

Promoting "Family-School-Community" Collaborative Education Through A "Classroom-Homework-Presentation" Cycle: A Survey on Family-School-Community Collaboration in Rope Skipping at Chaqiao Experimental Primary School

Ye Weiyena¹, Zhang Danning²

^{1,2} Chaqiao Experimental Primary School

ABSTRACT: Classroom instruction, homework, and presentations are the three pillars of compulsory education. These three elements work together to support students' learning, consolidation, and strengthening of knowledge and skills, forming an interactive, complementary, and mutually beneficial cycle. Within this cycle, schools actively lead, families proactively fulfill their responsibilities, and society effectively supports the "classroom-homework-presentations" model, promoting collaborative education among families, schools, and communities, thereby fostering a collaborative, sustainable educational ecosystem.

Rope skipping is a key component of physical education classroom instruction. This report will use the example of a collaborative family-school-community model for "rope skipping." By combining the practical effectiveness of classroom "rope skipping" instruction, the after-school physical education homework model, and the evaluation and incentive effects of the community demonstration platform, it will analyze the rationality and feasibility of this operational model, aiming to provide a reference case for improving the collaborative education mechanism between schools, families, and communities.

KEYWORDS: Collaborative education; Family-school-community cooperation; Rope skipping

With the introduction of the "double reduction" policy in July 2021, the nation's attention to education has intensified. Since the 20th National Congress of the Communist Party of China, the Ministry of Education and 13 other government departments have jointly issued the "Opinions on Improving the Mechanism for Collaborative Education among Schools, Families, and Societies" (hereinafter referred to as the "Opinions"). These documents call for the establishment of a clearly defined, robust, closely linked, and scientifically efficient collaborative education mechanism among schools, families, and society by 2035. The "Opinions" set forth four working principles: "upholding a people-centered approach, government-directed coordination, collaborative education, and a problem-oriented approach." These principles clarify the respective responsibilities of schools, families, and society in collaborative education, as well as the coordination mechanisms between them. Schools, as the leading role, should fully leverage their leading role in collaborative education; parents, as the primary responsible body, should earnestly fulfill their responsibilities for family education; and society, as the supporting force, should effectively support and serve comprehensive education, making family education guidance a key component of public services in urban and rural communities.

Based on the responsibilities of families, schools, and society (communities), we have divided the educational and teaching structure into three key components: classroom instruction, homework, and achievement presentation. We are committed to integrating the "classroom-assignment-exhibition" teaching structure into the collaborative education process of "home, school, and society." Using the "class-homework-exhibition" model as an opportunity, the initiative promotes communication, interaction, and feedback between home, school, and community. Chaqiao Experimental Primary School is piloting this model, using skipping as a starting

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point.

Rope skipping is a crucial activity for elementary students to develop physical fitness and improve their overall health. It's not just a single movement; it can be organized in a variety of creative ways. Adapting skipping in the classroom can enrich students' imagination and stimulate their creativity. In after-school physical education homework, skipping is highly practical and easy to implement, providing feedback. It's an effective way to address gaps in classroom instruction, strengthen home-school communication, and foster healthy lifestyles for students. In community demonstrations, skipping is highly entertaining and a highly adopted form of "national exercise," boosting community engagement and feedback effectiveness.

1. Leading "Homework" with "Classroom": Optimizing School Instructional Design

Rope skipping classroom instruction is central to collaborative learning. Only by leveraging limited classroom resources, emphasizing key skills, and providing positive feedback can the correct implementation of rope skipping be incorporated into family education. Incorporating meticulous time management, experiential teaching and practice, and positive psychological guidance and assessment into curriculum design can help refine and implement homework assignments.

(1) Optimizing Design and Focusing on Physical Fitness

Excellent classroom design can stimulate student engagement and interest. When designing preparatory activities, teachers should consider the specific characteristics of the project. For example, in a rope skipping class, teachers can assess students' basic rope skipping skills, speed, and collaborative abilities through activities such as one-minute rope skipping, fancy rope skipping, and double rope skipping. During one-minute speed rope skipping exercises, teachers often focus on how many jumps students can complete, neglecting the process-oriented distribution of physical fitness across each stage. The physical exertion during rope skipping exercises increases the difficulty of completing the movements. The practice process is often accompanied by deformation of movements and an increase in the number of skipping breaks, which ultimately affects the rope skipping results. In a scientific and reasonable classroom teaching design, teachers pay more attention to the factors that affect sports performance and focus on studying the changes in sports psychology after physical exertion.

(2) Set Goals and Manage Time Carefully

Emphasis should be placed on students' achievements at each stage of practice. Regarding time, the original one-minute practice can be divided into 15-second, 30-second, 45-second, 60-second, and 75-second intervals. By comparing and analyzing the relationship between different time periods and the number of jumps, we can fully understand students' physical energy distribution and changes in their sports psychology during the rope skipping process. For students whose rope skipping performance needs improvement, teachers can compare their 45-second and one-minute rope skipping performances. This will reveal issues such as increased interruptions and distorted rope movements during the last 15 seconds. Teachers should constantly remind students to maintain their speed, complete the full jump time, or even add more time to improve their endurance.

(3) Detailed Instruction and Practice, Emphasizing the Learning Experience

Teachers can use simple descriptive language when correcting students: "Jump upward with your feet together, landing on your toes and using your knees as a cushion." When correcting rope skipping in class, follow the principle of gradually progressing from easy to difficult, from simple to complex, based on the students' practice. For example, how can we address students' coordination in rope swinging? As a first step, we can have students draw circles with their wrists. You can also play games to exercise your wrists. Next, have students start by shaking the rope with one hand, mastering the direction of the rope, gradually increasing the speed, then switching hands to practice, and finally shaking the rope with both hands at the same time, requiring both hands to be consistent. At the same time, you can also use the mirror method to correct it, which will achieve twice the result with half the effort. In daily education and teaching activities, teachers can actively encourage students to play the role of little teachers and little referees to assist teachers in carrying out classroom activities. In rope skipping classroom teaching, teachers can invite students to play roles such as rope skipping timekeepers and starters to replace teachers in giving instructions. Students participating in classroom role-swapping can not only experience the freshness brought by the teacher's role, but also have a certain understanding of the formation of sports skills. Physical education teachers should be good at grasping students' psychological characteristics and teaching students in accordance with their aptitude in classroom exercises.

(4) Leverage Incentives and Focus on Psychological Evaluation

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Physical education teachers should learn to effectively utilize classroom comments during classroom exercises to boost students' confidence. Elementary school students are eager to perform well in class and are eager to attract the attention of their classmates and teachers through their actions. Ultimately, they aim to gain recognition from both teachers and students. Classroom comments can guide students to perform correctly while also boosting their interest in practice. When using motivational comments in the classroom, it's important to ensure accuracy. Using phrases like "well done" or "excellent" during classroom teaching evaluations can prevent students from subjectively assessing the quality of their movements without properly understanding them.

Elementary school classroom comments should highlight key points and difficulties. While providing richer comments, teachers should also be able to engage with students' psychology and motivate them. For example, during a rope skipping competition, teachers could say, "Your unyielding spirit truly resembles that of a group of soldiers capable of winning battles. I believe you will perform even better in the upcoming exercises." "Your wrists are as flexible as Superman. With good physical training, you too have the potential to become Superman. I give you a thumbs-up." Vivid motivational language from teachers can help boost students' interest in exercise and boost their confidence. Teachers can use comments like "You can stop and see how other students who jump faster are doing it" to encourage students to actively ask for advice from their faster classmates. When evaluating rope skipping techniques, it's important to focus on detailed explanations and practice. Using comments to guide and motivate students allows them to communicate and learn from each other, creating a positive learning atmosphere.

2. Complementing "Classroom" with "Homework": Detailed Implementation of Family Education

After classroom instruction concludes, schools should promptly assign appropriate homework for review and consolidation. During family education, regular physical training should be strengthened, with supervision and corrective guidance provided through various platforms. Homework can compensate for insufficient classroom time and inadequate individualized instruction. Furthermore, homework can inform and optimize instructional design and enhance teacher skills.

(1) Implementation and Building a Communication Platform

Through communication with students and parents, the Physical Education Department implements various intelligent tools for collaborative home-school communication regarding after-school homework. A communication platform centered around DingTalk groups is established for posting and providing feedback on homework. Teachers, acting as the lead, assign homework of varying goals and difficulty levels to different students in different classes. Students can use this app to review their performance comments and reflect on their performance through videos. Parents can also monitor their children's homework at any time. Teachers can also use this platform to monitor students' progress and provide appropriate corrections.

(2) Implementation Effectiveness and Improved After-School Mechanisms

We extracted exercise data from the six-week action research period and conducted a statistical analysis of the actual completion rate of online physical education homework. We found that the average completion rate for the 114 students in the three experimental classes was 78.36%, and the average completion rate for the week was 79.32%. A comparative analysis of the students' physical fitness revealed that general activities did not significantly improve the control group's physical development (Table 1). Furthermore, Tables 2 and 3 show that the experimental group's performance in the one-minute rope skipping, one-minute sit-ups, sit-ups, and 50-meter x 8 shuttle runs after the action research was significantly different from before the action research ($p < 0.05$). The experimental group's performance after the action research was significantly better than before the research. This steady improvement in completion rate is primarily attributed to the "Daily Rope Skipping" app, the physical education teacher, the homeroom teacher, and the parents' four-in-one oversight mechanism. The duration of online physical education homework can be determined by referring to the app's data analysis of students' exercise time each day and each week.

Table 1 Comparison of physical fitness test results of the control group before and after the action study (n=114)

Test items	Control group pre-	Control group post-test	Difference	T	p
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Promoting "Family-School-Community" Collaborative Education Through A "Classroom-Homework-Presentation" Cycle: A Survey on Family-School-Community Collaboration in Rope Skipping at Chaqiao Experimental Primary School

	test						
	Mean	SD	Mean	SD			
1 minute of skipping rope	53.2	28.375	56.97	29.83	-3.77	-1.46	0.215
1 minute sit-ups	23.21	9.25	24.08	8.96	-0.87	-0.953	0.556
Seated forward bend	8.43	6.165	7.63	6.024	0.8	1.917	0.075
50-meter run	11.25	1.592	11.04	1.582	0.21	11.58	0.182
50m x 8 round runs	2.19	0.332	2.25	0.363	- 0.06	-0.552	0.63

Table 2 Comparison of physical fitness test results of the experimental group before and after the action research (n=114)

Test items	Control group pre-test		Control group post-test		Difference	T	p
	Mean	SD	Mean	SD			
1 minute of skipping rope	55.8	29.352	64.23	27.35	-8.437	-4.59	0.00**
1 minute sit-ups	22.65	8.46	26.75	9.54	-4.1	-5.95	0.00**
Seated forward bend	8.61	6.229	9.69	6.484	1.08	-2.571	0.051*
50-meter run	11.52	1.631	9.44	1.546	2.08	12.53	0.00**
50m x 8 round runs	2.29	0.426	1.84	0.419	0.45	-8.61	0.00**

Table 3 Comparison of physical fitness test results between the experimental group and the control group after the action research (n=114)

Test items	Control group pre-test		Control group post-test		Difference	T	p
	Mean	SD	Mean	SD			
1 minute of skipping rope	64.23	27.35	56.97	29.83	7.62	2.169	0.017*
1 minute sit-ups	26.75	9.54	24.08	8.96	2.67	2.425	0.016*
Seated forward bend	9.69	6.484	7.63	6.024	2.06	2.44	0.007*
50-meter run	9.44	1.546	11.04	1.582	-1.6	-7.613	0.00**
50m x 8 round runs	1.84	0.419	2.25	0.363	-0.41	-9.61	0.00**

(注: *: $p < 0.05$ Significant difference; **: $p < 0.01$ Highly significant difference)

3. "Classroom" "Homework" and "Presentation": Strengthening Evaluation through Community Platforms

Evaluation is an essential component of the entire teaching process. It closes the loop in our "Lessons-Work-Exhibition" cycle and also marks the beginning of a new cycle. Evaluation can take many forms, ranging from quantitative assessments to qualitative demonstrations and motivational feedback. "Exhibition," the display of achievements, is also a type of evaluation, integrated into

Promoting "Family-School-Community" Collaborative Education Through A "Classroom-Homework-Presentation" Cycle: A Survey on Family-School-Community Collaboration in Rope Skipping at Chaqiao Experimental Primary School

every aspect of the classroom and at home. The community can more effectively provide a public platform, allowing students to gain a higher sense of accomplishment and honor, thereby enhancing the impact of the sport itself.

(1) Student-centered, Building an Interactive Platform

In classroom teaching, we should be adept at tapping into students' strengths, proactively providing a platform for them to showcase their skills, actively setting an example, and leveraging the role of high-performing students in mentoring and guiding others. Teachers can invite students with strong technical skills and fast jumping speeds to demonstrate in front of the class. For example, when teaching students who jump too early or too late, we use demonstrations and evaluations to identify key and difficult points in the movements and how to better address these challenges. Physical education teachers should provide students with a platform in their daily teaching activities and be adept at leveraging role models to create a positive classroom atmosphere.

(2) Leveraging Technology to Innovate Home-School Assessments

Technological tools, such as the "Daily Rope Skipping" app, are powerful tools for supervising homework. It offers convenience, networking, and interactivity. The app's model of assigning homework, students completing it, and providing feedback and evaluation, encourages students to increase their after-school home physical activity from scratch. This model also extends children's daily exercise time, improves the quality of their movements, and enhances their overall physical fitness.

The school also provides positive and effective guidance for the presentation of achievement results. Based on the characteristics and physical development patterns of students in each grade, the school has established corresponding goals. These challenges are implemented during recess: Tuesday for the lower level, Wednesday for the middle level, and Thursday for the higher level. Successful challenges are rewarded with certificates, giving students a sense of accomplishment.

(3) Build a platform to enhance social impact

Schools can collaborate with local communities to create platforms for students who have achieved some success to showcase their skills. These can include organizing rope skipping competitions for local elementary school students, fancy rope skipping performances, and community rope skipping record challenges. By integrating the strengths of the school, family, and community, they can centrally and publicly showcase teaching achievements and student excellence. This not only enriches the evaluation process but also increases students' confidence and sense of honor. Furthermore, it can promote the positive and healthy theme of "national sports" to the public.

CONCLUSION

In summary, the "class-work-exhibition" initiative holds unique significance in every aspect of the "home-school-community" ecosystem, requiring coordinated communication and collaboration among all three parties.

In classroom teaching, teachers should prioritize pre-class preparation, thoroughly analyze student learning situations, and carefully plan unit teaching plans, ensuring a clear understanding and appropriate approach. In classroom teaching, teachers should respect individual differences, tailor teaching to students' abilities, and diligently implement teaching organization and management while fully ensuring teaching quality.

In family education, "Daily Rope Skipping" check-ins are crucial for improving students' physical fitness. In this era of development, the interconnectedness of post-class online check-ins and classroom instruction is emerging. Currently, the mutual promotion of information technology and classroom teaching is in its early stages of research, with many areas still underdeveloped and requiring further development and exploration.

In terms of social support, community collaboration and co-education are crucial components of my country's educational modernization. In this area, our education sector still has significant potential for development. The rational utilization of social work and its integration with campus development is a general trend and can also contribute to mutual development. Through the practice and innovation of relevant systems, community platforms will undoubtedly better serve classroom teaching and student development. As frontline teachers, we should constantly consider, adjust, and optimize our teaching over the past decade, facing new technologies and concepts in the face of the tide of the times, and letting the sparks in our hands shine brightly on the stage of society. A virtuous cycle of teaching ecology must be the convergence of every force in society. It protects the growth of every life and is protected by it.

Promoting "Family-School-Community" Collaborative Education Through A "Classroom-Homework-Presentation" Cycle: A Survey on Family-School-Community Collaboration in Rope Skipping at Chaqiao Experimental Primary School

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