

Analysis of the Effective Path of Home-School Cooperation in Special Education Based on the Background of “Internet+”

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Abstract: Under the background of “Internet Plus”, special education home-school cooperation is facing new challenges and opportunities. As an indispensable part of the education system, the importance of special education is self-evident. However, there are still many problems in home-school cooperation in terms of information transmission, interaction mode, personalized education needs and technology application. By analyzing these problems and exploring the application path of Internet technology in home-school cooperation, this paper proposes measures such as constructing an information sharing platform, innovating home-school interaction modes, developing personalized education programs, and strengthening technology application and training, aiming to provide an efficient and sustainable development mode for home-school cooperation in special education. These measures not only help to improve the overall quality of special education, but also effectively promote close cooperation between home and school, creating a better environment for the growth of children with special needs.

Keywords: Internet+; Special Education; Home-school Cooperation; Information Sharing.

1. Introduction

Special education, as an important branch in the field of education, aims to provide special children with educational services adapted to their individual needs and to help them realize their self-worth in life. However, special education requires not only the efforts of schools, but also the active participation of parents. The quality of home-school cooperation directly affects the educational effect of special children. In recent years, with the rapid development of Internet technology, the education field has gradually stepped into the era of “Internet+”. In this context, information technology provides new possibilities for home-school cooperation, but also brings new challenges. Problems such as information asymmetry, backward interaction, difficulty in meeting personalized education needs and insufficient application of technology need to be solved. This paper will address these issues and explore the effective path of special education home-school cooperation in the context of “Internet+”.

2. The Application of Internet+ in the Field of Education

Nowadays, the wide application of tools such as online education platforms, educational APPs and virtual classrooms not only breaks the time and space limitations of traditional education, but also provides students with richer and more personalized learning resources. Especially in special education, the application of Internet technology is particularly important. Special children often need more one-on-one attention and customized teaching programs, and Internet technology can provide instant feedback and dynamic adjustments to better meet their needs. Through big data and artificial intelligence, teachers can more accurately understand each student's learning progress and psychological state, so as to develop more scientific teaching programs. In addition, the Internet also provides more

channels and ways for home-school communication, making it easier for parents to participate in their children's education process and form a synergy to jointly promote their children's overall development [1]. The application of these technologies not only enhances the quality and efficiency of education, but also injects new vitality and hope into the development of special education.

3. Problems Faced by Special Education Home-School Cooperation in the Era of “Internet+”

3.1. Information Asymmetry

In the era of “Internet +”, the speed and coverage of information transmission has increased significantly, but there is still an obvious information asymmetry problem in special education home-school cooperation. Poor information exchange between parents and schools has led to a lack of effective communication and collaboration between the two parties in the process of their children's education. Schools often have a large amount of data on student performance, teaching resources and professional opinions, but this information is not conveyed to parents in a timely and comprehensive manner. Parents, on the other hand, have limited access to information and find it difficult to understand the actual situation and developmental needs of their children at school, which not only affects parental involvement but may also lead to misunderstanding and dissatisfaction. The education of children with special needs requires the joint efforts of parents and teachers, and the problem of information asymmetry has seriously constrained the efficiency and quality of such cooperation. For example, parents may be unaware of their children's progress in school and miss the best time for intervention; teachers may also be unaware of the impact of the home environment on their children and find it difficult to formulate targeted teaching programs. Therefore, solving the problem of information

asymmetry is the key to enhancing the level of home-school cooperation in special education [2].

3.2. Backward Interaction between Home and School

Although the development of information technology has brought more possibilities for home-school interaction, home-school interaction in special education still appears to be relatively backward. Traditional methods of home-school communication, such as face-to-face parent-teacher conferences, paper notices and telephone contacts, though still effective in some cases, are far inferior to modern technology in terms of speed and convenience of information transmission. Many parents are unable to participate frequently in school activities due to their busy schedules or remote residences, which leads to inadequate communication and affects the effectiveness of education. At the same time, the education of children with special needs requires more frequent and detailed interactions, especially in the areas of emotional management and behavioral intervention, and there are often communication barriers between parents and teachers. This lag in interaction not only affects parents' support for the work of the school, but also limits teachers' understanding of and adaptation to the home environment. In many special education schools, despite being equipped with modern information devices, the lack of effective interaction platforms and training makes it difficult to develop timely and effective communication between parents and teachers. Under such circumstances, it is difficult to fully meet the educational needs of children with special needs, and the effectiveness of home-school cooperation is greatly diminished.

3.3. Difficulty in Meeting Individualized Education Needs

The rapid development of educational technology has brought about many new tools and platforms, but it is still difficult to fully meet individualized needs in special education. The education of special children needs to be tailored to the needs of each child, and each child is different, and their needs for teaching content, methods and environments are also different. However, existing online education resources and platforms often lack sufficient flexibility and customization capabilities to accommodate the unique needs of each student. Many parents and teachers have reflected that although there are many educational APPs and online courses available in the market, most of these resources are geared towards ordinary students, and are not rich enough in content or diverse enough in form for children with special needs. This status quo makes special children still face the problem of poor learning results while enjoying the convenience brought by Internet education. In addition, the Individualized Education Program (IEP) in special education requires the participation of both parents and teachers in its development, but due to the limitations of the technological platform and insufficient training, it is often difficult for parents to understand the terminology and educational methods, thus preventing them from participating in it effectively. The difficulty in meeting individualized education needs not only affects the learning progress of children with special needs, but also weakens the effectiveness of home-school cooperation, which is regrettable.

3.4. Insufficient Application of Technology

In the era of "Internet +", the wide application of technology should have greatly enhanced the effect of home-school cooperation in special education, but in reality, the insufficient application of technology has become a significant obstacle. Many special education schools and families are still at the primary stage in the use of technological equipment and platforms, and advanced educational technology resources are not effectively integrated into daily teaching and communication[3]. This lag in the application of technology not only affects the efficiency of information transfer, but also limits the innovation of teaching methods. For example, some parents and teachers have reflected that although schools are equipped with tablet PCs and smart whiteboards, these devices are often only used for simple display and recording, failing to truly realize their potential in personalized teaching and interactive communication. Another major issue of under-utilization of technology is the lack of professional training and support. Many parents and teachers are unfamiliar and confused by emerging technologies and do not know how to utilize these tools to better support their children's learning and growth. This not only renders technological devices useless, but also exacerbates the troublesome home-school collaboration. The lack of use of technology makes it regrettable that home-school collaboration in special education has not kept pace with the times.

4. Effective Measures for Special Education Home-School Cooperation Based on the Background of "Internet+"

4.1. Building an Information Sharing Platform

In the context of "Internet+", constructing an information-sharing platform is a significant measure to improve the collaboration between special education schools and families. This not only enhances communication efficiency between home and school but also ensures the transparency and timely updates of information. Schools can leverage modern information technology to establish a comprehensive cooperative platform that encompasses students' learning records, behavioral logs, and health status across multiple dimensions. The platform can feature dedicated modules that allow parents to review their children's latest progress at any time and gain a clear understanding of their performance at school as well as areas requiring improvement. To safeguard the security and privacy of information, the platform should employ advanced encryption techniques and stringent data management policies to protect students' personal information from unauthorized disclosure. Additionally, schools can periodically invite technical experts to conduct security assessments and optimizations of the platform, ensuring it consistently meets the latest security standards. In terms of functionality, the platform should offer multilingual support to facilitate the use by parents from diverse backgrounds. Furthermore, the platform could be designed with an interactive information feedback system, where parents and teachers can leave messages at any time to pose questions and offer suggestions. This not only increases the frequency of communication but also promptly resolves issues, preventing the inconvenience caused by delayed information. To boost the utilization and effectiveness of the

platform, schools should regularly organize training sessions to assist parents and teachers in mastering the platform's various functions. Training can be conducted in a combination of online and offline formats, with online sessions taking place through live and recorded videos, and offline training being performed via practical demonstrations at parent-teacher meetings or teacher training seminars [4]. The training content should cover basic operations of the platform, methods for data entry and review, and strategies for leveraging the platform's interactive features to facilitate effective home-school communication. Schools can also appoint dedicated information administrators to manage the platform's daily maintenance and information updates. Information administrators must not only promptly upload children's learning and behavioral data but also regularly collate and disseminate crucial information and activity announcements related to home-school collaboration. Moreover, they can gather feedback from parents and teachers to continuously refine platform features, ensuring they better align with user needs.

4.2. Innovating Home-school Interaction Mode

Traditional modes of communication between home and school often rely on face-to-face meetings and printed materials, which prove particularly cumbersome in the realm of special education. Therefore, it is imperative to harness the power of internet technology and develop diverse interactive channels. A comprehensive home-school interaction platform could be established by schools, incorporating not only instant messaging and video conferencing functionalities but also interactive teaching modules, enabling parents to participate in their children's daily learning activities. For instance, online classrooms could be set up on the platform, allowing parents to observe the teaching process, gain insights into their children's learning progress, and engage in post-class discussions with educators to collaboratively address learning challenges. Moreover, the platform could offer personalized learning reports, regularly updated with the child's academic progress and behavioral performance. These reports should include detailed data analysis and professional recommendations, ensuring parents have a comprehensive understanding of their child's situation. To enhance the effectiveness of interactions, a task management system could be integrated into the platform, enabling parents and teachers to collaboratively create and monitor learning tasks, with timely feedback on task completion and outcomes. In terms of interaction content, specialized lectures and training courses could be offered to help parents better comprehend the professional knowledge and methodologies of special education. These lectures could be conducted live or recorded for on-demand viewing by parents. To boost the engagement and appeal of interactions, gamified learning elements could be introduced, designing interactive learning tasks and reward mechanisms to stimulate children's interest in learning, while fostering mutual understanding and cooperation between parents and teachers through shared participation in these games. Schools could also organize regular online parent-teacher conferences to discuss children's unique educational needs and strategies [5]. Through video conferencing, parents could gain a clearer view of the school's teaching environment and facilities, and exchange experiences and suggestions with other parents. To ensure the effectiveness and sustainability of interactions, the platform should provide multilingual support and auxiliary tools, catering to diverse parental

preferences and ensuring all families can participate without barriers.

4.3. Developing Personalized Education Programs

In the context of "Internet+", the development of personalized educational programs is a significant measure to enhance cooperation between special education schools and families. The needs and abilities of each special child are unique; therefore, educational plans must possess a high degree of personalization and flexibility. Schools can leverage big data and artificial intelligence technologies to collect and analyze children's learning data, such as academic performance, behavioral manifestations, and interests, to compile detailed personal profiles. These profiles not only provide teachers with a scientific basis but also assist parents in gaining a more comprehensive understanding of their children's characteristics and needs. To ensure the effectiveness of the educational plan, schools can establish specialized home-school collaboration teams, comprising special education teachers, psychological counselors, and parent representatives. This team can hold regular online meetings to discuss each child's specific circumstances, set personalized teaching goals and methods. Parents can raise their observations and suggestions during the meetings, collaborating with professionals to refine the educational plan. Furthermore, the platform can provide a rich resource library, including a variety of teaching videos, interactive exercises, and tutoring materials, allowing parents and teachers to select appropriate content based on the child's needs for supplementation and reinforcement. To better implement personalized educational plans, schools can introduce intelligent learning management systems. This system can dynamically adjust the teaching content and difficulty based on the child's learning progress and feedback, ensuring that each child advances at a pace suited to them. The system can also generate customized learning reports, which are periodically sent to parents, keeping them informed of their child's academic status and areas for improvement. Home-school interaction plays a crucial role in personalized educational programs. Teachers can assign personalized homework through the platform, and parents can upload feedback after the child completes the homework, facilitating timely adjustments to teaching strategies. Additionally, the platform can feature a parent guidance area, offering professional family education guidance and psychological support to help parents better address their children's special needs. Regular online parent training and workshops also contribute to equipping parents with more effective tutoring methods and psychological support skills.

4.4. Strengthening Technology Application and Training

The application of technology not only furnishes special children with enhanced learning resources and support but also significantly elevates the efficiency and quality of home-school communication. Schools should proactively adopt advanced educational technology tools, such as intelligent assistive devices and online learning platforms, to foster a more personalized learning environment for special children. For instance, intelligent voice devices can aid hearing-impaired children in better comprehending and engaging in classroom activities, while visual assistive tools cater to the learning needs of visually impaired children. Regarding these

technological tools, schools should organize regular technical training to ensure that both teachers and parents are proficient and effectively utilize them. The training content should not only encompass the basic operation of technology but also include pedagogical strategies and psychological support techniques. For example, training on intelligent assistive devices should involve how to configure and adjust device parameters to meet the specific needs of individual children; for online learning platforms, it should elucidate how to leverage the platform's interactive features to boost children's interest and engagement levels. Moreover, schools can collaborate with technical and educational experts to co-design training curricula, ensuring the scientific soundness and practicality of the content. The training formats can be diversified, including live online sessions, recorded videos, and interactive workshops, allowing parents and teachers to participate in ways that align with their time and needs.

5. Conclusion

The collaboration between special education institutions and families has ushered in new developmental opportunities in the era of "Internet+". By establishing platforms for information sharing, the symmetry of information between parents and schools is achieved; innovating interactive models to enhance parental engagement and communication effectiveness; designing personalized educational programs to meet the diverse needs of special children; and reinforcing technological application and training to elevate the digital literacy of both parents and teachers. These measures collectively form the effective pathways for the collaboration

between special education institutions and families. Not only do they help address the primary issues in current cooperation, but they also provide a more comprehensive and efficient educational support for special children in long-term development.

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