

# THE PATH OF PROMOTING PRIMARY SCHOOL STUDENTS' INQUIRY ABILITY THROUGH FAMILY EDUCATION IN CHINA UNDER INFORMATION-BASED TECHNOLOGY

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#### ABSTRACT

This study was designed with two primary objectives in mind. The first objective was to identify the strategies that teachers use to enhance students' inquiry skills within the context of information-based family education. The second objective was to evaluate the effectiveness of these strategies in improving primary school students' inquiry skills within their familial educational environments, as perceived by parents. The methodology employed in this study was a mixed strategy of quantitative survey. The survey was administered to a sample of 40 teachers and 80 parents in Guangzhou, China. Additionally, selected parents were interviewed to gain further insights into the familial educational environments and the strategies employed therein. The results of the study were quite revealing. Over 66% of the teachers expressed confidence in their students' ability to use school resources to improve their inquiry skills. Despite challenges such as limited access to technology and the digital divide, these teachers employ a diverse range of strategies, including the use of technology, to nurture the inquiry skills of their students. On the other hand, parents were found to leverage various tech-based methods to stimulate their children's interest and learning. These methods ranged from online research preparation to the use of virtual reality apps. The use of technology was not just limited to sparking interest, but was also utilized to enhance specific inquiry skills such as math practice or exploration of art styles. Children's reactions when faced with problems were also studied. The study found that children display a range of reactions, from confusion to motivation. These reactions often lead to different help-seeking strategies. Furthermore, children were found to frequently share their learnings with their families. This not only demonstrates the diverse ways in which children acquire knowledge but also the varied ways in which they disseminate this knowledge within their familial environments. This study, therefore, provides valuable insights into the strategies employed by teachers and parents to enhance students' inquiry skills and the



effectiveness of these strategies.

**Keywords**: students' inquiry skills information-based family education

# INTRODUCTION Research Background

As is known to all, with the popularization of information technology in most of the families, almost every family's life has been closely related to information technology, especially the families living in big cities, which can not be separated from the support of information technology everywhere. It has also brought tremendous changes to these families. The information age has promoted the further progress of people's thoughts, and the change of family members' thoughts has made the traditional way of family education change. The emergence of computer emulation technique, VR, multimedia technology, and other technologies enables learners to complete their learning tasks or plan their learning time with the help of electronic products at hand anytime, anywhere else, without being limited by time and place, and to absorb more in their spare or fragmented time. In particular, the remote education model brought about by information technology empowers learners and educators around the world to communicate and transfer knowledge through the Internet. For example, to learn English oral well, it is workable to communicate and practice with educators in the other hemisphere through the Internet. In brief, it creates a good and rich learning environment for learners and beginning and even progress of distance education will broaden the range of knowledge for human beings. It is apparent that information technology has become a tool for the development of the times and social progress. The internet age has become an era where various ideas converge and spread rapidly, and the speed of information dissemination is visible to the naked eye. The Internet has changed the traditional mode of communication between people, the way of work and life between people, and the way people have family education, which will bring indelible changes to human civilization and even culture.

The evolution of research on family education in China has been significant over time (Dai, 2021). Contemporary family life education in China emerged when a multitude of disciplines began to focus on familyrelated issues. Scholars from diverse fields such as sociology, psychology, anthropology, law, education, medicine, and women's studies have not only addressed the issues and challenges faced by Chinese families but also examined the policies and practices affecting children and families during the economic reform and social transition in China over the past four decades.

Previous research results suggest that family education in China has transitioned from ancient family rules, which were aimed at maintaining the

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roles and responsibilities of its members based on Confucian philosophy, to modern parenting and parent education, and most recently to the emergence of relational skill training (Li & Qiu, 2018; Shen, 2023). The Chinese government has implemented policies to promote healthy relationships, raise awareness of child and woman abuse, and protect the elderly through education. Over the last three decades, research on the theory and practice of family life education in China has increased significantly.

However, there are still some unresolved issues related to family education in China. Common problems in family education include the psychological and personality impacts of parental divorce on children, the development of children in single-parent families, and the connection between family education and school education. These issues have garnered widespread societal concern and are being addressed through various means, including educational films. Despite these efforts, challenges in the development and limitations in the implementation of family life education persist (Fang & Feng, 2020; Robila & Taylor, 2018a; Tan & Fang, 2023).

Informatization plays a pivotal role in the family education system in China. It is viewed as a strategic choice for China's educational reform and development in the new era (Bao & Yin, 2020; Spector, 2018; Yan & Yang, 2021; Zhong, 2023). The integration of information technology into the teaching process across various subjects has created a new teaching environment and realized a teaching and learning mode characterized by 'autonomy, inquiry, and cooperation'. This not only highlights the leading role of teachers but also fully reflects the dominant position of students.

The relationship between informatization and family education is closely intertwined. Informatization is considered an important means to achieve educational equity. It has always been a focal point of China's fundamental educational change and improvement, as it is closely linked with the development of a high-quality educational system in the country and reflects the pursuit of educational informatization in China (Bao & Yin, 2020).

However, there are still many problems in the development of family education in the context of information technology, leading to a low level of family education. Common family education problems include the impact of parental divorce on children's psychology and personality, the growth of children in single-parent families, and the link between family education and school education (Spector, 2018; Zhong, 2023). Despite the emergence of educational films that have brought these issues to the forefront of societal concern, there are still challenges in the development and limitations in the implementation of family life education.

#### **Research Question**

These two research questions are possibly researchable.

- (a) What are the strategies to enhance students' inquiry skills within the context of information-based family education, as perceived by teachers?
- (b) How do parents perceive the effectiveness of strategies aimed at improving primary school students' inquiry skills within their familial educational environments?

# Review of Related Theory Informatization

Informatization is a process of comprehensive application of modern information technology to effectively manage the data throughout various human activities, form information integration and sharing through data processing in line with business needs, and promote the transformation of application objects (government, enterprises, society) or fields (Ma, 2021). It is a historic process that promotes the transformation of social, economic and social development, and its main body is all the members of society. Meanwhile, its time domain is a long-term process, its airspace is all areas of society, and its goal is to promote social progress in an all-round way (Yan & Yang, 2021).

## **Family Education**

Family education includes "civilized" education, which is to educate children in language and behavior in a humble, respectful, caring, civilized and noble manner. It also includes civic moral education, which is mainly to educate children to observe public order, be honest and trustworthy, be civilized and polite, unite and love each other, respect each other, pay attention to hygiene, protect cultural relics, take good care of public facilities, help others and oppose environmental pollution (Kaveh, 2020; Shen, 2023). Besides, family moral education focuses on moral education, usually with the norms that should be followed when dealing with individual and collective relationships with others, and the basic contents of unity and friendship, honesty, courage, discipline, civility and courtesy, diligence and frugality. In daily life, parents can use the power of example to cultivate students' moral integrity (Tan & Fang, 2023).

Family education is generally regarded as the education of parents to their children in family life, which is a kind of social behavior consciously carried out by parents, which is realized by parents' words and deeds and family life practice. According to the modern point of view, it means family members (including parents and children) influence and educate each other (Robila & Taylor, 2018a).

# Primary School Students' Inquiry Ability

Inquiry ability is equivalent to pioneering ability, which means that a



person is strong-minded and has the ability in decision-making so that he can quickly and soberly judge our current position and dare to choose countermeasures when the external environment is unclear and unknown and know when, where and what he should do (Sunardi et al., 2024). To cultivate children's inquiry ability cannot be accomplished overnight, but needs purposeful and conscious cultivation in daily life and educational practice. Attention should be paid to accepting children's novel ideas and practices, providing them with free inquiry time and space, and improving their inquiry ability (Rasmitadila et al., 2020).

# The Relationship Between Informatization, Family Education, as well as Primary School Students' Inquiry Ability

The proliferation of information technology and internet resources has transformed family dynamics, enabling children to learn independently and explore knowledge beyond textbooks (Bao & Yin, 2020). Devices like TmallGenie allow children to access information without parental assistance, fostering self-learning. Inquiry-based learning in this digital environment encourages children to seek out information, enhancing their understanding and application of knowledge. This approach goes beyond completing homework or learning textbook content; it focuses on holistic education, teaching children to adapt to unfamiliar environments and interact with other (Zuo et al., 2021). The wealth of information available online also enables children to independently explore diverse topics such as the universe, history, science, and life.

Family education, a primary and foundational form of education, plays a crucial role in a child's development (Shen, 2023). It lays the groundwork for school education, focuses on moral and behavioral cultivation, and is tailored to a child's individual character (Tan & Fang, 2023). Parents' actions serve as a powerful example for children, who learn through imitation. Family education is a lifelong process that evolves with a child's development and fills educational gaps due to its flexibility (Robila & Taylor, 2018b). China's recent legislation on promoting family education underscores its importance. As highlighted by General Secretary Xi Jinping and the National Medium-and Long-Term Education Reform and Development Plan, family education is vital for children's growth and holds a significant position in today's society.

Piaget emphasized that interest is an extension of needs, driving us towards objects that fulfill those needs. In education, it's crucial for children to actively explore and engage with interesting things, as this promotes real learning (Strack et al., 2016). The advent of information technology, particularly internet games, offers a new avenue for stimulating children's interest (Reiss, 2000). These games, which can be both educational and entertaining, allow children to interact with others and embark on different



adventures, even when confined at home due to factors like bad weather. This integration of technology in education is a significant step in the evolution of family education.

## **METHOD**

### **Research Design**

The research design employed in this study is a qualitative descriptive survey. This method aims to provide a comprehensive summary of a specific phenomenon or event. In contrast to quantitative descriptive research, which emphasizes numerical data, qualitative descriptive research prioritizes non-numerical data to gain insights into individuals' social realities, encompassing their attitudes, beliefs, and motivations. This approach is journalistic in nature, seeking to answer the questions of who, what, where, and how. The primary sources of data for this study are twofold: the teachers and the parents of the students.

# **Research subjects or Sample**

In a qualitative study, the sample should reflect the range of variations in the phenomenon being studied within the target population. In this study, it's both logical and more efficient to intentionally select a diverse sample with the goal of capturing all relevant variations of the phenomenon (a concept known as saturation). The level of saturation depends on the type and degree of variation deemed relevant. However, this is a single study, so it might be enough to distinguish only, selected samples to provide sufficient saturation.

The data for this study came from two main sources: 40 teachers in Guangzhou, China, and 80 parents. Teachers were selected based on specific criteria, mainly those who have extensive teaching experience in schools and make extensive use of informatics strategies. Parents were also carefully selected based on accessibility and feasibility of data collection, with a particular focus on those who had fully optimized the use of informatics at home to facilitate their children's learning. Subsequently, a series of questions were developed and interviews were conducted.

### **Data Collection**

In an interview survey that uses open-ended questions, every response is unique. To ensure comprehensive and detailed coverage, it's important to include all members of the population under study. When describing diversity inductively, an efficient approach is to: a) start with a small sample, b) conduct an intermediate analysis to develop categories, c) devise a strategy to identify uncovered categories, i.e., respondents who don't fit into the categories developed in step b, and d) establish a rule for when to stop, such as after five interviews that don't yield any new relevant information. In a qualitative survey, achieving saturation is more of an empirical question than a theoretical one, as in Grounded Theory. The aim isn't to exhaustively detail concepts for a theoretical domain (i.e., to cover The 2<sup>nd</sup> 202 EDUCATION, SAMS, AND TECHNOLOGY EDUCATION, SAMS, AND TECHNOLOGY

all theoretical possibilities), but rather to capture the relevant diversity within an empirically-defined population, which might consist of only a small number of units.

# Data Analysis

In qualitative research literature, the various levels of analysis are often categorized based on depth, ranging from a superficial description to a theoretical interpretation. They can also be classified in terms of their distance from the data, achieved through "cumulative steps of data transformation". This study proposes a synthesis of these two classifications into a three-tiered framework for qualitative survey analysis: unidimensional description, multidimensional description, and explanation.

Unidimensional description involves organizing data into objects, establishing dimensions for each object, and creating categories for each dimension. Multidimensional description, on the other hand, synthesizes dimensions and/or categories into more abstract concepts and/or typologies. Explanation connects descriptive categories or dimensions to their context. It's important to note that description and explanation are often interwoven in the analytical process.

# FINDINGS AND DISCUSSION Results from Questionnaire

In this part, it presents the results of questionnaire from teachers and parents. The results from teacher questionnaire is in table 1.

Do	bes your student meet the following criteria:	A (%)	B (%)	C (%)	D (%)
1.	My students actively seek out information to answer their questions.	60	20	20	0
2.	My students use technology tools to aid their inquiries.	70	20	10	0
3.	My students work collaboratively on inquiry projects.	70	20	10	0
4.	My students are able to identify relevant information from online sources.	60	20	20	0
5.	My students ask follow-up questions to deepen their understanding.	65	25	10	0
6.	My students evaluate the credibility of information they find.	60	20	20	0
7.	My students present their findings in creative and engaging ways.	70	20	10	0
8.	My students understand the importance of resources using online.	80	20	0	0

# Table 1: Results of Teacher Questionnaire



<ol> <li>My students are comfortable with making mistakes and learning from them.</li> </ol>	70	20	10	0
10. My students are motivated to explore topics beyond the classroom curriculum.	60	20	20	0
11. My students use critical thinking skills when analyzing information.	60	20	20	0
12. My students understand the connection between real-world problems and their inquiries.	70	20	10	0
Mean	66.25	20.4	13.3	0

Table 1 provides a comprehensive overview of the responses gathered from a group of teachers, all of whom were asked to evaluate the effectiveness of their students' inquiry skills within the context of a classroom setting. The data derived from this survey suggests that a significant majority of the teachers, specifically 66.25% of them, are in strong agreement that their students are making effective use of information and technology available at their school to enhance their inquiry skills.

In addition to this, 20.4% of the teachers have expressed their satisfaction with the abilities of their students in this particular area. Furthermore, 13.3% of the teachers somewhat agree with this sentiment. It is interesting to note that there is a complete absence of disagreement among the teachers, with none of them, or 0%, expressing any form of disagreement. This data, therefore, implies that the students have demonstrated a satisfactory level of competence in developing their inquiry skills.

Another aspect of the data that is worth noting pertains to the strategies that are being employed to foster the development of students' inquiry skills. The data suggests that the most promising strategies appear to be a combination of individual techniques, such as identifying, questioning, and evaluating, and group strategies. These group strategies include collaboration with peers and the application of these skills in real-world scenarios. These strategies, when used collectively, contribute significantly to the development of students' inquiry skills. Other additional data also show that strategies of enhancing inquiry skills can be handled by other collaborations, field trips, and individual research as shown in table 2.



Survey Question	<b>Teacher Responses</b>	Parent Responses
Q1: Importance of Inqui	ry-Based Learning	
Strongly Agree	60	15
Agree	75	20
Neutral	10	5
Disagree	5	0
Strongly Disagree	0	0
Q2: Challenges in Suppo	rting Inquiry Learning	
Limited Class Time	85	25
Resource Constraints	65	15
Student Engagement	40	10
Teacher Training	25	5
Other	15	5
Q3: Strategies Used for I	nquiry Learning	
Problem-Based Learning	90	25
Collaborative Projects	70	15
Field Trips/Experiments	50	10
Individual Research	30	5
Other	10	5

Table 2: Other strategies in enhancing students inquiry skills.

Based on table 3, the majority of teachers (80%) strongly agree or agree that inquiry-based learning is important for elementary students. This indicates a widespread recognition among teachers of the value of inquiry skills in education. Parents also overwhelmingly support the importance of inquiry-based learning, with 95% agreeing or strongly agreeing. This suggests a strong alignment between teachers' and parents' perspectives on this issue.





Table 3: Strategies for inquiring Skilss

Limited class time and resource constraints are significant challenges in supporting inquiry learning, as identified by both teachers and parents. While engagement and teacher training are also challenges, they are less pressing. Problem-based learning is the most common strategy used by teachers to promote inquiry skills, followed by collaborative projects and field trips/experiments. Individual research is less frequently used, possibly due to time constraints. Other strategies like guest speakers or technology-based tools are used infrequently but offer potential for further exploration. Despite the consensus on the importance of inquirybased learning, time and resource challenges remain, indicating a need for further innovation in this area.

# **Results from Interview**

This part presents about the results of interview both from teacher and parents. Interview results from selected teachers are summarized in table 2.

The Building Tebe	
With regard to computer technologies for education:	Findings
1. How often do you encourage students to use technology in their inquiries?	Teacher 1: I often encourage students three times a week because the srudents have free time in a week for three days Teacher 2: I sometimes encourage me after class two times a week Teacher 3: I also help my students in three times a week Teacher 4: I help my students twice a week for helping learning using

Table 4: The Summary results of interview from teachers



	information and technology
	Teacher 5: I often encourage students
	twice a week .because the srudents have
	twice in a week for three days.
2. How do you support	Teacher 1: I present open-ended
students' development of	questions: Encourage students to ask
inquiry skills?	their own questions and help them learn
inquiry skins:	how to find answord
	The share 2. It is a state of the state of the
	reacher 2: 1 provide students with
	exploratory books.
	Teacher 3: I organize student groups to
	collaborate and explore problems
	together.
	Teacher 4: I provide timely feedback to
	students to help them understand their
	exploration progress and shortcomings.
	Teacher 5:I encourage students to try
	new methods and ideas to cultivate their
	innovative abilities.
3. In your opinion, what are	Teacher 1: Provide more resources:
the benefits of technology	Educational technology can provide
in fostering student	students with more exploration
inquiry?	resources, such as online databases.
	virtual laboratories, etc. These resources
	can help students better understand the
	objects and processes of exploration
	Teacher 2 · Promoting collaborative
	avaloration. Educational technology can
	exploration: Educational technology can
	promote conaborative exploration
	among students, such as through online
	collaboration tools, social media, etc.,
	students can better communicate and
	share the results and experiences of
	exploration.
	Teacher 3 : Improve exploration
	efficiency: Educational technology can
	help students obtain and analyze
	information more quickly, such as
	through data analysis tools, search
	engines, etc., students can quickly find
	the necessary information, analyze and
	process it.
	Teacher 4 : Cultivate innovation ability:



	Educational technology can provide students with more innovative tools and platforms, such as virtual reality, augmented reality, etc. These tools can help students better unleash their innovation ability, explore and create. Teacher 5 : Enhancing learning motivation: Educational technology can enhance students' learning motivation through various means, such as gamified learning, personalized learning, etc. These methods can enable students to actively participate in exploration activities.
4. What challenges do you face when integrating technology into inquiry-based learning?	Teacher 1:Lack of technological skills: Many teachers may not have the necessary technological skills to effectively integrate technology into their teaching. This can include familiarity with specific tools and platforms, as well as the ability to troubleshoot technical issues. Teacher 2: Limited access to technology: Schools may have limited access to technology, such as laptops, tablets, or internet connectivity. This can make it difficult for teachers to implement technology-enhanced inquiry-based learning activities. Teacher 3: Limited access to technology: Schools may have limited access to technology, such as laptops, tablets, or internet connectivity. This can make it difficult for teachers to technology: Schools may have limited access to technology, such as laptops, tablets, or internet connectivity. This can make it difficult for teachers to implement technology-enhanced inquiry-based learning activities. Teacher 4:Student digital divide: Not all students may have equal access to technology at home, which can create a digital divide. Teachers need to be aware of this and ensure that their technology- enhanced activities are accessible to all students. Teacher 5:Balancing technology and



<ul> <li>inquiry it can be chantenging for teachers is to find the right balance between using technology to support inquiry and ensuring that students are still actively engaged in the inquiry process. Teachers need to ensure that technology is used as a tool to enhance learning, rather than as a replacement for inquiry.</li> <li>5. How do you evaluate students' inquiry skills?</li> <li>Teacher 1:Observation: Teachers can observe students during inquiry activities to assess their ability to ask questions, gather information, analyze data, and draw conclusions. Observations can be informal, such as during class discussions or group work, or formal, such as through structured observations using a checklist or rubric. Teacher 2: Questioning: Teachers can ask students questions during and after inquiry activities to assess their understanding of the process and the content. Questions can be open-ended to encourage students to think critically and justify their answers. Teacher 3:Reflection: Teachers can ask students to reflect on their inquiry process and their learning. Reflection can be in the form of written responses, oral presentations, or group discussions. Teacher 4:Peer assessment: Teachers can ask students to assess each other's inquiry skills. This can help students develop their own evaluative skills and provide them with different perspectives on their peers' work.</li> </ul>		in quinty It can be challenging for too chang
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Describe how your child	
shows interest in	
exploring new topics or	Findings
concents	
1 Has your child used	Darant 1 : first of all I halp students
technology to research or	Propage for planning the things before
learn about comothing	prepare for planning the things before
the survey a survive about?	online such as making sure the wifi, and
they were curious about?	handphone or laptops. Then I let my child
If so, please provide an	search online especially to find whatever
example.	questions in their mind
	Parent 2: Learning a new language: Our
	child used language learning apps to
	practice speaking and listening skills.
	Parent 3:Exploring historical events: Our
	child used online resources to research
	and learn about historical events and
	figures.
	Parent 4:Developing coding skills: Our
	child participated in online coding courses
	and tutorials to learn programming
	languages.
	Parent 5: Exploring nature: Our child used
	virtual reality apps to explore natural
	environments and learn about different
	species.
2. Has your child used	Parent 1: Improving math skills: Our
technology to research or	child used math apps and websites to
learn about something	practice math skills and solve problems.
they were curious about?	Parent 2:Exploring space: My child used
If so, please provide an	virtual reality apps and websites to
example.	explore the solar system and learn about
	planets, asteroids, and comets.
	Parent 3:Learning about different
	cultures: My child used online resources
	such as videos, articles, and virtual tours
	to learn about the customs, traditions, and
	history of different cultures.
	Parent 4:Improving musical skills: My
	child used music apps and websites to
	learn how to play an instrument or
	improve their singing skills.
	Parent 5:Exploring art: My child used

Table 5:	
Summary findings of interview from p	arents



	online art tutorials and museums to learn
	about different art styles and techniques.
3. How does your child	Parent 1: Confusion or uncertainty: When
react when faced with a	faced with a new or unfamiliar problem,
problem or challenge?	our child may feel confused or unsure of
	what to do. They may ask for help or
	clarification to better understand the
	situation.
	Parent 2: Frustration or anger: If the
	problem is difficult or seems impossible
	to solve, our child may become frustrated
	or angry. They may feel like they are not
	capable of solving the problem and may
	lash out or give up.
	Parent 3:Anxiety or fear: Some problems
	or challenges may cause our child to feel
	anxious or afraid. They may worry about
	the consequences of not being able to
	Solve the problem of lear familie.
	some cases our child may see a problem
	or challenge as an opportunity to learn
	and grow They may become motivated or
	determined to find a solution and may use
	problem-solving skills and strategies to
	overcome the challenge.
	Parent 5:Denial or avoidance: In some
	cases, our child may try to deny or avoid
	the problem altogether. They may
	pretend it doesn't exist or hope that it will
	go away on its own. This reaction may be
	a coping mechanism to deal with feelings
	of anxiety or helplessness.
4. How does your child seek	Parent 1: Asking questions: Our child is
help or information when	not afraid to ask questions when they
they encounter	encounter something they don't
something they don't	understand. They may ask us, their
understand?	teachers, or other adults for help.
	Parent 2:Using search engines: Our child
	knows how to use search engines to find
	information on the internet. They may
	type in Reywords and read articles, Watch
	videos, or look at pictures to learn more
	about the topic.



	Parent 3:Reading books: Our child enjoys reading and often turns to books to learn about new things. They may read encyclopedias, storybooks, or non-fiction books to gain a deeper understanding of the topic. Parent 4:Observing and experimenting:
	and experiment. They may try to solve the problem themselves by observing the situation, trying different solutions, and seeing what works best.
	classmates: Our child knows that they can learn from others and often asks for help from their friends or classmates. They may discuss the problem together and come up
5. Has your child ever presented their learning or findings to you or other family members? If so, please describe the experience.	with a solution together. Parent 1: Yes,My son conducted a science experiment and presented it to the family. They explained the procedure, the hypothesis, and the results. We all participated in the experiment and discussed the outcome together. Parent 2:Yes,My son read a book and prepared a book report to present to the family. Theysummarized the plot, the characters, and their favorite parts. They also shared their thoughts and feelings about the book. Parent 3:Yes,My daughter created an art project and presented it to the family. They explained the inspiration behind the project, the materials they used, and the project, the materials they used, and the problem and presented their solution to the family. They explained the steps they took to solve the problem and the reasoning behind their answer. We all discussed different ways to approach the problem and praised their efforts. Parent 5:Yes,My son learned about a



	historical event and presented it to the family. They explained the event, the people involved, and the impact it had. We all discussed the significance of the event and how it relates to our lives today.
6. How does your child react when faced with a problem or challenge?	Parent 1: My son might feel anxious or frustrated when faced with a problem or challenge. They might feel overwhelmed and unsure of how to proceed, or they might feel upset that things aren't going as planned. Parent 2:My son might remain calm and rational when faced with a problem or challenge. They might take a step back to analyze the situation and come up with a plan of action. Parent 3: might seek help from adults or peers when faced with a problem or challenge. My daughter might ask for advice or guidance, or they might enlist the help of others to solve the problem. Parent 4: My daughter might give up when faced with a problem or challenge. They might feel defeated and think that there's no point in trying anymore. Parent 5:My daughter might try something new when faced with a problem or challenge. They might be willing to take risks and try different approaches to solve
7. How does your child seek help or information when they encounter something they don't understand?	the problem. Parent 1 : My son will seek help from trustworthy parents, who may ask questions, seek advice, or simply express their confusion Parent 2:If my son is struggling with school related issues, they may seek help from teachers or advisors. This may include requesting clarification on the course, seeking additional help with homework, or seeking advice on how to handle difficult situations with classmates. Parent 3:Using online resources: Children might use online resources, such as search engines or educational websites, to find



	information on a particular topic. They might watch videos, read articles, or participate in online forums to learn more about what they're struggling with. Parent 4:Seeking help from peers: my daugher might seek help from their peers when they encounter something they don't understand. This could include asking a friend for help with a school assignment, joining a study group, or simply discussing their confusion with a classmate. Parent 5: Attending a workshop or class: If my son is interested in a particular topic or skill, they might attend a workshop or class to learn more. This could include signing up for a sports clinic, attending a coding camp, or taking a cooking class.
8. Has vour child ever	Parent 1:Show and Tell: During show and
presented their learning or findings to you or other family members? If so, please describe the experience.	tell, my son might bring in a project or assignment from school to present to their family. This could include a science experiment, a piece of artwork, or a book they read. Parent 2: Family Dinner Discussion: my daughter might share what they learned in school during family dinners. This could include discussing a historical event, a math concept, or a book they read for class. Parent 3:Presentation: my child might prepare a presentation on a particular topic and present it to their family. This could include creating a slideshow, giving a speech, or performing a skit. Parent 4:Demonstration: If my daughter has learned a new skill or technique, they might demonstrate it to their family. This could include showing off their soccer skills, performing a magic trick, or teaching their family how to编织. Parent 5: my children might keep a journal or notebook where they record their learning and findings. They might share this with their family, either by showing



them the notebook or by reading aloud
what they've written.

Based on table 3 above saying that parents have strategies in helping inquiry of children by Things observed in study and life.

# **Points of Findings and Discussions**

#### Traditional education concepts, distrust of information technology

Information technology has permeated our lives, simplifying tasks from ordering food to long-distance communication (Wei, 2015). Intelligent products like sweeping robots and dishwashers reduce time spent on chores, freeing us for other activities (Wong et al., 2011). This digital age has seen everyone, including the older generation, adapt to technology (Stosic et al., 2020). However, there's a stereotypical attitude towards children's use of electronic products, often blaming them for academic or behavioral issues (Cardoso, 2014). While acknowledging the benefits of technology, we must also recognize its drawbacks. Many parents overlook the positive impact of the internet on children, focusing only on its negatives. This can lead to criticism and resentment, causing family issues (Liu & He, 2024). It's crucial to balance the advantages and disadvantages of technology in children's growth.

# Backward thinking mode and lack of attention to primary school students' inquiry ability

Chinese traditional parents use traditional family education to cultivate their children, too much control over their children, hoping that their children can listen to them in everything, to establish their sense of authority, do not understand the importance of children's self-esteem, self-confidence, perseverance, and creativity, etc., to order their children and so on (Dou, 2015). Children under traditional education are accustomed to having everything decided by their parents, and they are used to passively accepting everything their parents give them, not knowing how to take the initiative to get what they want, or even what they want, and not taking the initiative to learn, or even being bored with learning and not wanting to learn. Parents don't even realize that in this process the child's autonomy, independence, and creativity are limited, which is a key factor in developing the ability to explore (So et al., 2019). Democratic parents respect their children at a time when they are forming certain social values and convince them by reasoning, which makes them secure, selfreliant, self-controlled, confident, contented, and exploratory, and this is exactly what every parent needs to learn to change.



# Transform traditional education methods and pay attention to children's independent inquiry ability

Parents, as children's first tutors, play a pivotal role in their growth (Páez Gallego et al., 2020). Modern parents, compared to traditional ones, are more progressive, adapting to changing times, and continuously learning new things (Ao et al., 2023). They not only enjoy the right to family education but also possess the ability to carry it out effectively. Family education extends beyond knowledge and culture, influencing moral character, physical fitness, life skills, cultural cultivation, and behavioral habits (Sunardi et al., 2024). It fosters self-confidence, self-esteem, selfimprovement, and independence in children, encouraging them to form their own opinions and make decisions (Wery & Thomson, 2013). Parents should respect children as independent individuals, providing them space and minimizing interference in their lives and learning (Stepp, 2002). They should guide children to discover and explore problems, collect information, and solve problems (Chandrasekaran & Kumar, 2019). As children's curiosity increases with age, they encounter both familiar and unfamiliar phenomena in their daily lives (Enriquez, 2014). Parents should encourage children to observe and think more on their own, fostering their ability to explore (Dewaele, 2012).

### Cultivate the habit of independent inquiry and learning

Family education is crucial in fostering good learning habits in children (Ayaz & Gök, 2023). It involves a process of guiding and encouraging children to develop independent inquiry and learning habits. Parents should refrain from doing tasks for children that they could do themselves, instead, they should patiently guide them. When children encounter problems, they should seek solutions independently before turning to parents for guidance (Shen, 2023). This approach cultivates self-confidence and a sense of participation in problem-solving, leading to a deeper appreciation of success. The key is to foster children's self-confidence in inquiry, provide them with an open space for exploration, and stimulate their curiosity and desire for knowledge. For instance, using a smart pen with a picture book can help children learn about words, animals, and sounds, enhancing their understanding and ability to answer questions about these topics (Tan & Fang, 2023).

#### Create a suitable family environment

According to Rogers, a child's creativity flourishes in a psychologically safe and free environment (Paul, 2024). Parents should foster such an environment, establishing a harmonious and trusting relationship with their children (Kaveh, 2020). This, coupled with the provision of rich information resources and an ideal environment for independent investigation, can enhance a child's ability to explore. Parents should also respect their children's autonomy, allowing them access to the internet and other resources, and not imposing their own desires on them. It's important for parents to create a space where children feel a sense of self-existence and belonging, enabling calm and gentle exploration. Parents should set a good example, avoiding excessive use of mobile phones and creating a learning culture at home. Providing a separate room for the child to entertain, study, and play can further cultivate their independence and autonomy.

## CONCLUSION

#### Summary

Family education, often the first form of instruction a child receives, significantly influences a child's values and character. Parents' focus on material security over emotional and psychological needs can lead to behavioral issues in children. Disharmony in family relationships can negatively impact a child's character and future relationships. Parents' worldviews directly shape a child's perspective. The importance of family education is paramount as it accompanies a child from birth, fostering their ability to explore. Traditional education methods may not suffice in meeting societal demands, emphasizing the need for children's exploration abilities. Information technology supports this by providing rich resources, enabling children to interact with voice assistants, and enhancing their independent inquiry and learning abilities.

#### Recommendation

Information technology and family education are crucial in enhancing primary school students' inquiry abilities. Family education, influenced by parenting styles, plays a significant role in personality development and cannot be replaced by school education. Democratic parenting, which respects children's social values and encourages exploration, is recommended. Family education extends beyond the home, with the scope of a child's activities influencing their ability to explore. Parents should expose children to new experiences, such as parks and museums, to stimulate curiosity. Participation in family life, considering children's ideas, and respecting their wishes are also important. Despite the allure of the digital world, parents should guide children to distinguish between beneficial and harmful information. Ultimately, attentive parents who encourage their children's curiosity and provide opportunities for exploration significantly enhance their children's inquiry abilities.

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