

Content Development of Comprehensive Practical Courses Based on the Concept of Core Literacy

Shuai Ding, Weicong Ma, Xuefei Wang

Hebei Normal University for Nationalities, Chengde, Hebei, 067000, China

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Abstract: Based on the standards of Core Literacy for Chinese Students to develop and Guidelines for Comprehensive Practical Activity Curriculum in Primary and Secondary Schools, the "Thematic Comprehensive Activity" curriculum of a primary school in Chengde City was developed and studied with core literacy as the main line of the activity and "small agronomist" as the theme of the activity.

1. Introduction

Under the background that countries all over the world have begun to pay attention to the curriculum reform, the comprehensive practical activity curriculum, as the carrier of research-based learning in the new curriculum reform, has attracted the attention of experts and scholars since the 21st century. The integration of core literacy, comprehensive practical activities and thematic teaching in this study will be more conducive to the development and utilization of educational resources, the overall reform of learning methods, and the establishment of students' dominant position, so as to truly realize the all-round development of students' morality, intelligence, physical, beauty and labor.

2. Development model of thematic comprehensive activity curriculum based on the concept of core literacy

This research will adopt PDCA cycle model as the model of curriculum development of "thematic comprehensive activities" under the core literacy. The operation steps of PDCA cycle include planning, implementation, inspection and processing. The following will be explained in combination with this research.

Phase P is the planning phase, which this study will be called the design phase, including the selection of topics, the formulation of goals, and the formulation of the plan of action. Corresponding curriculum objectives were developed based on the "Minor Agrist" theme identified in this study. Including the overall goal of the course and the specific goal of the course, it can be set from the four aspects of value recognition, responsibility, problem solving, creative and materialization, to provide guidance for the implementation of the subsequent course: we can develop a reasonable action plan based on the overall goal, including learning stage, specific time, specific objectives, class name, teaching content, and evaluation points. In this study, it will be classified according to six core qualities to find the right direction in implementation[1].

Phase D is the implementation phase, which will be called the implementation phase in this study.

The implementation phase is the key to test whether the scheme is feasible. According to the overall plan formulated in Phase P, a very specific action plan is designed, such as a detailed activity teaching plan for specific teaching objectives, key and difficult points of teaching, teaching process, etc., for a certain lesson in the class hour directory. We can take effective actions according to specific plans, and truly implement them in the classroom.

Stage C is the inspection stage. In this stage, the implementation process and results of teaching activities will be checked to find the advantages and disadvantages, affirm the advantages and analyze the disadvantages, and prepare for the improvement stage. We can check whether each part has achieved the set goals and the expected results. If the expected results are not achieved in the end, it is necessary to consider whether the plan is not strictly followed in the process. If not, it is necessary to re formulate an appropriate plan [2].

Phase A is the improvement phase, which deals with the advantages and disadvantages checked out and plays a role in summarizing. At this stage, there will be three results: we should strengthen the successful experience, summarize the successes and incorporate them into the standard, so as to provide experience for the follow-up of this activity. we can learn the lessons from failures, analyze the deficiencies in the activity process, and seek solutions through various ways to continuously optimize and improve. We can also summarize better plans to achieve the expected goals; There are still unresolved problems in this loop, which will be handed over to the next loop for processing.

3. Course objectives

According to the specific situation of the senior students in primary schools, the curriculum learning objectives with the theme of "Little Agronomists" is formulated, including the overall objectives and specific objectives. The specific objectives will be designed according to the four dimensions in the Outline.

3.1. Overall objective

They accumulate rich experience in practical activities, including gaining new practical experience and expanding the original life experience; In the process of practice, they are good at finding problems, analyzing problems with knowledge, and designing various solutions to solve problems; Finally, they can acquire knowledge and skills in various fields, find their self-worth, enhance their sense of social responsibility, and have the spirit of innovation and practical ability to achieve all-round development.

3.2. Specific objectives

(1) Value identification: they can experience the fun of planting and the joy of harvest, learn to cherish food, and respect the achievements of farmers.

(2) Responsibility: they can actively participate in social practice activities, be able to independently complete assigned tasks, and have team spirit and mutual aid spirit.

(3) Problem solving: In the process of planting, they have a preliminary awareness of problems, and good at digging and raising problems; They are be able to analyze problems from multiple perspectives under the guidance of teachers; they can seek solutions to problems through various ways, and discuss the best solution to problems in combination with specific situations, so as to initially have the ability to solve problems.

(4) Creativity materialization: they are be able to apply the theoretical knowledge of planting to practice, preliminarily master the basic skills of planting, learn to choose from existing conditions, and be able to plant creatively.

4. Curriculum content and core literacy benchmarking

Based on the content of six indicators in three major fields in the Core Literacy Development of Chinese Students, this study classifies the curriculum content based on the perspective of core literacy, and puts forward specific requirements. See Table 1 for details:

Table 1: Specific Requirements Based on Core Literacy

Core quality	Basic points	Course name	Specific requirement
Cultural Basis	Cultural heritage	I'm a little agronomist	Explore the original meaning of the word "farming" and its evolution process; Appreciating the calligraphy of "farming" has the consciousness of appreciating beauty; Accumulate idioms and stories with the word "farming"; Find common agricultural proverbs in life, understand the relationship between agricultural proverbs and life, and concern about human survival; Learn the corresponding farming poems, appreciate the farming scenes in life, and have the consciousness of expressing beauty with art.
	Scientific spirit	Geographic location and climate Land layout and vegetable garden Understanding soil Plant composition Understanding fertilizers	Be curious about planting knowledge and eager to learn true knowledge; Be able to understand things with a scientific way of thinking; Be good at finding problems, and be able to actively seek solutions to problems.
Independent development	Learn to study	I'm a little agronomist My harvest	Stimulate inner learning interest through various forms; Can effectively carry out information retrieval, learn to use the network to consult data, and can analyze and synthesize information. Such as: the development of agriculture, agricultural proverbs commonly used in life; Be good at summarizing and reflecting on your own performance.
	Healthy life	Health and diet	Learn to process food in a correct and healthy way and develop a healthy lifestyle; Have a sense of caring for your health.
Social participation	Responsibility	Salute the farmer uncle	Be enthusiastic about public welfare and volunteer service; Have the consciousness of loving and respecting nature; Able to work as a team and have the spirit of mutual assistance; Be grateful.
	Practice and innovation	I'm a little expert in planting Tools and equipment Seeding and seedling raising Transplanting and planting Crop rotation Weeding Battle Mulch cultivation Potted crop Crop picking and preservation	Have the enthusiasm to learn planting techniques; In the activity of planting carrots, he has a positive attitude towards work and loves work; Have hands-on operation ability and master certain planting skills; In the planting process, they are good at observation and have a sense of problems. After finding problems, they can combine specific situations and give play to their subjective initiative to solve problems; Have a sense of improvement and innovation.

5. Course content design and implementation

According to the specific objectives, the overall class hour catalogue is designed, and the overall learning content and the evaluation points and methods used are marked behind each stage.

5.1. Preparation stage

5.1.1. Course name of week 1: I'm a Little Agronomist

Learning objectives: they should understand agricultural agronomy knowledge and have a strong interest in planting, so as to be able to present our thoughts through paintings.

Learning content: they can learn to use the network to consult data, and be able to analyze and synthesize information, such as agricultural development history, agricultural proverbs, etc; they should know that agriculture is closely related to our lives and has a great impact on human life; they can learn farming poems, appreciate farming scenes in life, and create paintings according to our imagination.

Key points for evaluation: whether information can be queried and processed; Can you tell which things in life are related to agriculture; Can I create by myself.

5.1.2. Course name of the 2-4th week: Geographic Location and Climate, Land Layout and Vegetable Garden, Understanding Soil, Composition of Plants, Understanding Fertilizer, I'm a Little Expert in Planting

Learning objectives: they should understand the conditions (weather, location, soil, etc.) required for planting, know the composition of plants, types of fertilizers and methods of use, and master the planting steps.

Learning content: they should learn the representative crops suitable for planting in different regions of China, and impact of climate on crop growth; The layout of land and vegetable garden is based on the natural conditions and individual needs for agricultural products, including regular strip, regular square, radial and combined; Learn the composition and type of soil[3]. Different soils are suitable for planting different crops; they should also learn the classification of plants and observe that the body of flowering plants is composed of roots, stems, leaves, flowers, fruits and seeds, know the type of fertilizer, the role of fertilizer, how to apply fertilizer, and the precautions after applying fertilizer; Through video demonstration, teacher explanation and group discussion, they can learn the theoretical knowledge of planting steps and precautions: selecting varieties - soil preparation and fertilization - sowing - management - watering.

Key points for evaluation: Can you tell what conditions are required for plant growth; Can you draw the composition of the plant body; Can you select seeds and report the planting steps.

5.2. Exploration stage

Course name of week 5-8: Tools and Equipment, Seeding and Seedling Raising, Transplanting and Planting, Crop Rotation, Weeding War, Covered Cultivation, Potted Crops.

Learning objectives: we can have hands-on operation ability and master certain labor skills, select solutions according to specific conditions and improve problem solving ability; we should have a sense of teamwork and actively communicate with team members.

Learning content: we can select planting tools and equipment, know how to use tools and safety precautions when using tools; When purchasing tools, we can choose the most favorable purchase scheme in the store; With the help and guidance of teachers and old farmers, we should carry out sowing and seedling raising according to the planting theoretical knowledge, follow up observation records, and carry out transplanting practice in groups, so as to know when to transplant, and learn how to transplant; we should know what rotation is, the purpose of rotation, know that different disciplines can be rotated, and carry out hands-on practice; they should learn the harm of weeds and how to thoroughly remove weeds, and methods of pest control, the cultivation of spring flower

mulching with plastic film;[4] they should learn how to potted plants, know which vegetables and fruits are suitable for potted plants, and plant a pot for your family by yourselves or with your parents.

Evaluation points: whether they are willing to plant; Whether they are good at observation, have problem awareness, and record problems in the problem book; Whether they have a positive attitude to solve problems; Whether there is a sense of cooperation and mutual help; Whether it is flexible; Can you keep an observation diary.

5.3. Achievement stage

Week 9-10 Course name: Crop Picking and Preservation, Salute to the Farmer Uncle, Health and Diet, My Harvest.

Learning objectives: they should be able to record the planting process completely and understand how to harvest and preserve crops; they should learn to cherish food and respect the achievements of farmers, and know how to eat healthily, as well as summarize the activity.

Learning content: they should learn the season of crop maturity and identify crop maturity, and learn how to store crops, what should be paid attention to when picking, and what seeds can be planted next time; they should know that food is hard won, how to be grateful and cherish food; The picked food can be used for charity sale and other caring services; they should learn healthy food processing methods, know healthy eating time, and understand the nutritional value of food, in order to reasonably match diet, avoid food poisoning, and take care of your health; The group shall make a manual copy of the activity to record the activity; Everyone writes an article about their own activities.

Key points for evaluation: whether the activity is recorded completely; Whether to show true feelings; Can you express your true feelings in words.

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