

# *Construction of the Cross-Border Training Mode of Visual Communication Professionals in the 5G Era*

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**Abstract:** This paper studies the visual communication major in the 5G era, and the visual communication major refers to a field of art and design to convey information and express emotions through visual graphics, language, words and other means. Its importance lies in the ability to effectively convey the core concept of the product or brand. In the 5G era, due to the innovation and development of technology, the application scenarios of visual communication professionals have been further expanded, and higher requirements have also been put forward for visual communication professionals. The research work of this paper mainly includes the following parts: (1) it analyzes the current development status and application characteristics of 5G technology, and discusses the influence on visual communication major; (2) it analyzes the significance, content and implementation approach of the cross-border training mode from the theoretical perspective, and analyzes the necessity of introducing cross-border training mode in visual communication major; (3) it explores the practical needs and cross-border quality of visual communication students in the 5G era; (4) the future development of the training of visual communication professionals in the 5G era is discussed.

## 1. Introduction

With the continuous development of 5G technology, visual communication has gradually been widely used in various industries, and cultivating visual communication professionals in the market demand has become an urgent problem to be solved. This paper aims to explore the cross-border training mode of visual communication professionals in the 5G era, so as to improve the quality and competitiveness of visual communication professionals in the 5G era, and provide strong support and help for related fields. In this paper, the combination of literature research and empirical investigation, from the actual case, explore the 5G era under visual communication professionals cross-border training mode of theoretical basis and practical experience, through the cross-border communication and cooperation between different industries, and through the school, enterprise cooperation related course aspects. This study preliminarily explored the cross-border training mode of visual communication professionals in the 5G era, put forward the cross-border training mode

based on industry-university-research, practical exploration and collaborative development, and proved the feasibility and effectiveness of this mode through practical exploration and verification. In the future, the cross-border training of visual communication professionals needs to be more deeply practiced and explored, so as to cultivate talents with innovative consciousness and practical ability. At the same time, an exchange platform for cross-field cooperation should be established to create more cooperation opportunities and inject new vitality into the development of the industry.[1,2]

## 2. Research Background

With the development of The Times, the concept of cross-border education has attracted more and more attention. Cross-border education refers to a form of education that establishes connections between different disciplines and aims to cultivate talents with diverse and comprehensive abilities. In this process, it is necessary to learn from the knowledge of various disciplines, integrate the ideas of interdisciplinary disciplines, explore new knowledge and skills, and promote the improvement of the overall quality. The theoretical research of cross-boundary education can be traced back to the 1960s, and the field of cross-boundary knowledge integration has become a hot topic of academic research. Some scholars have proposed the concept of integrating disciplines, emphasizing exchanges and cooperation between different fields. For example, the "Trinity" proposed by the American educator Oxford emphasizes the combination of discipline connotation, methodology and practical application to realize the cross-border integration of knowledge. At the same time, cross-border education has also been highly recognized, and has become one of the core issues of education reform in the 21st century. Cross-border education crosses the traditional disciplinary boundaries and needs to cultivate comprehensive talents with a wide range of knowledge and innovation ability. In this process, cross-border education involves many disciplines, fields and majors, among which interdisciplinary, cross-cultural and cross-language communication and cooperation are of great significance. In addition, cross-border education also needs to use the corresponding educational means and educational resources, such as cross-campus cooperation, interdisciplinary research, cross-cultural experience, etc. These methods can promote communication and cooperation across disciplinary boundaries and enhance students' learning, practical ability and ability qualities across disciplinary areas. In the cross-border training of visual communication professionals, the cross-border education theory provides a road map to provide theoretical support and guide the practical direction. Only by cultivating students' broad vision and keen insight, and strengthening the exchange and cooperation between multiple disciplines, can we promote and lead the future innovation and development. At the same time, cross-border education can also promote discipline innovation, cultivate comprehensive talents with leadership ability, pioneering spirit and teamwork spirit, and provide new ideas and impetus for the future development of science and technology. In short, in the cross-border training of visual communication professionals, the cross-border education theory provides a road map to provide theoretical support and guide the practical direction. In the theoretical research of cross-border education, the emphasis on the cultivation of comprehensive talents and the coordinated development of disciplines, which can promote students' communication and cooperation across the subject boundary, and enhance students' comprehensive quality and ability quality across the subject field.[3]

### 3. Cross-border Cultivation Mode

#### 3.1 Characteristics of Cross-Border Education

With the continuous development of social economy and science and technology, the interconnection and integration of various professional knowledge and fields are increasing day by day. Cross-border education has thus emerged and become a new concept and development trend in the field of education today. Cross-border education refers to an educational activity among different disciplines, fields and industries, aiming to promote the interweaving, complementarity and innovation of different knowledge, skills and perspectives. The theoretical basis of cross-border education includes: interdisciplinary, collaborative innovation, thinking leap, innovation and entrepreneurship, etc. Through the summary of the humanities, social sciences and natural sciences, Klein pointed out that there are four interdisciplinary courses in universities: "undergraduate general education and liberal education course", "interdisciplinary methodology course", "vocational training course" and "interdisciplinary research field curriculum".[4] Cross-border education has some notable characteristics. First, it aims to expand students' knowledge and promote the comprehensive development of professional skills and literacy. Secondly, it can promote the communication and cooperation between different fields and industries, so that students can better understand the current situation of the society and the industry, and improve their comprehensive quality and competitiveness. Third, cross-border education can produce more innovative and creative talents to meet the needs of today's economic development. Its essence is to integrate the way of thinking and working methods in different fields, and give full play to the complementary advantages of various fields, so that complex problems can be solved in an all-round and multi-angle way. Existing research, some scholars analyzed the psychological process of interdisciplinary learning, and discusses the interdisciplinary academic achievement and promote the creativity of psychological mechanism, the study based on the concept of "cognitive assimilation learning theory" system, "subject concept map" (disciplinary concept maps) into interdisciplinary knowledge integration, put forward the "interdisciplinary concept diagram" (interdisciplinary-concept maps) the psychological tool (figure 1).[5] In short, cross-border education is an important direction and trend in the development of education today, and its characteristics are indeed conducive to promoting educational innovation and building innovative talents. For the major of visual communication, on the theoretical basis of cross-border education and multi-disciplines, the cross-border training mode is explored, which can provide theoretical and practical support for the training of more critical thinking and creative visual communication professionals.[6]

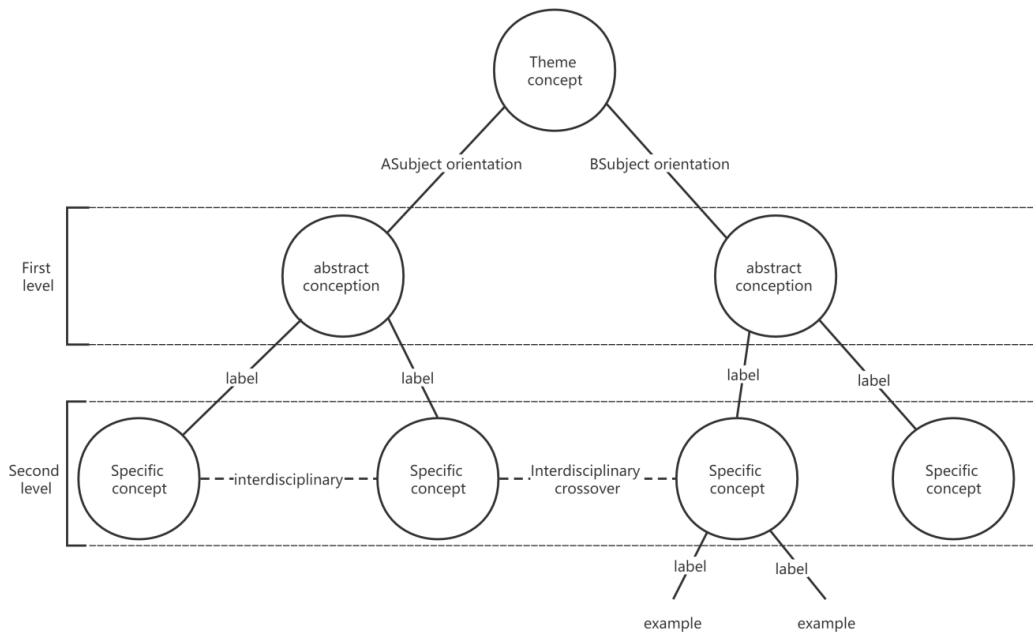


Figure 1: Structure diagram of the interdisciplinary concept

### 3.2 Application of Cross-Border Training Mode in the Training of Visual Communication Professionals

In the training of visual communication professionals, the application of cross-border training mode has become a trend. The implementation of the cross-border training mode, through the cross-integration with other majors, enables students to obtain more extensive and in-depth knowledge, broaden their horizons, and improve their overall quality. As shown in Figure 2, some scholars analyze and sort out the development expectations of visual communication graduates' ability level through the research industry, which provides a clear guidance for us to carry out cross-border talent training.[7] Specifically, the implementation of this model needs to be adjusted and improved according to different professional fields and specific situations. In the implementation of the transboundary culture model, several aspects deserve our attention. First, the goal of cross-boundary cultivation needs to be clearly defined. That is to say, in the process of cross-border training, the knowledge and skills that students need to master should be made clear, and their practical ability and comprehensive quality should be improved through practice and reflection. Secondly, in practice, we should pay attention to the coordination and cooperation between majors, integrate resources, and avoid the problems of resource waste and information island. In addition, in the actual process of cross-border training, schools should strengthen the guidance and management of students, and guide them to apply their knowledge and skills to their practical work. It is worth noting that the essence of the cross-border training mode is to connect between the premise of the major and the major, through the exchange and learning of knowledge and skills in different professional fields, to improve students' comprehensive quality and lay a foundation for their future career development. At the same time, the cross-border training model can not achieve significant results overnight, and the school and students need to form a joint effort to achieve the best results. Therefore, in the implementation of the cross-border training model, the joint support and efforts of schools and society are needed to achieve greater success. In the 5G era, we will face more opportunities and challenges. As a visual communication professional talent in the new era, we need

to conform to the trend of The Times, constantly broaden their horizons, constantly improve their comprehensive quality, and make their own contributions to the progress and development of the society. The implementation of the cross-border training mode provides us with a better learning opportunity and a platform. We should cherish this opportunity, constantly improve ourselves, and lay a solid foundation for our future career.[8,9]

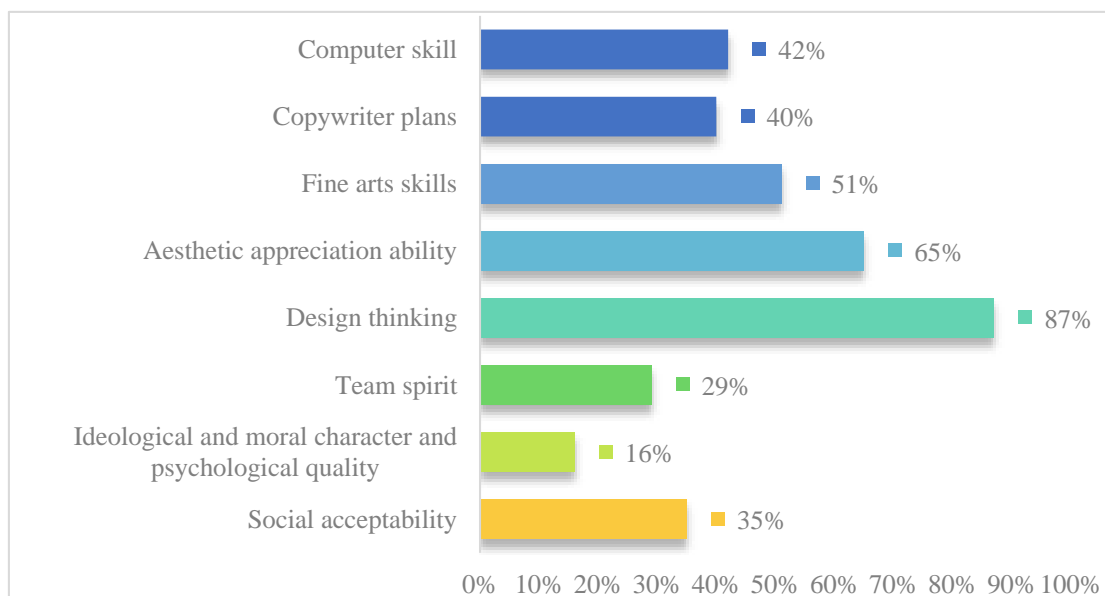


Figure 2: The research industry analysed and sorted out the development expectations of the ability level of visual communication graduates

#### 4. Preliminary Exploration of the Cross-Border Training Mode of Visual Communication Professionals in the 5 G Era

##### 4.1 Integration of Traditional Visual Communication Professional Courses and 5G Technology Courses

In the 5G era, visual communication professionals should have stronger technical capabilities and quality capabilities to meet the multiple needs of the industry.[10] Some scholars have sorted out the practical application process of 5G technology in visual communication majors through case analysis: among them, the integration of traditional visual communication professional courses and 5G technology courses is an important step in the cross-border training of visual communication talents. Traditional visual communication professional courses focus on visual design skills and art modeling skills, but in the 5G era, visual communication talents need to master a wider range of technical knowledge, such as AR, VR, MR, AI and so on. Therefore, on the basis of traditional courses, it is necessary and feasible to explain and practice 5G technology related knowledge. For example, combining the graphic design and animation design in the visual communication course with the application of 5G technology will enable students to better master the characteristics and practical skills of 5G technology. At the same time, it can also increase the interest and practicality of the course, improve the enthusiasm of students. In the process of formulating the curriculum integration plan, the actual situation and development needs of students should be taken into account. For example, different elective directions and training plans can be set up according to the actual needs of different students to meet the students' personalized development. In addition, it is also necessary to strengthen the combination of practical links, so that students can better apply what they have learned to practical projects. In short, the integration of traditional visual

communication professional courses and 5G technology courses can provide strong support for the cross-border training of visual communication talents, and meet the multiple needs of the industry for high-quality visual communication talents.

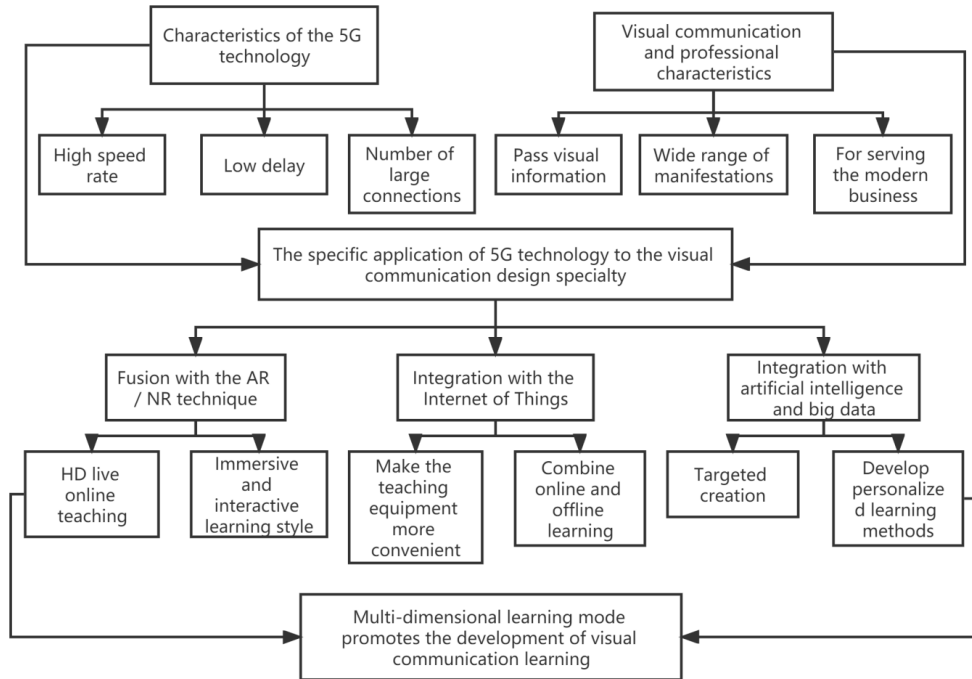


Figure 3: The key discipline of "Digital Performance and Simulation Technology" adopts the "subject group" course

The specific application case is shown in Figure 3: The key discipline of "Digital Performance and Simulation Technology" built by a university in Beijing adopts the curriculum of "subject group". In addition to the combination of science and technology and the penetration of arts and sciences, the curriculum of subject group combining art and work has also become a necessary link of interdisciplinary talent training.

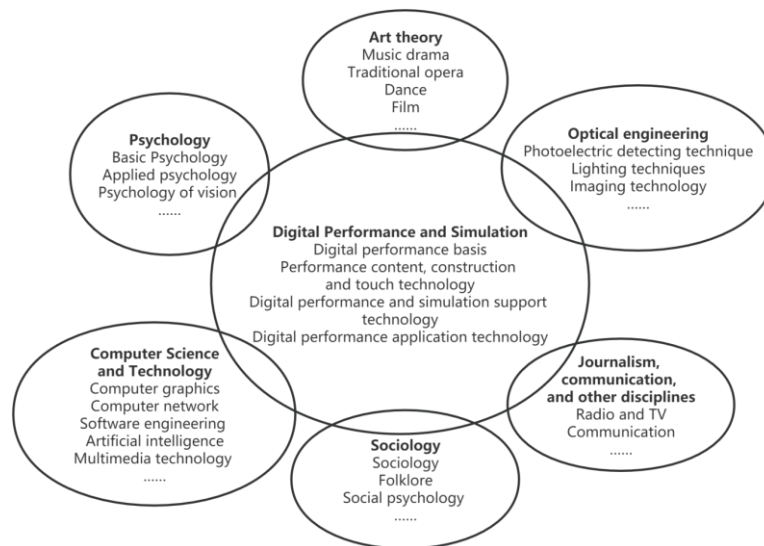


Figure 4: Interdisciplinary group of "Digital Performance and Simulation Technology"



At the same time, the researchers also put forward to construct a "interdisciplinary concept" as the media tool, to improve interdisciplinary academic achievement and creativity as the goal of interdisciplinary knowledge integration model (figure 4,5), for interdisciplinary learning, interdisciplinary teaching, and interdisciplinary research and interdisciplinary problem solving provide theoretical enlightenment and intellectual support.[11]

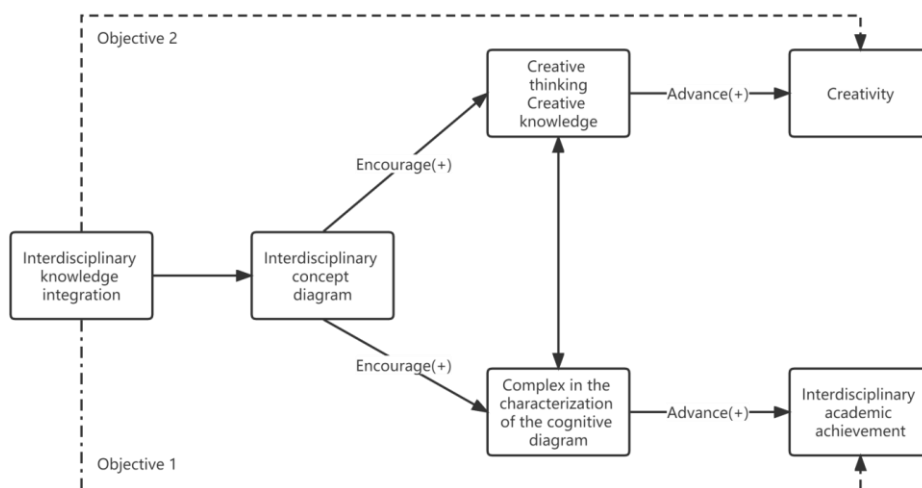


Figure 5: Interdisciplinary knowledge integration model to promote interdisciplinary academic achievement and creativity

## 4.2 Advantages and Disadvantages of Cross-Border Culture Mode

In the 5G era, the cross-border training mode of visual communication professionals has been further promoted and applied. Through cross-border training, the traditional visual communication professional courses and 5G technology courses have been integrated, realizing the complementarity and integration of knowledge and skills. The advantage of this model is that it enables students to learn relevant knowledge and skills in a more comprehensive way. Their talents not only have the ability and accomplishment of traditional visual communication, but also master the application and development ability of 5G technology, which can better adapt to the needs of the new era. However, there are also some shortcomings in the cross-border cultivation model. First of all, students may face difficult problems in the course, and need to spend more time and energy to adapt to the learning of new knowledge and skills. Secondly, cross-border training also requires higher discipline integration ability and discipline boundary expansion ability, which also has higher requirements for students' own quality. In addition, in the teaching process, we also need to coordinate the curriculum setting, teacher training and other resources, which increases the difficulty of teaching. In view of the shortcomings of cross-border cultivation mode, we should solve them in various ways. On the one hand, we should strengthen the integration and optimization of teaching resources, covering knowledge, skills and quality and other aspects, so as to make education and training more in line with social needs. On the other hand, we should also pay attention to the cultivation of students' own quality, such as discipline integration ability, expansion ability, innovation ability and so on, so as to enhance students' interdisciplinary literacy and employment competitiveness. To sum up, the cross-border training mode is of great significance and value in the 5G era. It not only challenges the traditional training mode, but also improves the comprehensive quality and ability of visual communication professionals, and helps to better adapt to the needs and development trend of The Times. However, cross-border training also needs to

face various challenges and difficulties, and we need to constantly deepen exploration and innovation, to form a cross-border training program and system suitable for ourselves. [12-13]

## 5. Conclusion

In order to meet the needs of the current society for the diversification and cross-border development of talents in the visual communication industry, the cross-border training mode will be more widely applied and developed in the future.[14] In the future, the trend of crossover cultivation may be in the following directions: 1. Break the disciplinary restrictions and achieve interdisciplinary integration. In the future, the cross-border training mode will emphasize interdisciplinary intersection and integration, not just cross-industry communication and cooperation, but to break the disciplinary barriers, promote the mutual penetration and promotion of different disciplines, and realize all-round interdisciplinary integration.2. Strengthen practical teaching and improve students' practical ability. With the increasing demand of enterprises for talents with practical ability as the core, the future cross-border training mode will pay more attention to practical teaching, and cultivate students' practical ability through various practical forms and ways, so as to realize the seamless connection between theory and practice.3. Strengthen industry cooperation and improve students' comprehensive quality. In the future, the cross-border training mode will continue to strengthen the cooperation with the industry, provide students with practice opportunities in enterprises, improve the comprehensive quality of students, and make students better integrate into the corporate culture and work rhythm in the process of cross-border practice.4. Pay attention to personalized development and promote the overall growth of students. In the future, the cross-border training mode will give more prominence to the personalized development of students. Through the formulation of personalized learning plans and practice plans, students can explore their potential in the cross-border practice and improve their personal quality and ability. In short, in the future, cross-border training mode will become an important way to cultivate visual communication professionals, with practice development as the core and disciplines as the basis, so as to provide more and more high-quality cross-border talents for the industry. [15-16]

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