

Research on the Application of Traditional Tie-Dye in Primary and Secondary School Art Teaching

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Abstract: Traditional tie-dye is one of China's intangible cultural heritages with a long history and a part of traditional Chinese culture. Applying traditional tie-dye to the teaching practice of art in primary and secondary schools can not only make use of the limited classroom practice to give students the opportunity to feel the unique charm of tie-dye, but also enrich students' knowledge of traditional culture and enhance their hands-on ability in the process of art practice. This paper takes the application of traditional tie-dye in primary and secondary art teaching as the main research object, and discusses the significance and deficiencies of the application of traditional tie-dye in art teaching practice.

In the art education of Chinese primary and secondary schools, in addition to art creation and art appreciation courses, handicraft courses, which cultivate students' aesthetic ability and exercise their hands-on skills, also play a significant role in the art education curriculum. Traditional Chinese tie-dye, while being both artistic and practical, not only has a long history of development, but also has deep traditional cultural deposits. In the actual teaching process, on the one hand, with the physical growth and development of primary and secondary school students, as well as the improvement of their cognitive ability, primary and secondary school students are able to gradually realize the real world objectively, and gradually have a certain practical ability. On the other hand, the basic technique of tie-dye is not very complicated, and the whole process of tie-dye can be completed under a relatively simple condition. Therefore, in the actual teaching process of art education, the introduction of traditional tie-dye-related teaching content is a relatively good choice in terms of art education and traditional cultural education for students.

1. Colorful and Splendid Traditional Tie-Dyeing

Tie-dye is a traditional dyeing process in Chinese folklore, and the main purpose of tie-dyeing fabrics is to obtain floral patterns on the fabrics during the dyeing process. The tie-dye products dyed by using tie-dye process have unique patterns, overall color harmony, flower color is rich in layers, and the pattern is ever-changing, which has a strong practical function as well as its own unique artistic and aesthetic value[1]. Tie-dye is generally made of natural materials such as cotton and white fabric as the base cloth, in addition to other fabric products such as silk fabric can also be used for tie-dye. The main component of silk is animal protein, so the tie dyeing effect is more prominent in

color rendering performance compared to plant fiber fabrics such as cotton, but the disadvantage is that it is more expensive. The main dyes used in tie-dyeing are indigo solutions made from natural plants such as *Panax quinquefolium*, *Lonely Blue*, *Artemisia absinthium* and other raw materials, and the color shown is usually blue, but of course, other natural materials can also be used to produce different colors of dyes for tie-dyeing. Today's traditional tie-dye in the inheritance category, combined with China's intangible cultural heritage list, China's domestic inheritance of traditional tie-dye techniques to date according to the geographical division, there are Han tie-dye (Zigong tie-dye), Bai tie-dye, Yi tie-dye, and each category has its own unique artistic style characteristics. Each category has its own unique artistic style and characteristics. According to the division of time, in addition to the traditional tie-dye craft, there is also the modern tie-dye that innovates and transforms the traditional tie-dye. Therefore, the main object of this study is the traditional tie-dye process, and the content related to modern tie-dye will not be repeated.

The practical techniques of traditional tie-dye are more or less slightly different in different fabrics and different branches of the category heritage, but the techniques of traditional tie-dye mainly consist of two steps: tying flowers (formerly known as "tying knots") and dyeing. Before dyeing, the tie-dyed fabric should be treated with tying flowers. The specific content of the flower tying process is to bind or sew the fabric prepared for dyeing before dipping it into the dye. The main tools used are tie-dye lines, clips and other tools to bind or sew the fabric that has made a certain shape through pinching, folding, curling, squeezing and other methods[2]. Now, rubber bands and other tools are also used to bind. Some special patterns also need to use special modeling tools such as splints or beads to assist. The purpose of tying the fabric is to prevent the dye from fainting to the place that needs to be left blank, the principle is "physical anti-dyeing", the use of physical means to isolate the complete immersion of the dye on the fabric, and then leave a white pattern on the fabric, or further secondary tie-dyeing. The common methods of tying flowers are mainly binding, sewing and clamping. Binding is the use of rope to bind the fabric where there is a need for white space for a purpose, sewing is the need to make the necessary needle and thread sewing, and then remove the suture after completing the tie dye. Clamping in addition to the need for rope tying also need to borrow wood chips, clips and other tools for specific combination assistance, is the three categories of the need for the most tools in a way of tying flowers. Tying flowers is not only a necessary step in the tie-dye process before dyeing, but also plays a key role in the final pattern formed by the tie-dye. The dyeing step after tie-dyeing is the color development step in the traditional tie-dyeing process. This part is mostly completed by using the immersion dyeing process. The specific practice is to soak the cloth or other fabric products after the completion of the tying flowers into the processed dye.

Thus, the relatively complete traditional tie-dye process is roughly divided into five steps. The first step is pattern design, which is divided into two types, with and without drawing. The type with a drawing involves designing a pattern on drawing paper before tying the fabric or other textile products, then transferring the designed pattern onto the blank fabric or textile products to be dyed, and then using the tying technique according to the transferred drawing to reserve the pattern before dyeing. The type without drawing is not to carry out detailed pattern design before zahua, with the appropriate zahua technique directly on the fabric or products ready to be dyed zahua processing, with a strong casual, accidental, relatively simple operation, low threshold, in the actual teaching of the use of this type of zahua technique. The second step is dyeing, which is divided into monochrome dyeing and multi-color dyeing, but before dyeing, the fabric or fabric products need to be soaked in water. Monochrome dyeing is the simplest type of dyeing, where the fabric to be dyed is dyed only once. Multi-color dyeing involves dyeing the fabric with two or more dyes. Compared with monochrome dyeing, multicolor dyeing is slightly more complicated and tests the operator's ability to match colors and control the dyeing process in terms of the aesthetic appearance of the final result. For multi-color dyeing, it is necessary to dye the fabric or fabric products with light colors first, and then tie the dyed

light-colored fabric or fabric products and immerse them into the dark dye solution for dyeing. Multi-color dyeing need to pay attention to the color should not be superimposed too much, to more than two kinds of not more than four kinds of the best, but also pay attention to the harmony of color matching. In the dyeing process, there are also two ways of dyeing: complete immersion and hanging dyeing (fabric or fabric products are not completely immersed in the dyeing solution). Hang-dyeing can be dyed with a gradation effect from dark to light. The third step is washing, after the fabric or fabric products to be dyed are fully immersed in the dyeing solution and then pulled out, followed by rinsing the fabric or fabric products with clean water, until the water becomes clear. The fourth step is to remove the thread, drying after the washing step, after drying completely, or tied or sewn tie flower for all the removal of the thread, all the sewing or tying thread completely removed after the need to carry out a second water washing. At the end of the wash, the fabric or fabric products are not drying when the unthreading will cause the fabric or fabric products to stay white part of the staining. The fifth step is drying, try to avoid drying in direct sunlight, otherwise it will cause uneven dyeing of the fabric or fabric products [3]. If there is a need for secondary dyeing or multiple dyeing, such as multi-color over-dyeing effect, then repeat this series of processes, if there is no need to change the pattern then there is no need to carry out the removal of the thread, just repeat the dyeing. If you want to get a deeper color, you can increase the soaking time of the fabric or fabric products in the dye at the dyeing stage or carry out several repeated dyeing, and then carry out the subsequent steps such as washing.

2. The Significance of Applying Traditional Tie-Dye to Art Teaching in Primary and Secondary schools

The origin of the traditional tie-dye technique is in the Yellow River basin, because the time is too far away, the specific reasons for the formation of the tie-dye technique cannot be traced, but it has existed for quite a long time in the process of China's known historical development, and the earliest known information is that in the Eastern Jin Dynasty, there are records related to tie-dye. Traditional tie-dye has both practicality and unique artistic value, and has been passed down to the present day, not only as one of China's traditional crafts, but also as one of China's intangible cultural heritages. Introducing traditional tie-dye into primary and secondary art classrooms not only enhances students' cultural awareness of traditional Chinese culture and folk art, but also has a positive significance on the inheritance and protection of traditional tie-dye[4]. Through the practical learning of traditional tie-dye, students can not only learn the basic techniques of tie-dye, but also have a certain understanding of the procedures and principles of the production of tie-dye, such as how to tie the flowers and sew the fabrics in the process of tie-dyeing, as well as how to dye the fabrics, and how to match the colors in the process of dyeing in a better way, and other practical skills and knowledge of the arts. More importantly, students can learn from the traditional tie-dyeing techniques to appreciate the deep national culture and emotion contained in this ancient technique, such as the folk culture knowledge contained in the tie-dyeing patterns, etc., and cultivate the patriotism of students through the study of aesthetic education.

Art teaching in primary and secondary schools in China, especially in the nine-year compulsory education stage, is carried out on a national scale, but the development of each region is different, so the art teaching content needs to be quite universal in order to be implemented on a wide scale. The practical materials for traditional tie-dye are relatively easy to obtain, and even in areas where there are difficulties in obtaining the necessary raw materials, the materials can be replaced with ones that are more suitable for the actual teaching conditions in the local area. Moreover, the plant dye used in traditional tie-dye is natural and harmless, the price of raw materials is relatively low, and the basic techniques are simple and easy to learn, so it can be applied to large-scale teaching and learning, so

it is quite feasible for traditional tie-dye to be introduced into primary and middle school art classrooms. In addition, traditional tie-dye, which is a type of folk art, not only enriches the teaching content of primary and secondary art courses, but also enriches the teaching form of art teachers after entering the art classroom. Because of the craft characteristics of traditional tie-dye, the teaching process is no longer the traditional mode of teachers speaking and students listening, but the teacher's guidance is supplemented by the student's hands, so that the students increase a lot of hands-on practical opportunities. On the one hand, because of the uncertainty of tie-dye molding, it is conducive to stimulating students' interest in learning art knowledge, mobilizing students' motivation to learn, and stimulating students' vitality in exploring art learning. On the other hand, when teachers teach the related contents of tie-dye, they also briefly describe the historical and cultural background of traditional tie-dye, which not only cultivates students' aesthetic ability and improves their art literacy through the process of art teaching, but also increases their accumulation of knowledge about history, culture and folklore[5].

Compared with the traditional art teaching in primary and secondary schools that paint on paper, tie-dye uses fabric as a medium that is different from paper and dip-dye as a way of color development that is very different from painting, which, compared with traditional art teaching, increases the students' experience of art in the process of art learning. And by tie-dye special teaching methods, art teachers in the actual teaching process of the teaching form must be based on practice, invariably also cultivate students' hands-on practical ability. In the teaching process, in addition to organizing hands-on practice in the course of the practical process, teachers can also organize the observation and appreciation of traditional tie-dye content and production process. This is a student-oriented teaching mode, in which students take more initiative in the whole teaching process, and are able to learn art knowledge and skills according to their own interests to a greater extent.

3. The Application of Traditional Tie-Dye in Art Teaching

Traditional tie-dye has been introduced into art teaching in primary and secondary schools nowadays, but the degree of completion of traditional tie-dye teaching in art teaching varies from place to place due to the constraints of unbalanced economic development. In some areas, the practical teaching of tie-dye can be well applied in the process of art teaching, and even rich and colorful practical activities can be carried out with the theme of tie-dye. However, in some areas, when art teachers are practicing art teaching, they still adopt the teaching mode that the teacher lectures and the students listen to the lectures, or they just skip the lectures and do not teach anymore, especially in the rural primary and secondary schools in remote areas, where this kind of phenomenon is more common.

Most of the reasons for the unsuccessful application of traditional tie-dye teaching in art teaching practice are influenced by the local economic environment, which tends to be rural areas with insufficient economic development. Firstly, the lack of economic development leads to insufficient materials, and teachers and students cannot afford the cost of practicing traditional tie-dye in art courses. Secondly, there is a lack of access to relevant teaching resources due to information blockage. Art teachers are unable to acquire relevant knowledge and skills associated with traditional tie-dye from the outside world, and naturally, they are unable to impart knowledge related to traditional tie-dye to students in the classroom. Finally, the teaching concept is outdated and there is a lack of art teachers in economically underdeveloped areas. Under the traditional exam-oriented education ideology, the art subject is categorized as a secondary subject, and compared with the "main subjects" such as language and mathematics, the art subject receives insufficient attention, coupled with the large-scale lack of art teachers in terms of quantity, the art class in some areas, in the actual teaching process, most of the main subject teachers teach the art class part-time, and in terms of teaching content, not only the art subject is not taught to the students, but also the art subject is not taught to the students. In terms of teaching content, not only is it impossible to effectively implement the daily

teaching content of the art subject, but it is also almost impossible to implement the traditional tie-dye-related content, which is more finely divided in art teaching[3].

In areas with insufficient economic development, when there are certain art teaching conditions, art teachers can simplify the tools and materials required for teaching traditional tie-dye according to the actual conditions of the local art teaching practice and the necessary conditions of the traditional tie-dye operation process. For example, if it is not possible to prepare other fabrics such as cotton with a white background, paper towels or straw paper can be used instead, and light-colored clothes discarded by students at home can also be used for transformation to replace the base cloth. In the use of dyes, if it is not possible to prepare conventional tie-dye solution, you can buy cheap ink, colored ink, or use the surrounding non-toxic plants that can be picked, homemade plant juice dyes and other more easily accessible materials, so that students can carry out tie-dye related experiences. For areas with better economic development, although the traditional tie-dye process can be well implemented in the art teaching process, but in the actual teaching process, subject to various aspects of the impact of the actual education and teaching in the actual education and teaching sometimes can not achieve the expected results of the lecturing art teachers, so in the results of the teaching of the need to have a certain psychological expectations. On the one hand, by the students' personal qualities, practical hands-on ability, as well as the art teacher's guidance and other aspects of the impact of students in the process of learning and practice, the actual production of tie-dye works, the quality of the work, may be uneven; on the other hand, some art teachers in the actual process of teaching, focusing on students in the tie-dye technology training, while missing the most important aesthetic training, which is something to pay attention to. This is an area that needs attention. What art teachers need to do in the actual teaching process is to cultivate students' art literacy through art courses, and the practical teaching of traditional tie-dye is a means for better art education. In the actual teaching, students' aesthetic quality should be cultivated through the practice of traditional tie-dye, such as color matching, graphic combination and so on, instead of focusing only on the teaching of techniques, which is a means rather than a goal.

4. Conclusion

Traditional tie-dye has a long heritage, not only has its own unique artistic charm, but also has a strong practicality in folk life. In recent years, because of the rapid development of science and technology, the application of traditional tie-dye in people's lives is no longer as extensive as it was in the past, but the pure and simple artistic characteristics of traditional tie-dye products are still something that people can appreciate. Traditional tie-dye in primary and secondary art teaching has its unique role in the value of art and culture and in inspiring students' sense of beauty. However, in order to integrate traditional tie dyeing techniques into art teaching in primary and secondary schools and enable students to experience the humanistic ideas contained therein, further strengthening and implementation are needed.

References

- [1] Wang Jianhua, Liu Suqiong, Lin Wenming. *Innovation and practice of traditional tie-dye under modern aesthetic concept*[J]. *Textile Report*,2022,41(05):121-125.
- [2] Huang Ling. *Research on the Innovative Application of Traditional Tie-Dye Craft in Primary School Art Teaching* [D]. *Guangxi Normal College*,2018.
- [3] Sheng Lina. *Exploration of tie-dye class in high school art teaching*[J]. *Popular Literature and Art*,2013(01):197-198.
- [4] Yan Huizhen. *Research on Intangible Cultural Heritage into Secondary School Art Curriculum and Teaching* [D]. *East China Normal University*,2016.
- [5] Zhang Xiangyan. *Exploration of teaching practice of handmade tie-dye into high school art classroom* [D]. *Changchun Normal University*,2021.DOI:10.27709/d.cnki.gccsf.2021.000255.