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Study on the Application of Life-Based Inquiry-Based Experiential Activities in Cultivating Creative Thinking in Kindergartens

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Abstract: With the implementation of the "Guidelines for Learning and Development of Children Aged 3-6," kindergarten education increasingly emphasizes child-centered learning, focusing on experience accumulation and ability development. Creative thinking, as an important component of children's core competencies, plays a crucial role in children's imagination, problem-solving abilities, and innovative awareness. However, some kindergarten activities currently lack sufficient real-life relevance, are monotonous in form, and have limited child participation, thus hindering the cultivation of creative thinking. This paper takes the application of real-life inquiry-based experiential activities in cultivating creative thinking in kindergartens as its research object. Through theoretical analysis and a current situation survey, it explores its implementation strategies. The study argues that real-life inquiry-based experiential activities, based on children's daily lives, can effectively stimulate children's interest in inquiry and promote the development of independent thinking and divergent and flexible thinking by creating inquiry scenarios close to life, providing open-ended materials, emphasizing the inquiry process, and strengthening home-school cooperation. The study shows that systematically carrying out real-life inquiry-based experiential activities not only helps improve children's creative thinking level but also provides practical reference for kindergarten curriculum design, teacher instruction, and home-school collaboration, possessing significant theoretical and practical value.

Keywords: Real-life Inquiry-based Experiential Activities, Kindergarten, Creative Thinking.

1. Introduction

With the in-depth implementation of the "Guidelines for Learning and Development of Children Aged 3-6," kindergarten education increasingly emphasizes child-centered learning, focusing on children's acquisition of experience and development of abilities. Creative thinking, as an important component of children's core competencies, is crucial for the development of children's problem-solving abilities, imagination, and innovative awareness. However, in actual teaching, some kindergartens still suffer from problems such as teaching content being divorced from children's real lives, monotonous activity formats, and low child participation, which are detrimental to the development of children's creative thinking.[1]

Life-based inquiry and experiential activities are based on children's real lives, guiding them to gain experience through observation, manipulation, exploration, and experience in authentic situations, aligning with the characteristics of children's physical and mental development. Applying life-based inquiry and experiential activities to kindergarten education helps stimulate children's learning interest and promotes their active thinking and creative expression. Therefore, exploring the application of life-based inquiry and experiential activities in cultivating creative thinking in kindergartens has significant practical implications.

This study aims to explore the specific application methods and educational value of life-based inquiry and experiential activities in cultivating creative thinking in kindergartens. By analyzing the current status of related activities in kindergartens, it proposes practical implementation strategies to promote the development of children's creative thinking. At the theoretical level, this study helps enrich the research content related to the cultivation of children's creative thinking; at the practical level, it can provide a reference for front-line kindergarten teachers to carry out life-based inquiry and experience activities, and improve the quality of kindergarten education and teaching.

2. Definition of Relevant Concepts and Theoretical Basis

2.1. The Concept of Life-Based Inquiry-Based Experiential Activities

Life-based inquiry-based experiential activities are activities that take children's daily life experiences as a starting point, create realistic or near-realistic life scenarios, and guide children to actively learn through hands-on activities, observation, exploration, and communication. Compared with traditional classroom teaching, life-based inquiry-based experiential activities emphasize "originating from life and returning to life," focusing more on children's active participation and experience. In these activities, children are both explorers and learners; they discover problems, propose hypotheses, and try solutions through hands-on activities, and deepen their understanding through communication and sharing.[2]

Life-based inquiry-based experiential activities have the following characteristics:

(1)Life-Based Context: The content of the activities is closely integrated with children's daily lives, such as the kitchen, garden, and community environment, enabling children to develop an interest in exploration and a sense of inquiry in familiar environments.(2)Inquiry Process: The activities emphasize the process rather than a single result, encouraging children to independently discover problems,

raise questions, and try to solve them, accumulating experience through continuous trial and error.(3)Experiential Participation: Children participate in the activities through direct operation, observation experiments, and communication with peers, enhancing their initiative and enthusiasm for learning. (4)Knowledge Constructivity: Through practical experience and reflection in activities, young children gradually construct new cognitive structures, forming an understanding of the essence of things and the ability to make independent judgments.

For example, in the activity "Observing Plant Growth," teachers can guide children from sowing seeds, watering, observing seedling growth, to recording changes, allowing children to experience the laws of plant growth throughout the process and raise their own questions and solutions. This activity is not only close to life but also fully stimulates children's curiosity and creativity.[3]

2.2. The Concept of Creative Thinking in Young Children

Creative thinking refers to an individual's ability to think about problems in a unique, novel, and flexible way, based on existing experience and knowledge, and to propose creative solutions. In early childhood, creative thinking mainly manifests in imagination, divergent thinking, flexible thinking, and the ability to take risks. Specifically, children's creative thinking is mainly manifested in:

(1)Rich Imagination: Children can associate with existing experiences, combining different elements to form new cognitive or expressive methods, such as building a small house with cardboard boxes or creating new toys from discarded materials.(2)Strong Question Awareness: Young children often dare to ask questions, maintain curiosity about phenomena in life, and try to understand the reasons behind things.(3)Attempts at Diverse Solution Methods: When solving problems, young children often do not stick to fixed methods but try multiple strategies, demonstrating divergent and flexible thinking.(4)Expression and Communication Skills: Young children can express their ideas through language, actions, or graphics, and obtain feedback through communication to further optimize their thinking methods.

Cultivating creative thinking in young children not only helps improve their individual innovative abilities but also lays a solid foundation for their lifelong learning and comprehensive development. Research shows that early creative thinking ability is closely related to children's future problem-solving abilities, learning interests, and social adaptability.[4]

2.3. Theoretical Basis

Real-life inquiry-based experiential activities effectively promote the development of children's creative thinking. Their theoretical basis mainly includes constructivist learning theory, multiple intelligences theory, and theories of child development psychology.

2.3.1. Constructivist Learning Theory

Constructivist learning theory posits that knowledge is not passively received, but actively constructed by learners in specific contexts. Piaget pointed out that children gradually form cognitive structures through perception, manipulation, and thinking in their interaction with the environment; Vygotsky emphasized the "zone of proximal development" theory, believing that with appropriate guidance from adults or peers, children can achieve higher levels of cognitive abilities.

Real-life inquiry-based experiential activities provide children with authentic situations. Through independent operation, problem-solving exploration, and peer collaboration, children actively construct knowledge in practice. For example, in the "Garbage Sorting and Environmental Protection" activity, children, through observation, sorting, discussion, and hands-on activities, not only master garbage sorting knowledge but also propose optimization solutions, thus demonstrating the combination of knowledge construction and creative thinking.

2.3.2. Theory of Multiple Intelligences

Gardner's theory of multiple intelligences posits that everyone possesses multiple intelligences, including linguistic intelligence, logical-mathematical intelligence, spatial intelligence, bodily-kinesthetic intelligence, musical intelligence, interpersonal intelligence, intrapersonal intelligence, and naturalistic intelligence. Young children exhibit different strengths in different activities, and diverse activities allow for the comprehensive development of their potential.

Life-based inquiry-based experiential activities can fully engage children's multiple senses and intelligences. For example, in the "Building a Mini Farm" activity, children need to manipulate objects (bodily-kinesthetic intelligence), plan layouts (spatial intelligence), observe plant growth (naturalistic intelligence), and cooperate with peers (interpersonal intelligence). The integrated participation of multiple intelligences helps stimulate children's innovative thinking and improves the diversity of their problem-solving abilities.

2.3.3. Developmental Psychology Theories

Young children's thinking is primarily concrete and image-based, relying on intuitive experience and sensory stimulation. Piaget believed that preschool children are in the preoperational stage, and their thinking is intuitive, concrete, and context-dependent. Simultaneously, young children possess a strong desire to explore and are curious, adept at learning through observation, imitation, and practice.

Real-life experiential learning activities are closely related to children's life experiences and align with their cognitive characteristics. For example, in the "Making Juice" activity, children can intuitively understand the process of material change by actually squeezing juice and observing color changes and taste differences. This stimulates their interest in exploration and generates innovative thinking, thereby cultivating creative thinking skills.[5]

3. Current Status and Problems of Life-Based Inquiry-Based Experiential Activities in Kindergartens

3.1. Current Status of Life-Based Inquiry-Based Experiential Activities in Kindergartens

In recent years, with the deepening of the concept of quality education, more and more kindergartens have begun to integrate life-based inquiry-based experiential activities into daily teaching. For example, in the science area, teachers provide different kinds of natural materials, such as plant seeds, sand, and building blocks, to guide children in observation, classification, and construction activities; in the

life skills area, children participate in role-playing and hands-on activities in simulated supermarkets and family kitchens, experiencing problem-solving and collaborative communication in daily life.

In addition, some kindergartens have also carried out thematic inquiry activities, such as "Observing Plants in Spring," "Changes in Water," and "Community Environmental Detectives." These activities can guide children to discover problems in life, propose hypotheses, and try to find solutions, initially demonstrating the practical value of life-based inquiry-based experiential activities.[6]

However, overall, the development of life-based inquiry-based experiential activities still suffers from imbalance and limitations:

(1)Monotonous Activity Formats: Although some kindergartens have set up inquiry activities, the content is relatively fixed, lacking diversity and challenge, making it difficult to meet the needs of children at different developmental levels.(2)Lack of Systemic Implementation: Activities lack continuity and systematic design, often consisting of sporadic and fragmented events. This makes it difficult for children to develop complete inquiry experiences and thinking patterns.(3)Inconsistent Teacher Guidance Abilities: Some teachers lack a deep understanding of the concept of life-based inquiry activities and lack scientific guidance methods tailored to children's cognitive development.

Overall, although life-based inquiry and experiential activities have been initially explored in kindergartens, significant deficiencies remain in depth, systematic implementation, and teacher professional competence, hindering the effective promotion of children's creative thinking development.

3.2. Major Problems

3.2.1. Insufficient Real-Life Relevance of Activities

Some kindergarten "inquiry activities," while nominally close to daily life, are essentially still dominated by teacher explanations or standardized experiments, lacking genuine participation from children. For example, in "plant observation" activities, teachers overemphasize observing plant names and morphologies, with children simply copying and recording without choosing their own observation methods or raising exploratory questions. Such activities easily lead to insufficient participation from children, inhibiting their proactive thinking and creative expression.

3.2.2. Relatively Monotonous Teacher Guidance Methods

During the inquiry process, teachers often focus excessively on the results, such as requiring children to complete a certain operation or draw a fixed record sheet, neglecting the process-oriented significance of inquiry. Some teachers lack the skills to ask thought-provoking questions and fail to guide children to generate multiple solutions and creative ideas, resulting in "cramming" operations that limit the development of children's independent thinking abilities.

3.2.3. Insufficient Support from Inquiry Environment and Materials

Inquiry activities require a rich environment and open-ended materials as support. However, some kindergartens, limited by space, funding, or material preparation capabilities, provide limited and impractical inquiry materials. For example, in the "Changes in Water" experiment, children can only use a limited number of measuring cups or containers, lacking diverse tools and materials, which restricts the exploration process and hinders the full development of creative thinking. Furthermore, the spatial layout of the inquiry area is inflexible, easily leading to overcrowding or limited space, affecting the freedom of exploration and interactivity of the activities.

3.3. Analysis of the Causes of the Problems

(1)Teachers' Insufficient Understanding of Life-Based Inquiry Activities

Some teachers lack a systematic understanding of the educational value of life-based inquiry activities, remaining only at a superficial level, believing that "doing experiments" or "observing things" constitutes an inquiry activity, neglecting the process-oriented, open-ended, and problem-oriented nature of inquiry activities. Teachers themselves lack creative thinking and guidance strategies, making it difficult to effectively guide children in independent inquiry.[7]

(2)Insufficient Curriculum Design Experience

Many kindergarten curricula do not fully consider the developmental characteristics of children and the systematic nature of activities when designing them, lacking long-term planning and thematic extension. 3. Limited Kindergarten Resources

(3)Kindergartens face limitations in environment, materials, and funding, resulting in monotonous and inflexible materials and an irrational layout for inquiry activities. This restricts children's opportunities for free exploration and limits teachers' ability to create life-like scenarios.

(4)Insufficient Family and Social Support

The cultivation of children's creative thinking relies not only on kindergarten activities but also on the extension of family life and the support of the social environment. However, some families lack scientific educational guidance and pay insufficient attention to children's independent exploration and creative activities, affecting the continuity and overall effectiveness of life-like inquiry experiences.

Although kindergartens have explored life-like inquiry experiences, problems remain, including insufficient realism in activities, monotonous teacher guidance methods, and limited support in the inquiry environment and materials. The root causes lie in insufficient teacher professional competence, curriculum design experience, and resource availability. To effectively promote the development of children's creative thinking, improvements and optimizations are needed in activity content design, teacher guidance training, environmental and material construction, and family and social support.[8]

4. Application of Life-Based Inquiry-Based Experiential Activities in Cultivating Creative Thinking in Kindergartens

4.1. Creating Life-Based Inquiry Scenarios to Stimulate Children's Interest in Inquiry

Creating inquiry scenarios that are close to children's lives is key to stimulating their interest in inquiry and creative thinking. Teachers should start from children's familiar life experiences and select themes they encounter daily, such as "Secrets in the Kitchen," "Plant Growth," "Little Architects," and "Community Environmental Detectives," to construct realistic or simulated life scenarios. In this process, teachers should not only create the scene but also design questions

within the scenario to arouse children's desire to explore. For example, in the "Secrets in the Kitchen" activity, teachers can let children observe the changes in different ingredients after mixing and heating, and encourage them to make their own hypotheses, such as "Why does flour soften when water is added?" and "Why do bubbles appear when water is heated?" This guides children to actively think and ask questions, thereby stimulating their interest in inquiry.[9]

Furthermore, the creation of life-based inquiry scenarios should also emphasize interactivity and extensibility. Teachers can use role-playing, situational stories, and simulated operations to immerse children in the activity and allow them to fully experience the process. For example, in the theme of "Plant Growth," children not only observe seed germination but also record the growth process, design plant care plans, and discuss improvement methods with their peers. Through experiential learning in real-life situations, children can transform their life experiences into motivation for exploration, providing strong support for the development of creative thinking.

4.2. Providing Open-Ended Materials to Support Diverse Exploration

Open-ended materials are an important resource for promoting children's divergent thinking and innovative abilities. In life-based inquiry and experiential activities, teachers should provide children with diverse, manipulable, and combinable materials, such as recycled items, natural materials (leaves, shells, stones), building blocks, cardboard, and modeling clay. These materials have no fixed uses, allowing children to freely combine and manipulate them according to their own ideas, stimulating their creativity. For example, in the "Environmental Protection Little Makers" activity, children use recycled cardboard boxes, plastic bottles, and buttons to make small vehicles or animal models. By trying different combinations and structures, they not only develop their manual skills but also cultivate innovative thinking.

Furthermore, the openness of the materials should also be reflected in the flexibility of the manipulation methods. When providing materials, teachers can pose open-ended questions rather than fixed operational steps, such as, "Can you build a small cart to transport water using these materials?" or "Can you design a route for the ball to roll down a height?" Through this guidance, children can try multiple methods to solve the problem, promoting the development of divergent thinking. Research shows that open-ended materials provide diverse choices and operational space, helping children gradually form innovative problem-solving approaches through trial, exploration, and communication.

4.3. Emphasize the Inquiry Process and Guide Children's Independent Thinking

In life-based inquiry-based experiential activities, the teacher's role should shift from "knowledge transmitter" to "activity facilitator" and "learning supporter." Teachers should value the activity process rather than a single result, guiding children's independent thinking and exploration through questioning, encouragement, and appropriate demonstration.

Specific methods include:

(1)Inspirational Questions: Teachers can pose open-ended questions during children's activities, such as, "What do you think would happen if you changed the material?" or "Are there other ways to make the ball roll faster?", encouraging children to actively think and propose innovative solutions.

(2)Encourage Experimentation and Reflection: Teachers should encourage children to try boldly, allow for failure, view mistakes as part of learning, and guide children to summarize experiences and adjust their plans.

(3)Provide Opportunities for Collaboration and Communication: Through group collaboration, peer support, and sharing of results, children can learn from each other's ideas and stimulate more new thoughts. For example, in the "Little Architect" activity, children discuss design plans within groups, generating more innovative ideas through mutual suggestions and experimentation.

By focusing on the inquiry process, teachers not only help children master skills and knowledge but also cultivate their problem-solving awareness, independent thinking ability, and creative expression ability, thereby achieving the comprehensive development of creative thinking.[10]

4.4. Strengthen Home-School Cooperation and Expand Life-Based Inquiry Space

The cultivation of children's creative thinking not only relies on kindergarten activities but also requires the support of the family and social environment. Home-school cooperation can extend life-based inquiry and experiential activities to family life, enabling children to continuously explore and practice in a wider range of life scenarios.

Specific strategies include:

(1)Parent-child experiments: Teachers can design hands-on science experiments or daily observation activities for families, such as "Ice Melting Experiment" or "Little Plant Diary." Parents and children can work together to conduct these experiments, guiding children to ask questions, record observations, and analyze the reasons for changes.

(2)Daily observation records: Encourage children to record their daily observations, such as changes in small animals or plants, or weather phenomena. They can express their thoughts through drawing, photography, or written descriptions. Teachers will evaluate and discuss these observations within the kindergarten to promote experience integration.

(3)Sharing family resources: Parents can provide materials or tools from daily life to support children's independent exploration at home, such as old newspapers, cardboard, bottles, etc., allowing children to try designing and making things in their daily lives, thus broadening their exploration space.

Through home-school interaction, children can not only apply the exploration methods learned in kindergarten to their family life but also gain more opportunities for independent experimentation, forming a continuous learning experience. Research shows that home-school cooperation can effectively extend children's exploration space and enhance the continuity and depth of their creative thinking development.

5. Conclusion

This study on the role of life-based inquiry-based experiential activities in cultivating creative thinking in kindergartens reveals that these activities, grounded in children's daily lives, guide them to actively construct knowledge through observation, manipulation, exploration, and communication by creating realistic or simulated life scenarios. This effectively promotes the development of

children's imagination, problem-solving awareness, and innovative abilities. In practice, the provision of open-ended materials, diverse operational methods, and emphasis on the inquiry process enable children to try multiple solutions, cultivating divergent and flexible thinking. The transformation of the teacher's role is also crucial to the effectiveness of these activities. Teachers shift from knowledge transmitters to guides and supporters, guiding children to think independently and express unique insights through thought-provoking questions, encouragement of experimentation, and collaborative communication. Furthermore, home-school collaboration extends inquiry activities into family life, broadening children's learning space and enabling them to continuously explore and innovate in more life scenarios. In conclusion, systematically conducting life-based inquiry-based experiential activities not only comprehensively enhances children's creative thinking but also provides a practical reference for kindergarten curriculum design, teacher professional development, and home-school collaboration, possessing significant practical and long-term value for improving children's overall quality.

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