the relevance of Determinism and Pragmatism to educational programmes, many educational systems still rely heavily on rigid teaching methods that limit creativity, innovation, and active learner participation. Such traditional approaches often emphasize memorization and examination-oriented learning rather than practical experiences and creative thinking. This situation presents challenges to the integration of both philosophical assumptions into educational programmes aimed at enhancing learner-centred and creative educational practices. Therefore, there is a need to examine the logical relationship between Determinism and Pragmatism and their implications for creative education. Understanding the relationship between these philosophical perspectives may provide a framework for developing educational practices that encourage innovation, critical thinking, practical learning, and the holistic development of learners in contemporary society.

Objectives of the Study

The study aims to:

- Explore the logical relationship between Determinism and Pragmatism and their implications for creative education.
- Propose a philosophical framework for integrating Determinism and Pragmatism into teaching and learning processes in order to promote innovation and creativity in education.

- Clarify the concepts of Determinism and Pragmatism in relation to human actions, learning processes, and innovation in education.
- Examine the role of Determinism and Pragmatism in promoting creativity and innovation within educational practices.
- Identify the challenges affecting the improvement of creative education through the integration of Determinism and Pragmatism.
- Suggest appropriate strategies and recommendations for enhancing creative education through the application of Deterministic and Pragmatic principles.

METHODOLOGY

The paper adopts a philosophical clarification and analytical method as its research methodology. The choice of these methods is informed by the nature of philosophy of education, which is concerned with the critical examination, analysis, and clarification of concepts, ideas, and assumptions underlying educational theories and practices. Philosophical analysis is important because philosophy of education is both analytical and speculative in nature, as it seeks to clarify concepts, examine prescriptive statements, and establish logical relationships among ideas. The use of philosophical clarification in this study is considered appropriate because it enables the researcher to examine and explain the meanings of Determinism and Pragmatism and their implications for education, particularly creative education. The method further provides an opportunity to analyze the relationship between these philosophical perspectives and how they contribute to educational development.

The study relies on secondary sources of data through extensive review of relevant scholarly literature, including textbooks, journals, educational publications, and other academic materials. The paper reviews scholarly works and extracts important ideas concerning:

- Meaning of Determinism
- Meaning of Pragmatism
- Principles of Determinism and Pragmatism
- Relationship between the two philosophical concepts
- Educational implications for creative education

The information gathered from these sources is critically analyzed and interpreted to establish the logical relationship between Determinism and Pragmatism and to examine their implications for creative education. This approach provides a deeper understanding of the philosophical foundations that can enhance creativity, innovation, and effective educational practices.

Concept of Determinism

Determinism holds that human actions and behaviours originate from causes rooted in nature and human existence. Human beings interact with the world through their sense organs such as the eyes, skin, tongue, ears, and nose, which enable them to perceive, interpret, and give meaning to ideas and experiences. Through these processes, individuals receive information from the environment, process it, and transform it into knowledge. These processes are believed to operate according to established natural principles and laws that govern existence and human activities. Such principles are explained under the philosophical doctrine of Determinism.

According to Omoregbe (1993), in his explanation of Determinism: “A central proposition of the emerging science was the idea of universal causation; that is, the belief that every event has an antecedent cause and that there are no uncaused events. It was assumed that events occur in an orderly pattern which makes the formulation of causal or natural laws possible.” This supports the view that Determinism is a philosophical doctrine which maintains that human actions, behaviour, and events are influenced by preceding causes and conditions. It assumes that every event has a cause and that no human action occurs independently of biological, environmental, social, emotional, and psychological factors. Human behaviour is therefore largely shaped by culture, family background, heredity, experiences, and environmental conditions.

According to James S. J. Royers (1969): “Determinism provides us with an understanding of man as deeply and intimately affected by his environment and shaped by his destiny in important ways. Such a view fits more closely with our own experience and is immensely significant in helping us find solutions to some of our great social problems.” This perspective suggests that human actions, behaviour, life outcomes, and creativity are largely influenced by environmental factors such as family background, culture, education, and social relationships. It argues that individuals cannot develop in isolation; rather, their surroundings significantly influence their character, attitudes, and decisions. This view aligns with human experience because individuals often become products of the conditions under which they are raised and socialized.

The theory also implies that many social problems such as poverty, crime, and poor educational outcomes can be better understood by examining environmental and causal factors. Consequently, educational efforts can play a significant role in addressing societal challenges and creating opportunities for human development and innovation. Towoju (2016) states that: “Education cannot be autonomous and stand apart from nature. Our educational programmes, beliefs, feelings, judgments, actions, and ideas are determined by nature, although individuals may have options in selecting what knowledge to acquire and impart under specific conditions governed by natural laws.” This implies that educational practices, human nature, and instructional materials are connected with realities existing in the world. Human reasoning and educational experiences are influenced by natural conditions and environmental realities, which also contribute to creativity and innovation in education.

Essential Tenets of Determinism in Relation to Creative Education

- From the discussion above, the major principles of Determinism in relation to creative education include:
- Cause-and-Effect Principle: Human actions and learning outcomes are influenced by preceding or predetermined causes; therefore, creativity develops from experiences and environmental conditions surrounding learners.
- Environmental Influence: Learners’ creativity is shaped by environmental factors such as family background, schools, culture, and social interactions.
- Experience and Learning: Previous experiences significantly influence learners’ thought patterns and creative development.
- Influence of Heredity: Individual talents and abilities may be influenced by hereditary characteristics and biological factors that contribute to creative potential.
- Educational Influence: Educational experiences and conditions serve as important factors affecting creativity, innovation, imagination, and intellectual development.
- Predictability of Behaviour: Behaviour may follow predictable patterns. Under similar conditions and experiences, learners may display similar behavioural tendencies and creative responses.

Thus, Determinism provides a framework for understanding the relationship between environmental conditions, human behaviour, and creativity within educational settings.

Concept of Pragmatism.

The philosophical theory of Pragmatism states that truth is not fixed but can be tested through practical experience and application. It encourages individuals to examine traditional ways of thinking, acting, and solving problems in order to reconstruct their approaches to life in accordance with present realities and changing conditions. According to Aladejana (2019), Pragmatism challenges individuals to seek out processes and methods that work best in achieving desirable goals and outcomes. Major advocates of Pragmatism include John Dewey, William James, and Charles Sanders Peirce, among others. Pragmatism is also known as Experimentalism because it regards experimentation as the criterion of truth and maintains that truth is not absolute but continuously develops through innovation and experience. Pragmatism is equally referred to as Consequentialism because human actions are evaluated based on their outcomes and consequences. Therefore, one of the fundamental principles of Pragmatism is change (Ayeeni, 2018).

In this context, Pragmatism views creative education as a continuous process of growth and reconstruction of experience. This view aligns with Hassan (2018), who states that pragmatists define man as an experiencing

organism that cannot exist independently of interaction with the environment. Knowledge is therefore considered as human experience that has been processed and refined through interaction with reality. Within the environment, human beings interact with both living and non-living elements that constitute objects of knowledge and sources of creativity and innovation. The nature of these interactions determines both progress and failure. The values attached to the outcomes of these interactions with objects and experiences in the environment influence future actions and decisions. Based on this perspective, human beings can be viewed as creators of values whose mental processes are responses and adjustments to environmental stimuli. Consequently, changes in human experiences and environmental realities may also result in changes in knowledge, learning processes, and educational practices.

Ayeni (2016) maintains that Pragmatism has contributed significantly to modern educational practices such as:

- Experiential learning
- Problem-solving methods
- Collaborative learning
- Inductive methods of acquiring knowledge
- Learner-centred education
- Innovation in teaching and learning

Similarly, Singh (2018) states that Pragmatism has brought new awareness and transformation in modern education, resulting in the gradual decline of rigid traditions, outdated beliefs, and narrow perspectives.

Essential Principles of Pragmatism in Relation to Creative Education

The major principles of Pragmatism in relation to creative education include:

- **Learning by Doing:** Pragmatism emphasizes practical experiences through active participation in learning activities, thereby enhancing creativity and innovation.
- **Experience as the Basis of Knowledge:** Knowledge is acquired through interaction with the environment and practical experiences rather than mere memorization.
- **Flexibility and Adaptation:** Education should adjust to changing societal realities and technological advancements, including the integration of emerging innovations such as artificial intelligence in teaching and learning.
- **Critical and Reflective Thinking:** Learners should be encouraged to think independently, analyze situations critically, and develop original ideas.
- **Problem-Solving Approach:** Educational practices should develop learners' abilities to identify and solve real-life problems creatively and effectively.
- **Education for Life and Growth:** Education should prepare learners to function effectively in society and continuously develop their creative and intellectual abilities.

Therefore, Pragmatism provides a philosophical foundation for creative education by emphasizing practical experiences, adaptability, innovation, and learner-centred approaches that support human development and societal progress.

Logical Relationship between Determinism and Pragmatism

The concepts of Determinism and Pragmatism may initially appear unrelated because Determinism focuses on the view that human actions, behaviour, and development are influenced by prior causes such as environmental conditions, social factors, heredity, and experiences, whereas Pragmatism emphasizes practical experiences and the usefulness of ideas in solving real-life problems. However, a careful examination of the principles underlying both philosophical perspectives reveals significant points of connection. Both theories are linked through experience, innovation, human actions, flexibility, adaptation, and continuous development.

a. **Experience and its Logical Relationship with Determinism and Pragmatism**

The relationship between Determinism, Pragmatism, and experience is evident because both philosophies recognize the significance of experience and environmental factors in human growth and development. Determinism explains the causes and conditions that influence learning and behaviour, while Pragmatism provides practical methods through which educational goals can be achieved. According to Dada (2015), ideas and theories emerge from practice, and their values can be evaluated through their practical consequences. Thus, creative education seeks to help learners acquire knowledge through experiences and apply such experiences as guides for effective living and development. Experience therefore serves as a common foundation connecting both Determinism and Pragmatism.

b. Innovation and its Relationship with Determinism and Pragmatism

Innovation represents another important area of relationship between both philosophies. Determinism recognizes that creative abilities and innovative ideas can be influenced by learners' environments and experiences. Learners develop creativity based on the conditions and experiences to which they are exposed.

Pragmatism, on the other hand, promotes innovation through experimentation, inquiry, and problem-solving activities. It encourages learners to test ideas and discover practical solutions to societal challenges. The relationship between both perspectives suggests that innovation develops when favourable environmental conditions are combined with practical learning experiences. Consequently, creativity becomes a product of both environmental influences and active engagement with learning experiences.

c. Human Actions and their Relationship with Determinism and Pragmatism

The relationship between human actions in Determinism and Pragmatism appears complex because each philosophy approaches the concept from different perspectives. Determinism maintains that human actions are influenced by preceding causes such as culture, environment, and social conditions. Human actions therefore do not occur independently but are shaped by existing circumstances. Pragmatism, however, emphasizes actions based on practical consequences and usefulness. It focuses on actions that lead to desirable results and practical solutions. Despite these differences, both philosophies acknowledge that human actions are influenced by external realities and are directed toward achieving meaningful goals and solving problems.

d. Connection among Flexibility, Adaptability, Determinism, and Pragmatism

The relationship among flexibility, adaptability, Determinism, and Pragmatism demonstrates that understanding environmental influences and applying practical adjustments can enable learners and educational systems to adapt effectively to societal changes. Determinism recognizes that individuals respond differently to changing environmental conditions that influence behaviour and learning processes. Pragmatism strongly emphasizes flexibility and adaptation to changing realities and experiences. Therefore, both philosophies support educational systems that can adjust to social, technological, and environmental changes in order to remain relevant and effective.

Concluding View

One may therefore conclude that the logical relationship between Determinism and Pragmatism contributes significantly to understanding human behaviour, learning processes, teaching methods, and educational development. Although Determinists and Pragmatists differ in their approaches, both recognize the importance of experience, adaptation, and continuous development in human growth and creativity. Their relationship provides a balanced educational perspective that combines an understanding of the factors shaping learners with practical methods for improving learning outcomes and promoting creativity, innovation, and meaningful educational development.

Implications of the Logical Relationship Between Determinism and Pragmatism for Creative Education

The logical relationship between Determinism and Pragmatism has significant implications for creative education because it provides a framework for understanding how learners develop and acquire knowledge.

Determinism explains that learners' behaviour, abilities, and academic performance are influenced by environmental, social, and hereditary factors, while Pragmatism emphasizes practical experiences and learning through action. Their relationship therefore supports educational practices that encourage creativity and innovation. One important implication is the promotion of learner-centred education, where teaching methods consider learners' backgrounds, interests, and individual differences. This helps create an educational environment that supports creativity and active participation.

The relationship also encourages the development of critical thinking and problem-solving skills. Through practical activities and experiential learning, learners become capable of analyzing situations and generating creative solutions to problems. Furthermore, it promotes innovation and flexibility in teaching methods. Teachers are encouraged to use interactive, practical, and adaptable approaches that stimulate learners' imagination and creativity. Another implication is the improvement of the learning environment. Since environmental conditions influence learning and creativity, educational institutions are expected to provide supportive environments and adequate resources that enhance learners' development. Finally, the relationship contributes to the holistic development of learners by promoting intellectual growth, independent thinking, creativity, and social development, thereby preparing learners to respond effectively to contemporary societal challenges.

CONCLUSIONS

The study affirms that educational systems that rely heavily on rigid teaching methods and examination-oriented practices may limit learners' creative abilities and innovation. Therefore, educational institutions should encourage flexible teaching methods that support inquiry, exploration, and independent thinking. Finally, the study concludes that effective creative education requires supportive learning environments, qualified teachers, adequate educational resources, and educational policies that encourage creativity and innovation. Therefore, integrating the principles of Determinism and Pragmatism can contribute significantly to developing creative, innovative, and productive learners capable of adapting to the changing demands of contemporary society.

Recommendations

Based on the findings and conclusions of this study, the following recommendations are proposed:

1. Adoption of Learner-Centred Teaching Approaches

Educational institutions should adopt learner-centred methods of teaching that recognize individual differences, learners' experiences, and environmental influences. Teachers should encourage active participation and independent thinking among learners rather than relying solely on teacher-centred methods.

2. Promotion of Practical and Experiential Learning

Schools should emphasize learning through practical activities, projects, experimentation, and real-life experiences. This aligns with the pragmatic principle of learning by doing and enhances creativity and innovation among learners.

3. Improvement of Learning Environments

Educational authorities should provide conducive learning environments that support learners' intellectual and creative development. Since Determinism emphasizes environmental influences on learning, classrooms and schools should be equipped with adequate facilities and instructional materials.

4. Curriculum Reform and Flexibility

Educational curricula should be revised to include creative and practical activities that promote inquiry, experimentation, and critical thinking. The curriculum should also be flexible enough to address learners' different needs and abilities.

5. **Encouragement of Critical Thinking and Innovation**

Teachers should create opportunities for learners to ask questions, think independently, and generate new ideas. Learning activities should encourage creativity and originality rather than simple memorization of facts.

6. **Provision of Adequate Educational Resources**

Governments and educational stakeholders should provide sufficient educational resources such as libraries, technological tools, laboratories, and instructional materials to support creative teaching and learning.

7. **Development of Policies Supporting Creativity**

Educational policymakers should formulate policies that encourage innovative teaching methods and support the development of creative education at all introduction of artificial intelligence tools in education to breed creativity

8. **Integration of Deterministic and Pragmatic Principles in Educational Practice**

Educators should combine the insights of Determinism and Pragmatism by understanding the factors influencing learners while applying practical methods that enhance learning experiences and creativity.

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