MARKETING MONTESSORI: RECOMMENDATIONS FOR INCREASING ENROLLMENT AT YIMI CHILDREN’S HOUSE

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INTRODUCTION
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Montessori education is a unique teaching style that has been recently gaining popularity. Dr. Maria Montessori, who was the first female physician in Italy, founded this method in 1907. As part of the Montessori ideology, she wanted to approach education through a more scientific lens, with children learning on their own using interactive, tactile materials. Children are also given the freedom to choose their own in-class activities. As a result, they are encouraged to become independent thinkers who take initiative in their learning, which further supports the child's cognitive development during this time period. Each child's individual aptitude is accommodated with a personalized curriculum as well. According to Montessori philosophy, learning is considered a natural process, and the child's innate curiosity should guide their education.

The Montessori philosophy has since spread to multiple countries, attracting parents and policy-makers with its unique classroom environment and child-focused lessons. However, some countries, such as China, find it harder to adopt this teaching style. In China, western education models like Montessori are a new trend, and differ greatly from the traditional memorization-heavy, test-based system. While Montessori focuses on the child, building lessons around each child's personal progress and academic interests, traditional Chinese education directly contrasts this, with teacher-led instruction aimed towards the whole class. The collectivist culture of China creates obstacles to the Montessori method as well. Parents tend to focus on their child's grades and its subsequent reflection on the family, yet tests and academic ranking are absent in the Montessori curriculum (Gross & Rutland, 2019). Since Montessori deviates from China's traditional approach to education, it is important to market Montessori education to parents in a way that attracts them to this unconventional teaching style. Many interested parents are still uninformed about these new teaching methods as well, making it essential to educate and spread awareness of the Montessori philosophy. In fact, some parents agree with the Montessori principles without having a full understanding of them, and as a result are unaware of how the curriculum benefits their child.

Despite these challenges with Montessori education in China, the Chinese Society of Education continues to promote these new learning models in accordance with President Xi's view of education as an important asset for all Chinese citizens. With the establishment of more Montessori schools, there will be increased awareness of this method, and an increased focus on early childhood development throughout China. Our sponsor, Yimi Children's House (Yimi), is a network of Montessori schools in China that shares these initiatives. Founded in 2013, Yimi provides education to students who are 0-6 years old, with three grade levels: Nido (0-18 months), IC (19 months - 3 years), and CASA (3 – 6 years). Yimi has experienced immense growth since its establishment, expanding from a single campus with 20 students to 6 campuses with over 200 students in 6 years. To continue this development, our sponsor wanted us to help increase their enrollment across all existing campuses, with a focus on the Nido and IC age groups.

Thus, the primary goal of our project was to provide recommendations to our sponsor, Yimi Children's House, for improving, promoting, and increasing enrollment of their Nido and IC programs. To conduct a thorough investigation of Montessori practices in China and accomplish our purpose we had four different objectives: investigate the experiences of stakeholders (i.e. parents and teachers) at Yimi, examine existing Montessori schools in other countries to compare educational practices, analyze stakeholder responses to determine how to best improve the programs, and develop promotional digital materials for prospective parents.
LAYING THE FOUNDATION

Photo by Yimi Children's House
The Montessori method involves a more scientific approach to education compared to traditional schooling. In this teaching style, learning is seen as an innate process that stems from the child's intrinsic curiosity. Children are encouraged to learn independently in the classroom through the use of interactive, tactile materials. They are also given the freedom to work on in-class activities of their choice, which supports them in taking initiative for their learning. Furthermore, Montessori helps students become independent thinkers while still supporting their cognitive development at each stage. Each child's individual needs are met with the personalized curriculum that Montessori schooling has to offer.

There are four basic principles of Montessori, which are explained below:

**Montessori principles**

- **Each child is a unique individual**
  Montessori teachings recognize that each student has different learning styles and they understand concepts at a different pace. Thus, Montessori schools accommodate each student's individual aptitude by developing a personalized curriculum.

- **Freedom to learn and solve problem**
  Montessori education emphasizes that children should have “freedom with limits” (Yonkers Public Schools, n.d.). Students work in parameters set by the teachers, but they have the freedom to solve problems on their own and with creative thinking. The main purpose of the teachers is to guide the students through the learning process instead of instructing them.

- **Environment of order and focus**
  Montessori classrooms are organized to create a “prepared environment” for the student, one where children can learn independently (Elemeter, 2018). To help facilitate this, the classroom is designed with low shelves at the children’s eye level, which contains learning materials that capture the student’s attention. When the students are done using the materials, they are taught to put them back in their specific place on the shelf, establishing a sense of order.

- **Experiential learning**
  Dr. Montessori saw that students retained best by associating the material with experiences, actions, and movements rather than simply sitting and listening to the teacher. When learning math, students would not be given a list of equations to learn but would instead be given small objects, such as blocks that they could count.

*Figure 1: Montessori Principles*
Stakeholders in Montessori schools are advised to consider the pros and cons before choosing this unique education style. In particular, parents must make informed decisions when determining the best educational model for their children. A survey of parents taken in 2018 found three main reasons for why Montessori schools are attractive options: the principles and philosophy, anticipated outcomes, and classroom environment.

Parents believe Montessori principles encourage their children to engage in self-directed exploration, giving them the freedom to choose their own learning topics and become independent thinkers. This philosophy respects the interest of the child and allows for learning without unnecessary interruptions (Hiles, 2018). As for the classrooms, many parents are drawn to the mixed-age programs at Montessori schools. They believe this promotes peer learning and mentoring between students. The classrooms also have minimal distraction to help offer a peaceful environment that foster students' self-learning habits.

Several studies were conducted to examine anticipated student achievement in Montessori schools, as well as the students' view on their experience. The results showed that Montessori students enjoyed this unconventional learning style. Regarding academics, Montessori students surpassed traditionally educated students' performance in mathematics, language arts, and problem-solving (Dohrmann, 2003). These results provide insight into why parents might be attracted to Montessori methods, and it's potential to impact children's development and academic performance.

Despite the positive impact of Montessori education, it is necessary to acknowledge the weaknesses of the practice. Some parents worry that the independence encouraged in Montessori classrooms does not prepare students for the team-based environments in the professional world. Others view the loose curriculum of Montessori schools as a negative, because they believe that students are unable to handle freedom responsibly and will struggle with time management (Flavin, 2017). Parents should also consider the high costs of Montessori schools, making these institutions less accessible to families who are financially unstable (Kahn, 2010). Lastly, there are no requirements that need to be met to have “Montessori” in a school's name (Regoli, n.d.). This means parents must take extra steps to determine if the school practices true Montessori methods or not.

Figure 2: Pros and cons of Montessori principles from parent viewpoints

Perspectives on Montessori principles

<table>
<thead>
<tr>
<th>PROS</th>
<th>CONS</th>
</tr>
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<tbody>
<tr>
<td>Encourage to become independent thinkers</td>
<td>Unable to use time productively</td>
</tr>
<tr>
<td>Work without interruptions, learn to be focused</td>
<td>Unprepared for team-based environment</td>
</tr>
</tbody>
</table>

Freedom of learning

Work independently

OPINIONS ON MONTESSORI EDUCATION
Since the 1980’s, multiple waves of reform have been organized in China to drive early childhood education towards a more westernized and progressive model (Li, Wang, & Wong, 2011). During this time period, China was experiencing immense economic growth, and believed that a more globalized education system was necessary for future generations (Li & Chen, 2017). As part of this initiative, there was a push for programs like the Montessori method, since it embodies the child-focused and individualistic characteristics of a Western curriculum (Li, et al., 2011). However, these approaches inevitably clashed with traditional Chinese education, which is centered around a teacher-focused, whole classroom approach (Gross & Rutland, 2019). Despite the government’s success with promoting Western curriculums, teachers were left to design lessons without any formal training, while also combating the societal and cultural pressures to conform to typical Chinese practices (Li, et al., 2011).

Multiple factors make the implementation of a Montessori education difficult, especially the culture around education in China. A case study performed on reformative schools in Shenzhen in 2011 showed an immense “belief-practice gap” in their classrooms (Li, et al., 2011). While the teachers believed strongly in their progressive ideologies, the most prevalent teaching pattern was “whole-class-based, teacher-directed, and theme-based direct instruction,” using methods like homework, rote memorization, and copying exercises (Li, et al., 2011). This directly contradicts the child-directed, exam-free Montessori style. The classroom images above highlight the stark contrast between a “Montessori” classroom in China that has been influenced by traditional education, and a true Montessori classroom.

The study hypothesized that this disparity is due to the top-down approach of Chinese education, where exam-oriented primary schools place great pressure on kindergartens to comply with their teaching methods (Li, et al., 2011). Additionally, in the collectivist culture of China, parents tend to focus on their child’s grades and the subsequent reflection they have on the family. This puts pressure on Montessori teachers to keep traditional methods which both track students’ progress and allow for a ranking based on academic achievement (Gross & Rutland, 2019). Even if parents want to help reinforce Montessori skills, they do not know how. These traditionally-educated parents are completely new to the teaching style, and Montessori teachers must stress an open communication between home and school to close this gap in beliefs, values, and expectations.
Founded in 2013, the Yimi Children’s House is a network of Montessori schools in Hangzhou that services over 200 students and employs approximately 50 teachers. Yimi provides a pure kindergarten education to children 0-6 years old, with three grade levels: Nido (0-18 months), IC (19 months-3 years), and CASA (3–6 years). According to their website, the organization follows the scientific Montessori philosophy for an “advanced and pure Montessori education” (Hangzhou Yimi Children’s Home, 2017). They adhere fully to Montessori education and methods, employing professional Montessori teachers and aids, and have connections for their educators to receive official, international Montessori certification (Gaziano, Casey, Swiston, & Goldman, 2018). Yimi also believes in applying the Montessori philosophy to all subjects, including science, mathematics, art, culture and bilingual studies to achieve a “balanced development” (Hangzhou Yimi Children’s Home, 2017). In order to reach these goals, the organization provides a variety of resources to help students both inside and outside the classroom. One-on-one study with teachers and lessons based on the student’s personal aptitude help promote a child-focused education, while also targeting specific stages of early learning development. Scientific guidance and training programs provided for children and parents help to maintain this style of learning at home as well (Hangzhou Yimi Children’s Home, 2017).

Yimi Children’s House has experienced immense growth since its establishment, starting with a single campus of 20 students in the Binjiang District and now serving six campuses around Hangzhou with over 200 students (Hangzhou Yimi Children’s Home, 2017). To help expand even further, the Yimi Children’s House wants us to assess their Nido and IC programs specifically, identifying areas for improvement and promotion. Through this assessment, they hope to determine best practices for increasing enrollment in these programs across all campuses. Thus, the goal of our project is to provide recommendations to Yimi Children’s House for improving, promoting, and increasing enrollment of their Nido and IC programs.
PLAN OF ACTION

Photo by Parima Sharma
The purpose of our project is to provide recommendations to Yimi Children’s House for improving, promoting, and increasing enrollment of their 0-18 months (Nido) and 19 months–3 years (IC) programs. To conduct a thorough investigation of Montessori practices in China and accomplish our purpose, we have outlined four different objectives:

1. Investigate experiences of stakeholders (ie. parents and teachers at Yimi Children’s House).
2. Examine existing Montessori schools in different countries to compare and contrast their educational practices to Yimi Children’s House.
3. Analyze stakeholder responses to determine how to best improve 0-18 months (Nido) and 19 months-3 years (IC) programs.

The flowchart below summarizes the purpose, objectives, and methods.

Figure 6: Overview of purpose, objectives, and methods.

**Investigating Stakeholder Experiences**

In order to determine areas for improvement and promotion at Yimi Children’s House, it was necessary to investigate the experiences of stakeholders. Our team utilized semi-structured interviews, focus groups, and surveys as methods for accomplishing this. Through these methods, we gained new insights on the success of Yimi’s current programs, and suggestions for future improvements. By collecting the perspectives from both employees and parents, we also determined any discrepancies in stakeholder requirements.

For teachers, we held semi-structured interviews to better understand the employee experience at Yimi. Semi-structured interviews allowed us to ask pre-existing questions regarding the teacher’s perspective on Yimi, as well as any additional questions we had. We interviewed nine teachers in-person and collected information from two teachers through written responses to the interview questions. Five of the interviews were with Nido teachers, while six were with IC teachers. To the left is a picture of Emily, Parima, and our HDU buddy Jo holding interviews with a Nido teacher at the Saiyin campus.

Figure 7: Parima, Emily, and Jo conducting teacher interviews at Saiyin campus.
PLAN OF ACTION

The interviews were located at two campuses of Yimi Children’s House, Saiyin and Feicuiheng campus, and were conducted in both English and Chinese. To assist with the language barrier, our HDU buddies helped us translate the interviews, and we were able to gather more insights from the teacher perspectives. We also received verbal consent to record each interview session before it began, so any missed information could be translated later.

With parents, we chose to give surveys within focus groups to acquire a complete and accurate portrayal of their experience at Yimi Children’s House. Focus groups began with an introduction to our project purpose, followed by an explanation of the focus group and verbal consent from the participants. The participants were then provided with a QR code to scan that prompted the survey on their personal device. After the participants finished taking the survey, a few, more in-depth follow up questions were addressed to the group, and the discussion was recorded.

We were able to conduct nine Nido parent focus groups at two different campuses, the Saiyin Campus and Yimi Kindergarten. Due to difficulties when scheduling IC parent focus groups, our group decided to send out the survey via WeChat to all parents at Yimi. This way, parents we were unable to meet in-person, Nido or IC, could provide their feedback. We were then able to collect this data for analysis, reviewing it thoroughly alongside focus group and previously collected survey data.

After holding the teacher interviews, we also sent surveys through WeChat to collect supplementary information on the teacher experience at Yimi. The questions focused on the different aspects of Yimi’s curriculum and the success of Montessori principles there. To make the survey simpler and hopefully encourage more responses, most questions were in a multiple-choice, Likert scale format. To the left is an example of questions in our published teacher survey.

Examining Other Montessori Schools

To further analyze the practices at Yimi Children’s House, it is important to understand how other Montessori schools operate in comparison. We accomplished this by benchmarking Yimi to Montessori programs in different countries. This way, we could compare and contrast their practices, and determine if Yimi could learn from any aspects of these other programs. We chose to benchmark against schools in Japan, India, and the United States.
PLAN OF ACTION

To effectively analyze the organizations in each country, we had a list of topics to focus on with corresponding questions to aid our research. Below is a chart of the topics we researched with their questions prompts.

<table>
<thead>
<tr>
<th>Topics</th>
<th>Questions</th>
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<tbody>
<tr>
<td>Affiliated Organization(s)</td>
<td>- Which organizations are they affiliated with?</td>
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<tr>
<td></td>
<td>- What certifications do they have?</td>
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<tr>
<td>Location</td>
<td>- How many campuses does the school have?</td>
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<tr>
<td>Tuition</td>
<td>- What is the tuition?</td>
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<tr>
<td></td>
<td>- How does it compare to the local average income?</td>
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<td></td>
<td>- What does the tuition cover? (extracurricular activity, school trips, etc.)</td>
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<tr>
<td>Admissions</td>
<td>- How many students are enrolled at the school currently?</td>
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<tr>
<td></td>
<td>- What are the requirements for students to enroll?</td>
</tr>
<tr>
<td></td>
<td>- How does the school promote/market its teaching?</td>
</tr>
<tr>
<td>Teachers</td>
<td>- How many teachers are in the classroom?</td>
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<tr>
<td></td>
<td>- What is the role and responsibilities of the teachers?</td>
</tr>
<tr>
<td></td>
<td>- What are the qualifications of current teachers?</td>
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<tr>
<td></td>
<td>- What is the required training process for the teachers?</td>
</tr>
<tr>
<td>Student Life</td>
<td>- What is the age range of the different cohorts of students at the school?</td>
</tr>
<tr>
<td></td>
<td>- What is the average class size?</td>
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<td></td>
<td>- What are different subjects that students complete in class in order to learn?</td>
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<tr>
<td></td>
<td>- Is the program bilingual?</td>
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<tr>
<td></td>
<td>- What is the primary language of the program?</td>
</tr>
<tr>
<td></td>
<td>- What is the primary language of teaching in that country?</td>
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Additionally, we conducted non-participant observation of the Nido and IC programs during class hours. Through these observations, we could further compare Yimi to the Montessori classrooms we studied during our expert interviews in the United States. To organize our observation, we took notes on pre-determined aspects of the classroom, such as the application of Montessori principles, classroom materials, daily activities, and differences from others schools. Two group members observed IC classes, one at the Saiyin campus and one at the Feicuicheng campus, while two group members observed the same Nido class at Saiyin.

Each observation was two hours in length and all members took notes on the pre-determined topics during this time. Afterwards we summarized each group member’s data to gain a complete picture of the practices at Yimi Children’s House.
WHAT WE LEARNED

Photo by Yimi Children's House
WHAT WE LEARNED

After completing this data collection, our group thoroughly analyzed all information gathered to identify any trends that might have been present. This way, we could present significant findings to our sponsor, and more easily determine areas for improvement in the Nido and IC programs. However, the results were not what we anticipated. Our interview, focus group, and survey questions were primarily focused on the success of Montessori principles in the classroom; yet, we discovered that most parents lacked a basic understanding of the Montessori method in general. This affected most other trends we found, such as parent's understanding of teaching methods and the communication between parents and teachers. Despite these unexpected results, we continued to analyze all data in an unbiased manner, to present the best recommendations to our sponsor. Our findings and analysis is presented below.

Unfamiliarity with the Montessori Philosophy

Prior to data collection, our group anticipated that most parents associated with Yimi, especially those with children enrolled, would have an understanding of the Montessori method and its principles. Unexpectedly however, the most prominent trend we found in our data analysis was that most parents are unfamiliar with Montessori. In fact, more than half of both the current and prospective parents surveyed responded that they were only slightly familiar or not familiar at all with Montessori education. In written responses collected from the same survey, four current parents wanted increased education about this style of learning, geared towards themselves and relatives who were involved with the school. The teachers at Yimi further supported this observation, with four of teachers interviewed explaining how parents are not familiar with Montessori. Even parents in focus groups who stated that they were drawn to Yimi for the Montessori teachings displayed a misunderstanding of how principles are implemented, or expressed that they wanted a better understanding of the method overall. Due to the significant amount of evidence, we inferred that parents are likely drawn to Yimi Children’s House because of the idea of Montessori and its popularity, rather than true knowledge of its educational practices. Even one of the teachers we interviewed said that "parents do not really understand Montessori," and suggested that they are drawn to it because of the "foreign teacher in the classroom," or "what they heard about Montessori" (Saiyin Campus, November 7, 2019). This aligns with background research we collected as well, where studies have shown that anticipated academic results and the push for Western education are main attractions. As a result, a large disparity can be seen in the parents preconceived notion of what Montessori is, and their genuine familiarity.

Parents Like Montessori Principles

The collected data from parent surveys and focus groups shows that despite their lack of understanding of Montessori education, parents still like Montessori principles. Eight out of nine the parent focus groups explicitly discussed that they like Montessori principles. For the majority of parents however, they would express interest and approval of the Montessori principles, even if they did not understand that they were distinctly Montessori. Three current parents in the written survey responses mentioned that they liked how the curriculum at Yimi Children’s House follows the child’s interests closely.

Figure 11: Survey data on parents’ familiarity with Montessori
Due to the lack of parents' understanding about Montessori principles, a corresponding trend arose in the data of miscommunication between parents and teachers about Montessori techniques in the classroom. The data suggests a significant disconnect in understanding the Montessori teachings, which results in parents not agreeing or understanding the classroom activities. This could be due to the differences between Montessori and traditional Chinese education where results and rankings are emphasized instead of independent learning. Thus, parents may question the Montessori teachings without a direct form of examination in the classroom, and worry for their child's future transition into exam-based education. According to a Nido teacher we interviewed, children from zero to six years old are better adapted to Montessori education than exam-oriented education, but this could still be a worry.

Parents also have the tendency to decide their child's future career, as expressed by four teachers we interviewed. This goes against the Montessori philosophy of the child having freedom for their learning, and could lead to further miscommunication. In fact, a couple from one of our parent focus groups explained that the emphasis on individualization from Montessori conflicts with the Chinese collectivist culture. Furthermore, during observation we noticed that parents want to help their children when they encounter difficulties, but Montessori practices encourage the children to explore and learn on their own.

Some also shared that they expected their child to become more independent, self-confident, and self-disciplined at Yimi. While these are both critical aspects of the Montessori philosophy, the majority of these parents responded that they were unfamiliar with Montessori education. This finding was also unexpected, as these Montessori principles go against the Chinese traditional view on education. Still, without having an in-depth knowledge of Montessori philosophy, many parents liked the child-centered classes, belief in child's potential, and understanding of child developmental stages that Yimi offers. Additionally, many parents believed the practical life aspect of Montessori education is essential to child's development. Further supporting this trend, teachers shared that the parents like the flexible and personalized curriculum at Yimi, where students have the freedom to choose what they learn.

The figure below shows parents and teachers' responses related to Montessori principles.

**Figure 12: Responses of parents and teachers on Montessori principles**

- **60%**: Parents agree that children can work at their own pace
- **66%**: Parents agree that children’s manners and etiquette have improved
- **86%**: Parents think that it is very important that children can work independently
- **89%**: Parents think it is very important that children learn practical life skills

**Miscommunication About Implementation of the Montessori Method**

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What We Learned

Parents and teachers both seem to want increased and improved communication. For example, five of the interviewed teachers expressed that there is miscommunication between parents and teachers. Other teachers mentioned that they have classes and online resources to educate parents about Montessori methods, although more resources might need to be readily available for parents. Having a strong understanding of Montessori principles will help to have more effective communication between parents and teachers.

Parent Involvement

Discussion of parent involvement is one of the common themes from both parents’ and teachers’ responses. 65% of respondents from the current parent survey said that there are many opportunities for parents to be involved in Yimi’s program, while 4 out of 11 teachers interviewed said students at Yimi can complete class activities with their parents. In fact, four parents from the survey written responses mentioned that there are too many manual tasks for parents. They stated that they are working every day and don’t have time to complete the given tasks. However, 63% of parents still feel there should be more opportunities for involvement in their children’s education. Though parents wanted to be more involved in their children’s learning process, they also wanted to have fewer physical tasks given by Yimi.

With these contradicting statements, it is possible that parents might want to be more involved through updates on their children’s progress and the implementation of Montessori methods in the classrooms. This could be a result due to the lack of communication between parents and teachers at Yimi Children’s House, as mentioned earlier. A parent suggested that Yimi should host more meaningful activities, rather than formal activities, to improve the relationship between teachers and the school. In addition, teachers recommend parents to attend more parent-student days, workshops, and online classes that are organized by Yimi Children’s House. They believed this would help parents to gain more insights on Montessori principles as a whole and at Yimi Children’s House. Parents themselves also expressed interest in attending educational Montessori events, with suggestions in both the surveys and focus groups for more classes and informational sessions.

Classroom Environment and Activities

During our data analysis, another prominent trend we noticed was stakeholder comments on the Montessori environment. Many parents and teachers commented positively on the environment, including the quiet atmosphere, natural layout, and promotion of focus. However, there were a few consistent suggestions for the improvement for the environment as well. We suspect that parents take environment into account when selecting a school because they want their child to be in an area that promotes creativity and supports their academic growth. The trends we identified are presented below.
Comparison of the Nido and IC programs

During our observations, we noticed that the structure and curriculum of the Nido and IC programs were significantly different. While the IC program runs for the whole day without parent supervision, the Nido programs run for an hour and a half, and parents or relatives must be present. Additionally, the IC program focuses on academic areas based on Montessori principles, while the Nido program is more flexible and centers on free play. These distinctions are likely due to the differences in cognitive development between these age groups, however we believed it was important to compare the perspectives of teachers and parents across the two programs. The Nido program is also a recent addition to Yimi Children’s House, so we thought it was important to note significant differences in complaints or praise compared to the IC program. The significant differences we discovered are summarized below.
WHAT WE LEARNED

After comparing the Nido and IC data, we found clear disparity between the two programs regarding parent interference in the classroom and parent satisfaction. With the pool of teachers across two different campuses, this data suggests that the Nido program is lacking in parent relations when compared to IC. We infer that this is due to the novelty of the Nido program, and lack of established knowledge about its curriculum and teachers. This distinction between the two programs could be a possible focus for Yimi.

Comparative Analysis: Observation and Benchmarking

Our group did research on the Montessori practices in Japan, U.S.A, and India, and compared these to practices at Yimi Children’s House. In order to thoroughly compare the practices, we divided them into three main categories: administration, teachers, and curriculum. The information from our observation notes was also used to aid us during the comparative analysis process. This provided insights and helped our group to determine the best practices for the program at Yimi.

The figure to the left shows the similarities between Yimi Children’s House and Montessori schools in Japan, U.S.A, and India. The circle is larger if the trend associated with it is more common.

The bilingual program is popular among our benchmarking countries. Many parents believed that it is crucial for their child’s education to learn English at a young age, including at Yimi, where 89% of prospective parents said that it is important that there is a bilingual program. However, the bilingual program is quite new at Yimi Children’s House, and improvements could be made to satisfy parents’ expectations. 57% of teachers stated that there are many aspects of the bilingual program that could be improved. For instance, two out of nine teachers mentioned there should be more English training for teachers to enhance their English skills.
WHAT WE LEARNED

Japan was the main focus for our benchmarking out of the three countries, due to similarities in educational perspectives in Japan and China. Our HDU buddies compared and contrasted the administration, teachers, and curriculum of Montessori schools in these two countries. They identified trends in respect for the child’s choice, where schools in both countries encouraged children to choose their own learning materials and subjects to work on. Both countries also emphasized practical life and using teacher observation for curriculum improvement. The main difference between the two practices is Montessori education in Japan focuses on teamwork and encourages students to interact with peers. In contrast, Chinese Montessori emphasizes on independent work and learn to work without any interruptions. Japanese Montessori schools also have culture classes for students to learn about Japanese cultures and customs. Since our survey data reflected that 100% of Yimi’s prospective parents found learning science and culture either very or extremely important, an emphasis on this could be a recommendation for Yimi.

Why Yimi?

During our data collection, we investigated many reasons why people wanted to join Yimi’s community. The infographic to the right shows some of these reasons as told by parents and teachers. Multiple parents were recommended to look into Yimi Children’s House by family and friends. Others chose Yimi because of convenience and closeness to their homes. All of the parents wanted there to be qualified teachers, and 73% of current parents believed that Yimi offered a positive environment for their children.

These findings suggest that with respect to their curriculum, Yimi’s Montessori environment and qualified teachers attracts parents to the school. Parents want an environment for their children that promotes focus, concentration, and learning, especially since education is an integral part of Chinese society. This environment is in alignment with Montessori principles, which further supports the idea that parents like Montessori principles without knowing what they are. Additionally, teachers were reported to be professional, kind, attentive, and emotionally available for the students, which may help parents see the available support system for their child. If Yimi stresses these aspects that distinguish them from other Montessori schools, they will be able to promote themselves more effectively.

Figure 17: Common reasons stakeholders were attracted to Yimi
RECOMMENDATIONS
RECOMMENDATIONS

All of our findings lead us to come up with a set of recommendations to Yimi Children’s House for improving, promoting, and increasing enrollment of their Nido and IC programs:

1. Provide accessible resources, such as programs and lectures, to educate parents about Montessori philosophy. We suggest lectures and programs to take place on multiple days, multiple locations, and/or multiple times, including in person and on-line.

2. Improve communication between parents and teachers to build a greater trust between both parties. We suggest that teachers encourage parents to ask questions after class, either in-person or through WeChat, about any in-class activities they did not understand. We also suggest that teachers are more transparent about the connection between in-class activities and the Montessori principles.

3. Organize new activities for parents to be involved in the classrooms. We suggest increasing the variety of activities and the times they are held, so parents who cannot normally participate have more opportunities to attend. We also suggest holding more events that focus on building the relationship between parents and teachers.

4. Continue working to improve the Montessori environment. Based on the advice of both parents and teachers, we suggest that improvements be made to the outdoor time at all campuses, specifically increasing the time in nature and adding more outdoor activities. We also suggest rotating the toys and Montessori materials in the Nido classrooms more frequently.

5. Focus on educating parents and building credibility of the Nido program before expanding the program to other campuses. We noticed a significant difference in parent interference and expectations between the Nido and IC programs. Thus, we suggest holding more informational events to increase Nido parent’s trust in the school, and make the methods seem more reliable.

Along with these recommendations, we also presented two flyers to Yimi Children’s House for them to use on their official WeChat account. The first was an educational flyer, to inform parents about the Montessori principles. The second was promotional, highlighting the positive aspects of the Nido and IC programs to hopefully increase their enrollment. These flyers are attached below.
**RECOMMENDATIONS**

**What is Montessori?**

The Montessori method is a scientific approach to education where children are encouraged to become independent thinkers and learners using hands-on, interactive materials.

**What is the Montessori method?**

**Individualized Experience**

Montessori education recognizes each student as a unique individual and accommodates their differences in the following ways:

- **Freedom of Choice**
  Students are free to choose their work from the shelves and are guided by self-directed exploration.

- **Learning Style**
  Montessori offers different ways to learn, accommodating each student's learning style.

- **Different Pace**
  Children can work at their own pace in the Montessori classroom. Teachers will observe the students' progress to help them improve their weaknesses.

**Experiential Learning**

Students retain better if they learn through their actions and experiences, leading Montessori to emphasize this in its teachings.

- **Interactive Learning**
  Students learn with physical materials and their senses as opposed to sitting and listening to an instructor. For example, students learn to count with the use of colored beads.

- **Curiosity**
  The students’ innate curiosity guides their learning and work activities.

- **Exploration**
  The child’s curiosity can lead them to explore new ideas. Students can explore the natural world as part of the outdoor activity time.

**Orderly Environment**

The classroom environment establishes a sense of order and organization among children.

- **Child-Focused Environment**
  It is important to have an environment where children can become more independent. The classroom is designed to have the shelves at the child’s eye level so the learning materials can effectively capture the students’ attention.

- **Promotion of Focus**
  Classrooms have soft colors and natural light to create an environment that promotes attention, focus, and concentration.

- **Organization**
  Children learn to clean up after themselves by putting materials back in their specific place on the shelves and sweeping up any mess. This is part of the practical life component in Montessori programs.
Why Yimi?

What is Yimi Children’s House?

Yimi Children’s House is a network of Montessori schools in the Hangzhou area. Currently, they have six different campuses and are accredited by an international Montessori organization.

Programs for 3 Grade Levels:

- **Nido**: 0-18 months
- **IC**: 19 months-3 years
- **CASA**: 3-6 years

Why Should You Enroll Your Child?

1. **Learning**
   
   Yimi offers learning in accordance with the Montessori principles. They emphasize independence, freedom of choice, and provide child-centered education.

2. **Environment**
   
   The classroom promotes attention and focus with its soft colors and natural light. The classroom environment also helps students establish a sense of order and organization.

3. **Qualified Teachers**
   
   Yimi’s teachers have received Montessori training, and the primary role of the teachers is to guide the students. Furthermore, they are professional, attentive, and emotionally available for the students.

Hear from Current Parents

- **77%** Of current parents would recommend Yimi Children’s House to other parents.
- **73%** Of current parents agree/strongly agree that Yimi provides a positive environment for their child.
- **68%** Of current parents agree/strongly agree that their child is happier.
- **66%** Of current parents agree/strongly agree that their child can express themselves better.
OUR EXPERIENCES

Emily Whittles
Throughout my time in Hangzhou, I have grown as a person and learned more about myself in the process. Prior to this experience, I had never been out of the country, and I learned that I can handle challenges that I never thought I would face. Whether it be the language barrier, the jet lag, or the homesickness, I was able to work through it and put my all into this project. As a STEM student, I was able to commit to a style of project I never had before, and learned a new prospective on tackling problems. I know the lessons I have learned will be helpful in future project group situations, STEM or otherwise.

I am very grateful to have met some amazing new people and made new friends throughout this project as well. I have worked alongside group members who inspire me to be my best self, and are always there to pick me up when I'm down. I know that couldn't have done this without them. Overall, while this IQP in Hangzhou was definitely challenging at times, it was an experience that I know I will always value.

Parima Sharma
Through this project, I was able to learn more about Montessori education and how it is currently becoming more popular in China. It was interesting to be able to learn both teacher and parent perspectives in the Yimi community, and working with the Hangzhou Dianzi University students was a privledge. I improved my teamwork skills by collaborating with a large group of people to form recommendations for Yimi Children’s House from all the collected data. Finally, I gained insight into the world of social science research.
OUR EXPERIENCES

Matthew (Romaji) Finley
Another country, another world
We were together, but we didn’t know everyone that we would meet. We didn’t even really know each other, at least not as much as we know now. The project is almost over, but really, everything just started. The people here worked to help us, and I thought “would we do the same?”
But don’t think this project was easy. There were too many difficulties in it. Where and when will the parents, that we need to ask questions of, be? How many would there be? Who will translate? Will teachers respond to our survey? How many? What questions should we ask? Why?
Afterwards, we were left with too much information, and not enough.
But we had to move forward. We learned the true project, questions, and work. Even now, I don’t know the final report.

Amy Tran
Through this project, I was able to gain knowledge on Montessori education in general and had a more in-depth understanding of Montessori practice in China. Working in a group of four, I learned to work in a group setting and to become more responsible. My teammates are some of the hardest workers I know, and it was a privilege to work in the same group with them. Our HDU buddies were really helpful throughout this whole experience. They helped me to become more accustomed to an unfamiliar culture and felt more comfortable living in China. Through this IQP project, I learned many valuable lessons and made life-long friendships with people on the Hangzhou IQP site.
REFERENCES


REFERENCES


Sanantonio, Cody Davis. (2013). Montessori principles: Do Montessori parents understand their significance and apply them to their family lives?. Masters Theses. 1153. http://thekeep.eiu.edu/theses/1153


Brainstorming and beyond: A user-centered design method. Oxford: Morgan Kaufmann.


