

Reducing Inequality: The Ignition of Quality Education

Martin Huang

E-mail: martin01px2024@outlook.com

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Abstract

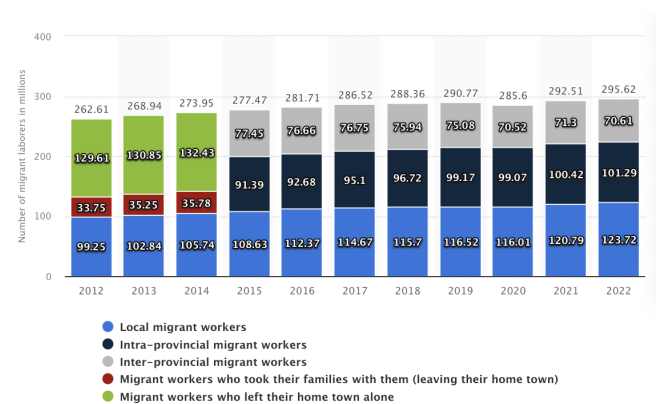
This article intertwines research with entrepreneurship, as readers are taken to the most rural areas in China, wherein massive populations are receiving either no education, or forms of education way beyond minimum limits of quality. Through investigation of cultural, financial, and structural barriers like the Hukou system that barricade Chinese children from accessing educational opportunities, the article connects dots between existing western organizations that aim to tackle education inequalities, formulating a business plan for another NGO, EQUcation, with research on how problems applicable to rural China can be uniquely solved, specifically for migrant children, oftentimes a disregarded subcategory of the disadvantaged population.

Keywords: rural China, inequality, education, business

1. Problem Statement

In China, 37.4% of the total population is rural (Macrotrends). To put that in perspective, just the rural Chinese population is about 197 million more than the US' total population, so it is imaginable how many more children are suffocating from poverty. Unlike their parents that migrated to urban areas for work, children in these rural areas (which consists of more than 70% of all children in China) do not have equal access to resources, facilities, and — most importantly — quality education to increase their future opportunities and perhaps bring them closer to an equilibrium with the urban kids. Despite the compulsory nine-year education policy imposed by the Chinese government, these children cannot go to school simply because of their financial status — a survey conducted by the office of the Women and Children Work Committee of the State Council and the China National Children's Center found that due to parents' inability to afford tuition fees, 2 million Chinese children are missing out on school, whilst 1.86 million migrant children (9.3% of 20 million) have to drop out for the same reason (“Millions of Migrant Children Can't Afford Education”).

Figure 1: Number of migrant workers in China from 2012 to 2022 (in millions)¹



Source: Statista

It's worth noting that in 2022, there were approximately 295.6 million migrant workers in China. Around 123.7 million of them were local migrant workers, working in the vicinity of their place of home, while 171.9 million worked at more distant places in their home province

or in regions far away (“China: Number of Migrant Workers 2022”, Statista).

Without access to education, these children are denied a prosperous future, especially when all Chinese citizens depend on their scores from a singular standardized test (that cannot be retaken) to apply for jobs. Furthermore, this separation between rural and urban residents is systematic; with the Hukou system in China, citizens that have been born in rural areas (or their past generations have lived in these regions) are registered to be "rural" and forced to stay there for education and housing, making it even harder to integrate with urban areas.

1.1 Quality of Existing Education

Yet, for those that do have access to education, the quality is quite low. As mentioned before, classrooms and amount of materials are tight, especially with lack of investment in these areas that aren't the most economically buoyant. According to studies conducted by the 2010 China Family Panel Survey (CFPS) and the 2009 Rural–Urban Migration in China (RUMiC), the "education performance of rural children (including those of rural non-migrants and rural-to-urban migrants) is significantly lower than their urban counterparts" (Zhang et al., 2015). This also affects human capital accumulation to a great extent; the country's labor force had an average of 8.6 years of education, with merely 25% — aged between 15 and 65 — had an education level of junior high school or above. This greatly hinders China's economic development more compared to other developing countries, making investments for infrastructure and resources even harder, exacerbating the cycle that poor people and migrants are trapped in, wherein their families can only do cheap labor and live paycheck to paycheck for generations on end.

2. Market Research

2.1.1 Childhood Education International

Childhood Education International has the mission to develop innovative solutions to create sustainable futures for children that are currently suffering lack of quality education, with the vision that education is the foundation of world progress. To tackle this issue, they've developed programs and training for educators, health professionals, and other caregivers in developing countries, collaborated with actual policymakers and ministry officials to make creative solutions to improve educational experiences, and spread such innovative ideas across countless regions through publications and other resources. CEI is considerably

successful due to their extensive global network; that is, their ability to provide consulting and advising services to schools, NGOs, government ministries, and education agencies all around the world to ensure their impact reaches a higher magnitude, and they even work with the UN — with representatives in New York and Geneva — to develop more innovative solutions using top-notch technology, with over 35 Country Leads that can respond more directly to their respective country's education issues. Furthermore, this ensures they continuously have a voice in the political sector and can engage in social discourse upon topics regarding education and children's rights, giving them the unique opportunity to create utilitarian and even legislative change through influencing policymakers. However, being an intergovernmental organization, they heavily depend on political capital and donations to maintain running because they do not directly profit from their programs.

2.1.2 ORT America

Another organization is ORT America, which focuses on providing relatively more physical benefits. They believe that it is important for their programs to reach as many students around the world as possible because they need to adapt to the evolving world in which education in the STEM sector is incredibly important, because in order for these children to succeed in the future they need to have these utility skills to have employment potential. They have provided an average of 275,298 hours of STEM programs per year, involving 14,856 students in STEM-related extracurricular activities, and provided 1,130 robotics kits to schools and other education institutes. Reasons behind ORT's success are twofold: firstly, they have a heavy religious background, emphasizing the importance of the 4,000 years of Jewish history. Not only do they provide better education, they also preserve Jewish life and culture through sophisticated frameworks involving the practices of rituals and learning stories behind Passover and the High Holidays. Therefore, they empower Jewish values which makes them highly popular among the Jewish community and also more value-driven. Secondly, they build actual schools for students from K-12 across 34 different countries, providing benefits to more students from more resource-poor communities that otherwise wouldn't have had access to technology-rich curriculums. One advantage they have over CEI is sustainability; through building their own schools and labs they enrich curriculum but also can collect tuition (that is relatively cheap considering the novel resources they provide) and other funds, so they have higher stability.

2.1.3 Stepping Stones China

The third organization on this list is Stepping Stones China. This is arguably the biggest competitor because they are located in Shanghai, targeting most of their resources to Chinese rural areas. Founded in 2006, they've grown to become one of the most well-known nonprofit in the country, their first and most famous program being SET (Shanghai English Teaching) which garnered hundreds of volunteers to teach migrant children in Minhang District, which expanded to numerous other programs such as online and rural teaching.

2.1.4 EQUcation

My venture idea — EQUcation — incorporates EdTech in selling lesson plans and online teaching materials. This would look like building a website that is accessible worldwide, full of lessons and resources available for download, but comparatively more user-friendly for Chinese teachers and schools in terms of format and languages. These resources could look like PPTs, videos, audio clips, worksheets, or even entire curricula., designed by professional English teachers and students or in any other subject, aligned with current Western styles of education that is scientifically proven to be most effective (like Duolingo with their research conducted on visuals and phonics). Given that oftentimes teachers in rural areas are undertrained, giving them direct, physical training could be too costly or time-consuming, which gives EQUcation a competitive advantage because one lesson plan can be used by countless students, teachers, and institutions all over the world simultaneously. As EQUcation uses the newest EdTech, it's also a sustainable approach which can constantly be maintained and innovated to match individuals' needs.

3. Formative Decisions

3.1 Enterprise Structure

EQUcation undertakes a hybrid structure, providing training, employment, and product to multiple entities. The training & employment part is hiring professionals to create lessons or providing online training sessions — both synchronous and asynchronous — to rural teachers. The main part of the enterprise is the products, in which the website lesson plans and other materials mentioned above are sold to individuals and institutions, so the funding comes from such payments — which are relatively more affordable since they're quite easy to make and don't require any physical interaction. EQUcation belongs to the founder at first, but then should expand to the community as public

contributions increase. Students and teachers (especially when they might be underqualified) purchase the materials and lesson plans at a low price, then utilize it to have more fruitful lessons, increasing their schools' quality of education that better suits them for higher levels of education that could be abroad in the future, reaching the social impact that we envision. These lessons are uniquely personalized and fun to learn from for kids, and we would have our marketing and advertising revolving around the most popular social media platforms in China, such as WeChat, Weibo, Douyin, Baidu, and Bilibili. We would work with other charities and nonprofits so they can purchase them to use for their own organization, ensuring that those poorer disadvantaged children and rural areas can still get these resources for free. Most ideally, we'd even work with more novel and innovative companies that deal with things like the metaverse to guarantee long-term innovation in our company, namely Facebook, Instagram, etc. that belong to Meta. EQUcation can also exist as a platform for resources from other charities and organizations to be compiled in one place, increasing accessibility and efficiency of sourcing materials.

3.2 Legal Structures

EQUcation takes on many legal structures depending on circumstances: it's all an NPO, Guarantee Company, and Limited Company at the same time, and I chose this legal structure because it is for a charitable cause and could function on public donations and grants, but the guarantors should pay a nominal amount to ensure its stability at the outset. Of course, the most optimal condition is for EQUcation to be a Limited Company because then it's less constrained by guarantors and owned by many shareholders that can provide funds and, more importantly, unique assets. Then, EQUcation would become more self-sustainable, and has a better place in the open market because of the assets coming from multiple NGO or for-profit companies; then, the enterprise's revenue can be used to cover all costs and reinvested to provide more benefits to raise the quality of education even higher. In the far or maybe even near future, we can develop more advanced solutions such as integrating Virtual Reality and Artificial Intelligence to create virtual classrooms or even AI teachers, ensuring that these newest and state-of-the-art technologies can actually reach the poor and disadvantaged individuals rather than just the rich and privileged. This would truly achieve our vision of reforming the equilibrium of education

3.3 Mission

EQUcation's mission is to lead in the innovation and implementation of EdTech solutions, focused on improving software by incorporating modules, data analysis and a myriad of online modules full of content for all grades and levels, accessible to students and teachers around the world. Our vision is to enhance the educational experience for disadvantaged children that lack the necessary infrastructure and resources, all in all to bring quality education for all.

4. Functional Inputs

The startup funds would have to come from investments, debt, and equity, and it would be best to create partnerships with other EdTech companies to expand our customer base; they could provide more software and hardware to our beneficiaries to ensure that they have the technology to access our products. These companies can include Shanghai Hefa Education Technology Co.,Ltd, one of the biggest education software developers in China, which should be interested in my enterprise as it's relatively more profitable than other charitable organizations that use the same methodology and technology.

4.1 Long-term Channels

After the business has taken off, donations and grants would be more possible and common, or perhaps even volunteer creations of materials to add to our database. A partnership with Stepping Stones China (mentioned in Market Research) would be the most ideal as they utilize a software named Mingdao that distributes self-made lessons to their volunteers, which would greatly help my enterprise. To get more investments, our framework can follow one that's similar to Crimson Education, which uses a singular website to connect tutors, strategists, and mentors to students all around the world, providing them additional resources, consulting, and even events like United Nations conferences. The more HR EQUcation garners, the more traction it would gain worldwide, ensuring that we get enough exposure and investment from more international corporations. After gaining reputation from these partnerships, governments are more likely to fund our projects.

Speaking of HR, EQUcation's team should consist mainly of software developers since it's an EdTech company. To get this talent, we would allocate a large portion of our funds to marketing, either through advertisement on education-related websites and social media platforms or hosting writing/speech competitions that provide awards or

scholarship prizes that attract more young talent. Furthermore, we would also use standard recruiting tactics such as internal HR tactics, IT hiring partners and project outsourcing. If things don't go well in the beginning, independent development with help from friends and family would be required to get the enterprise going.

5. Foundational Principles

The metric used to measure EQUcation's success will be quantified in many forms, specifically the amount of children that have accessed our lesson plans and materials, or teachers/institutions that have purchased our products. This means that on the individual level we have benefited as many people as possible, whether that be the children that have gotten a better quality of education or teachers that have a completely novel way of accessing curriculums or aligning with more modern, western-style teaching, which shifts the equilibrium to ensure that these schools or community centers for education are systematically reformed. The teachers are using the resources and lesson plans and taking matters into their own hands, so we and our program won't be seen as the "hero" of the story, completely preventing the savior complex from emerging. As we are gaining profit from people buying our resources to be sustainable, we are also caring for the planet because most of our services will be incorporating EdTech, meaning that we won't contribute to carbon emissions because we won't need transportation or even printing paper. At most, we are using more electricity and a datacenter, but that's comparatively much more environmentally aware than other enterprises, and the amount of gas or Earth's finite resources we've saved would also be a metric to measure our success.

6. Conclusion

At the end of this research, education inequality in China has been crystallized and narrowed down to its structural nuances, whether that be financial crises or the Hukou system. Moreover, the research discovered a multitude of existing efforts to solve this inequality, evaluating their processes and achievements. This comparative study was able to be used to construct a social enterprise plan for EQUcation, which looks at how EdTech specifically can be applied to such education shortages in rural China. Further research in the areas of educational resources distribution, particularly in rural areas, will be required to scale the impact of the organization.

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