

Educational Programs and Strategic Directions in the Context of Globalization

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Abstract: Globalization has become one of the key research topics in the field of global education. Educational curricula and strategies are gradually developing towards globalization and digitalization. This paper will study the current educational curriculum and the direction of future educational strategies under the background of globalization. Specifically, the core concepts, practical methods, and impacts of three distinctive educational models, namely, the Reggio education concept, the STEAM education system, and the IB international curriculum system, on contemporary education are studied. Through the study of these educational models, it is predicted that future educational strategies will develop in four aspects: emphasizing soft skills, increasing international education cooperation projects, promoting vocational skills training, and digital transformation. This paper adopts the literature research method, theoretical analysis method, case analysis method, and inductive summary method to conduct research. The research found that: the Reggio education concept, STEAM education system, and IB curriculum system promote the all-round development of children's independent learning and innovation ability, critical thinking, and global vision; future educational strategies will also tend to break the boundaries of disciplines and cultivate talents who dare to innovate and master multiple skills. This paper expands the conjecture about future educational strategies and is committed to helping international students improve their global adaptability.

Keywords: Educational programs, educational strategy trends, STEAM educational system.

1. Introduction

1.1. Background and Significance of the Study

As transnational mobility has become an inevitable phenomenon in the field of education, educational curricula in the context of globalization and the future direction of strategies have been widely debated. The current globalization and digitalization in the field of education have driven a major change in the global education system. Existing research results indicate that, as a result of the deepening impact of the globalized economy and significant changes in employment relations worldwide, more and more countries have begun to invest in research and development of new ideas and knowledge to strengthen their national power and become invincible in international competition. However, there is still a gap in research on how to predict future trends in educational strategies

through existing educational programs in the context of globalization. An in-depth exploration and analysis of this issue is very meaningful for education-related research in the context of globalization.

1.2. Research Methodology and Objectives

In this study, the three popular educational models, namely the Reggio educational philosophy, the Steam educational system, and the IB curriculum system will be subdivided into three major educational models, exploring their core concepts, practical methods, and their impact on contemporary education. Finally, these three distinctive educational models are integrated with the four future educational strategies to conclude. The three major education systems that will be studied in the article provide high-quality educational practices and explorations for global international student mobility, further promoting the globalization of education.

2. Educational Programs in the Context of Globalization

This section will focus on three dominant educational philosophies, including the early childhood stage, the adolescent stage, and the pre-college stage. An analysis of these mainstream educational philosophies will be used to summarize the tendencies of modern educational philosophies.

2.1. The Reggio Emilia Approach

The Reggio Emilia Approach is another mainstream approach to early childhood education in addition to the Montessori approach, which emphasizes the child's initiative and participation in the learning process and is flexible in its approach, valuing social interaction and cooperative learning.

Reggio nell Emilia is a small, educated, and civilized city in the north of Italy, a famous city because it is not only livable but also has a very low unemployment and crime rate, as well as high-quality social services. It dates back to shortly after the Second World War when parents petitioned the city government to build a new school. The parents put forward an eloquent spokesman, Loris Malaguzzi. Parents expressed their desire for schools that take their children seriously and enable even the youngest students to acquire the skills and values of cooperation and critical thinking necessary in a free and democratic society [1]. Because of In this way, Reggio gradually became a philosophy of education. In this philosophy, education is seen as a communal group activity and likewise a mutual sharing between children and adults who have different ideas about different things.

This approach to education emphasizes children's initiative, cooperative learning, and diversity of expression. Its core principles include stimulating children's curiosity and learning by providing them with appropriate environments [2]. Teachers are no longer the sole transmitters of knowledge, but collaborators and observers who explore with children in the learning process; express themselves in different ways, including language, drawing, dance, music, etc.; and parents are encouraged to participate in a variety of school activities and to work together with the school, the teachers and the children.

In actual teaching, teachers will design various activities and areas for children to learn through play. For example, the reading area provides an abundance of books so that children can share stories independently or with their peers. The drawing area is equipped with a variety of materials to encourage children to create freely and express their ideas. In addition, the Nature Exploration Area provides an opportunity to get in touch with nature, where children can observe plants, rocks, and insects outdoors and engage in practical scientific exploration.

Such an environment is designed not only to allow children to gain knowledge but also to develop their powers of observation, creativity, and cooperative spirit. By engaging in activities that are authentic and relevant to their lives, children are able to better understand the world around them.

It is in this way that Reggio Emilia's educational philosophy continues to drive innovation and development in education, producing future citizens with a spirit of inquiry and creativity. This approach has not only influenced educational practice in Italy but has also attracted widespread attention and reference around the world, becoming an important reference for modern educational reform.

In the context of globalization, Reggio's educational philosophy has greatly stimulated children's curiosity and spirit of exploration and fully cultivated their learning ability and creative thinking. Combined with the STEAM education system, it not only emphasizes the cultivation of students' interdisciplinary comprehensive application ability and critical thinking but also attaches great importance to the cultivation of artistic cells. The IB international curriculum system has cultivated students' international vision, enhanced global awareness, and is committed to cultivating students' comprehensive qualities to enhance cross-cultural understanding and communication skills.

2.2. STEAM Educational System

STEAM originated in STEM and later became the STEAM curriculum with the addition of A-art. Since the arts are a natural part of early childhood education, adding this element may help more teachers find ways to work STEM concepts into the curriculum. This new term STEAM can help early childhood educators to build the foundation of science-related knowledge, using the arts to This new term STEAM can help early childhood educators to build the foundation of science-related knowledge, using the arts to encourage children to express their ideas in a wide variety of creative ways. Combines these five domains in a way that aims to develop students' creativity, critical thinking, and problem-solving skills [3]. Through practice-oriented learning, students apply their knowledge from various disciplines in real-world projects that encourage teamwork and innovation, helping them to develop holistically and adapt to future career challenges.

In practice, students can design and build programmed robots by using math, engineering, and programming skills through teamwork, but at the same time incorporate art-related cosmetic designs to make the robots aesthetically pleasing.

The project-based learning method is generally used in teaching, this Pedagogically, both art and engineering education lend themselves to problem-based learning (PBL), a way to motivate and integrate authentic learning in a discipline [4]. Based on real-world authentic problems, students are guided to think actively, thus stimulating their desire to explore [5]. In the process of exploration, STEAM education encourages children to discover problems, formulate hypotheses, conduct hands-on investigations, verify conjectures, and summarize conclusions. In the process of exploring with a group, there is no standard answer to the inquiry content, children have the opportunity to think about the rationality of multiple perspectives in the process and to make choices and attempts, which is also the process of cultivating critical thinking.

The STEAM program is designed to inspire students, keep them motivated in their learning, and prepare them for future careers. Through this integrated approach to learning, students not only acquire knowledge but also develop the skills necessary to cope with a rapidly changing technological and social environment.

2.3. IB International Curriculum System

The International Baccalaureate (IB) Diploma Programme is a kindergarten- through university-preparatory education system for students around the world, designed to develop a well-rounded student body, not just academic achievement. The IB curriculum is divided into four main categories: the Primary Years Programme (PYP), the Middle Years Programme (MYP), the Pre-University

Programme (DP), and the Career Programme (CP), each of which has a unique set of goals and approaches.

Designed for children ages 3 to 12, the IB PYP focuses on fostering curiosity and inquisitiveness based on a deep understanding of the nature of children. By asking questions and exploring, students are able to gain a broad understanding of multiple areas of personal, social-emotional, and cultural knowledge. The curriculum emphasizes active learning and encourages students to think independently, collaborate with others, and work together to solve problems and complete tasks, thus developing self-management skills and teamwork.

In the International Baccalaureate Diploma Programme, students are assessed in a more diversified way, including, in addition to the traditional written exams, tests on oral expression in language subjects, science experiments, mathematical investigations, and artistic performances. There are also interesting tests [6]. Finally, after two years of study, students demonstrate their mastery of knowledge and skills through comprehensive scores and skills.

Through the IB program, students develop an international perspective. They learn to appreciate and respect different cultures and perspectives and develop intercultural understanding and communication skills. This is made possible by the fact that the I.B. courses and examinations were originally designed to meet the needs of the international mobile community and international schools [7]. This ability not only helps them to communicate freely in a multicultural environment but also prepares them for the future globalized society so that they can become globally aware citizens who can actively participate in international affairs and face global challenges. Such educational concepts and methods make the IB program an important part of the modern education system, cultivating high-quality talents to meet the needs of the future society.

3. Directions for Educational Strategies in the Context of Globalization

Students under this educational system are not only proficient in interdisciplinary knowledge integration, but also show super adaptability in the fields of criticism, creativity, and international vision to move towards the goal of cultivating compound talents in the future. Looking forward to this, future education strategies will develop in the following four aspects to meet the challenges of the era of globalization and digitalization.

3.1. Emphasizing Soft Skills

Emphasizing soft skills means paying attention to cultivating students' critical thinking, creative thinking, problem-solving skills, etc. to enrich students' personal growth and development in all aspects.

In the education plan launched by President Obama in 2009, it was clearly emphasized that students' critical thinking and creative thinking should be cultivated. This is an important foundation for coping with the unknown challenges of the future, ensuring national security, and promoting social progress [8]. In the 2012 IBM Global CEO Survey, most top leaders tacitly regarded interpersonal collaboration, creativity (especially creative thinking), etc. as the core elements of employee success [8]. Critical thinking plays an irreplaceable role in the education system, national security, social progress, and even the professional elements of employed personnel. When faced with complex and changing problems, it can provide highly accurate solutions and strategies to solve any problem and can greatly reduce errors caused by inconsideration.

Critical thinking and creative thinking complement each other. Creative thinking is a comprehensive thinking mode that integrates multiple key skills and social-emotional properties, such as the rigor of critical thinking and strong curiosity [9]. Therefore, creative thinking is a new thinking mode that breaks away from traditional concepts and inherent patterns and generates valuable and

reasonable ideas and solutions based on the rigor of critical thinking. Whether it is critical thinking or creative thinking, the ultimate goal is to solve problems.

In the 21st century, cultivating students' problem-solving ability is an indispensable part of the global education system. Through in-depth research on students in the "Problems and Difficulties" course, it was found that after training, students achieved a transition from confusion to confidence when encountering difficult problems [10].

To sum up, cultivating students' soft skills can not only promote students' all-round development and enhance professional competitiveness but also promote social progress, improve national competitiveness, and ensure national security. Moreover, international education often attaches more importance to cultivating students' comprehensive quality for all-round development, to enhance international students' global adaptability. Instead of assessing the overall ability of students based on unilateral academic results. It can be argued that the development of students' soft skills in the field of international education today and in the future is very important at the individual, social, and national levels. This is an area worth exploring and developing. Therefore, this paper speculates that the future will move towards the strategic goal of emphasizing soft skills training.

3.2. Increase in International Educational Cooperation Programs

In an era of accelerating globalization, international educational cooperation has become the norm in the field of education to meet people's needs [11]. At the same time, the training goals of international educational cooperation conform to the development of globalization and aim to cultivate students' global vision, cross-cultural communication skills, adaptability, teamwork skills, and other compound talents. International educational cooperation has also promoted the flow of international students around the world, strengthened the connection between the sending and receiving countries such as cultural exchange and communication, improved the quality of education, and promoted educational equity.

Therefore, this article believes that the comprehensive promotion of international educational cooperation projects in the future is the best solution to cultivate international talents and respond to the challenges of globalization. Countries should jointly promote international educational cooperation (such as dual degree programs, short-term/long-term exchange programs, overseas internships, and other international educational cooperation models) to cultivate compound international talents, deepen cultural exchanges and connections between countries, promote the flow of international students around the world, and strive to enhance international competitiveness to adapt to the complexity and change of globalization.

3.3. Promotion of Vocational Skills Training

As employment becomes the primary goal of fresh graduates, the focus of education should shift from simply imparting academic knowledge to cultivating students' comprehensive application and adaptability in real life, focusing on career preparation to ensure that what students learn is the skills needed in the workplace.

Due to the advent of the current digital age and the acceleration of globalization, not only has the original way of working in the workplace changed, but a large number of emerging occupations such as remote work, data analysis, and Internet of Things engineers have emerged, but the threshold of the labor market has also been raised.

In the past, the widely recognized employability skills in the job market refer to critical thinking, creative thinking, problem-solving skills, teamwork skills, and the ability to use technology effectively [12]. However, the Program for the Assessment of International Adult Competencies (PIAAC) has deeply analyzed that the basic personal cognition and work skills required for

integration into society include hard skills such as social skills and solving complex mathematical problems [12]. In the new digital workplace, the Australian government has targeted vocational skills training in different fields to seek a satisfactory workforce that adapts to the changes of the times [13]. This requires improving students' hard skills and the ability to adapt to the changing times.

Therefore, promoting vocational skills training is a crucial strategy for the future. This article believes that current vocational skills training is not only about cultivating soft skills but also about integrating the cultivation of other hard skills such as relevant digital skills. In the future, the education strategy will also be committed to vocational skills training to help fresh graduates actively cope with a variety of complex and changing workplace challenges in the context of globalization and the digital era.

3.4. Transformation to Digitalization

With the wave of advanced technology and globalization, digital technology has occupied a core position in the field of modern education, and the education system is moving towards a comprehensive digital transformation [14]. Digital transformation is also leading the fourth industrial revolution and will become an irreplaceable concept for achieving the goal of Industry 4.0 [15].

Whether in education or the workplace, the transformation of digital technology has improved the quality of education, optimized resource allocation, promoted educational equity, improved work efficiency, and facilitated the work and life of employees. For example, digital technology is used to achieve automation and intelligence to reduce the error rate of manual intervention. Especially in the COVID-19 period, digital technologies such as remote office and online classroom learning play a vital role. After the epidemic is over, digital technology has become an essential core element of this era.

Therefore, the high quality and efficiency brought by digital technology to the education field and the workplace are undeniable, and the future will move towards a comprehensive digital transformation, which will also be an inevitable result of the trend of the times.

4. Conclusion

In the context of global international student mobility (ISM), this article deeply analyzes the Reggio education philosophy, STEAM education system, IB curriculum system, and future strategy trends, and predicts that future education will move towards four major trends: emphasizing soft skills, promoting vocational skills training, increasing international education cooperation and digital transformation. The study found that the existing education model and future education strategies go hand in hand, jointly promoting the all-round development of students and improving their global adaptability. By proactively predicting the direction of future education strategies, it can effectively respond to the challenges of the era of globalization and digitalization.

This paper proposes a basic research framework based on the existing three major education models of Reggio, STEAM, and IB to predict that the future education strategy will move towards four major directions: emphasizing soft skills, promoting vocational skills training, increasing international education cooperation, and moving towards digital transformation. The innovation is to test the education curriculum and future strategy trends in the era of globalization and digitalization with ISM as the background, and to conduct analysis and research from an interdisciplinary perspective, providing new ideas and frameworks for education policymakers, practitioners, and researchers.

In the future, the global education system should continue to emphasize the cultivation of soft skills through curriculum setting, practical experience, etc., explore emerging professional skills in the digital age, accelerate the comprehensive digital transformation of the global education field and

the workplace, and expand the path of international education cooperation. Special attention is paid to the impact of emerging technologies such as artificial intelligence and emerging professions such as data analysts on the education field in the era of globalization and digitalization with ISM as the background, continuously optimize education strategies, integrate education resources to effectively respond to the challenges of the times, break the boundaries of traditional disciplines, and strive to more efficiently promote the comprehensive development of students to become internationally competitive compound talents to help students improve their global adaptability.

Authors Contribution

All the authors contributed equally and their names were listed in alphabetical order.

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