The impact of the medium of instruction on student learning in postcolonial states



WORLD STUDIES: Culture, Language and Identity

Economics and History

RQ: How has English as a medium of instruction impacted student learning in India's Pune Municipal Corporation schools?

WORD COUNT: 3997

Table of Contents

| Introduction | 3 |
|--|----|
| Colonial Language Policy: Cultural and Structural Impacts | 5 |
| Post-Colonial Educational Policy and Mother-Tongue Instruction | 8 |
| Educational Context of Pune | 10 |
| Research Methodology | 12 |
| Results | 14 |
| Analysis | 20 |
| Relevance to the Economy | 22 |
| Conclusion | 25 |
| Bibliography | 27 |
| Appendix- A (Questions asked in Interviews) | 31 |

Introduction

The protagonist of the blockbuster Bollywood film 'Hindi Medium' tearfully remarks: "In this country, English is not just a language- it is a class of society. And to get into this class, you have to study in a good school." Since the end of colonialism, English has become a *lingua franca*-the language of business, government and "prestige" (Iwara, 96) worldwide. In many postcolonial states such as India and Nigeria, English has taken on the added significance of being an official language of the federal government. Studies conducted in India also demonstrate that a knowledge of English increases the wages of men by 34% and women by 22% (VoxEU, 1). As a result, there has been a rush towards education with English as the medium of instruction, especially in ex-British colonies, where the language's utility is maximised.

It is important to note that the demand for the colonisers' language as the medium of instruction in postcolonial states is a global phenomenon, apparent in many African countries such as Nigeria, Tanzania, and Algeria. In Mali, an ex-French colony, the traditional French-medium education has been repeatedly criticised for its high dropout rates and low student attainment, but still continues to be widely consumed due to its perceived benefits (Canvin, 1).

As more and more students in postcolonial states are educated in colonial languages instead of their mother-tongues, it becomes imperative to analyse the impacts of colonial languages on student learning. This essay will attempt to analyse the impacts of an English-medium education in postcolonial states, focusing on the government-run schools in the city of Pune in India- a local manifestation of a global issue.

For the purposes of this analysis, I will be using the IB subjects of Economics and History, mainly the concepts of developmental economics and of postcolonial theory. This interdisciplinary approach is necessary- the motivation behind seeking an education in these developing countries is mainly economic, and the impact of education is economic as well. Additionally, understanding the colonial motivations for the implementation of language policy is important to evaluate its impact- necessitating the integration of history in this analysis.

The scope of my primary research is limited to the Pune city of Maharashtra, and the schools I chose to study were all Pune Municipal Corporation (PMC) schools. The primary research methodology used was conducting interviews and collecting student grades, while my secondary sources were mainly academic papers and web articles. The question that this essay thus seeks to answer is: *How has English as a medium of instruction impacted student learning outcomes in Pune's Municipal Corporation schools?*

Colonial Language Policy: Cultural and Structural Impacts

"Today India is more illiterate than it was fifty or a hundred years ago, because the British administrators, instead of taking things as they were, began to root them out." (Gandhi, quoted in Tooley)

Before colonization, India had its own indigenous systems of education, which reached significant sections of the population- in just one province (Madras) in the year 1822, a survey by British district collectors found 11,575 schools with a total of 157,195 students. This data forced Thomas Munro, the governor of Madras to state in his Minute of 1822 that the quantity of education was "higher than it was in most European countries at no very distant period." (Tooley, 213). Additionally, it is worth noting that this data may in fact be a conservative estimate, as British district collectors and government officials like Mr. Munro would have had no incentive to over-report such figures.

However, the quality seems to be a contentious issue- at least in the eyes of TB Macaulay. Macaulay served as president of the General Committee of Public Instruction for the British presidency (Tooley, 234). In his famous Minute of 1835, he proceeded to deride the system of indigenous scholarship and entirely dismissed the value of Indian languages as a means to obtain an education.

Macaulay believed that an English education for the 'natives' was critical and that "all the funds appropriated for the purposes of education would be best employed on English education alone." His aim was to "create a class of persons Indian in blood and colour, but English in tastes, in opinions, in morals and in intellect." Colonists in French West Africa also seemed to have a similar motive for promoting a French education- that of "training an indigenous staff destined to become our assistants throughout the domains.. to expand the influence of the French language..to assure the ascension of a carefully chosen elite.. to change their way of life." (Shimahara, Nobuo, Anweiler 1)

Thus it is clear that there was an implicit motive of cultural domination in colonial language policy. When analysing the impacts of the medium of instruction in postcolonial states, it is necessary to consider this cultural impact alongside the economic impact.

Most scholars agree that the cultural impact has been negative- enforcing the colonial language as the medium of instruction has restricted the formulation of a national identity. This sentiment is expressed by Gandhi: "The foreign medium has made our children practically foreigners in their own land. It is the greatest tragedy of the existing system. The foreign medium has prevented the growth of our vernaculars." (Groff, 150) Some scholars like Fanon also point to a more psychological impact, claiming that this education led to "self-alienation" in the African context. (Kay, Nystrom 1)

Besides a change in the medium of instruction, colonialists also made widespread structural changes to the way education was delivered. In India, Macaulay proceeded to lay the foundations for the English-based public schooling system which still persists- a centralised system with

publicly funded colleges, schools and teacher-training institutes, which set out to entirely supersede any existing native schools. The French in West Africa also implemented similar measures.

But data shows that such structural changes were extremely damaging- in 1858, about 36 years after Thomas Munro's survey, only 452 schools were found in the Madras province (as compared to 11,575 schools in 1922), meaning that there had been a huge decline in provision of education.

Thus it is clear that there was an overwhelmingly negative cultural impact of colonial languages being used as media of instruction, perhaps due to the ulterior motives of cultural domination held by the colonialists. In many cases, the new systems they proposed were also unsuitable for the context of the colony, resulting in lower provision of education and higher illiteracy. In the following sections, the economic impacts of such policies will be considered.

Post-Colonial Educational Policy and Mother-Tongue

Instruction

In post-independence India, many political and intellectual stalwarts believed in the urgency of 'decolonization', and recognized the need to create an educational system rooted in the national culture and indigenous languages (Pannikar, 140).

On paper, the support for indigenous mother tongues has been large-policies such as the Three Language Policy seem to act as a safeguard for the maintenance and spread of Indian languages (Groff, 151). However, despite these constitutional safeguards, the demand for and the provision of English as the medium of instruction is steadily growing across the country- the number of English-medium government schools has nearly doubled in the last five years. (Mody, 1).

A vast body of research suggests that children learn better in their mother tongues globally. Kosonen and Benson show that children are more likely to enroll and stay in school if they are taught in their mother tongue (Kosonen, 3). Additionally, their parents are more likely to communicate with teachers and participate in their children's education (Kosonen, 23). An experimental mother-tongue program conducted in Niger demonstrated that students who were learning in their mother-tongue had better test results and "a more relaxed atmosphere" than those studying in the ex-colonial language of French (Hovens, 1). Additionally, a detailed study of this system showed that a mother-tongue education

was also more likely to ensure that marginalized groups such as girls and rural children stayed in school longer. It is worth emphasizing that these results are not limited to Niger- the book *Language Issues in Comparative Education* details research studies from over a dozen developing countries which reiterate similar conclusions (Benson, 5).

Thus, it seems that most pre-existing research on the impacts of an ex-colonial language globally suggest that it is detrimental to student learning, and that students would learn better in their mother-tongue.

In the face of this, I hypothesized that an English-medium education would be detrimental to the learning of students in Pune's government-run schools. This research is significant as it aims to triangulate a conclusion and test its cross-cultural reliability and validity- it aims to verify whether a global conclusion holds true in a particular local context. To test my hypothesis, it is first necessary to understand the educational context of Pune, something I will expand on in the next section.

Educational Context of Pune

Pune is a city in the state of Maharashtra, India. Maharashtra as a state is educationally better developed than the rest of India, with a literacy rate (82.4%) higher than the national average of 74% (Census, 2011).

Pune's schools can be broadly divided into two categories- government schools and private schools. For the purposes of this essay, I will be focusing on government schools, as they are compliant with national and state education policy.

Pune's local government (the Pune Municipal Corporation, or PMC for short) runs over 300 primary, upper primary and secondary schools across the city. These schools all follow the Maharashtra State Board syllabus, ensuring that content is standardized across schools.

Students across schools study six core subjects:

- 1. Marathi (the regional language)
- 2. English (the official language)
- 3. Hindi (third language)
- 4. Social Studies (a broad subject spanning History, Geography, Political Science and Economics)
- 5. Science (the core sciences of Physics, Biology and Chemistry)
- 6. Mathematics

The medium of instruction is simply the language used in teaching- in this case, in teaching Social Science, Science and Mathematics. There are three main media of instruction that the PMC schools use:

- 1. Marathi medium (the mother-tongue and first language of most of the students)
- 2. English medium (Social Studies, Science and Mathematics are all taught in English.)
- 3. Semi-English medium (a system wherein students are taught Mathematics and Science in English, but Social Studies in Marathi)

The case of Semi-English medium is a very interesting one. It began as an experimental project in Pune in 2005 (Mata, 1), where it was seen as a method to meet the demands of parents for an English-medium education as well as to preserve Marathi education and culture. According to the newspaper the Maharashtra Times, it has received a generally positive response- proponents of it feel that it provides a more balanced education for our times. By teaching Mathematics and Science in English, it is expected that students will also learn the relevant scientific terminology in English, making it easier for them to transition into higher education. The system is also politically popular, as it offers an acceptable compromise to those on either side of the debate-theoretically, it would endow a student with proficiency in both English and Marathi.

The Semi-English system in Maharashtra is an instance of a wider push towards bilingual/multilingual education globally- policymakers in Tanzania have also debated using English to teach Science and Mathematics in their government schools (Benson and Kosonen, 77).

Research Methodology

To test my hypothesis of the negative impact of an English/Semi-English medium education on PMC school students, I identified four important stakeholders:

- 1. Students
- 2. Teachers
- 3. Government Officials (policy-makers)
- 4. Parents of students in PMC schools

I used two main methods of data collection:

- 1. Qualitative Data (one-on-one interviews with stakeholders)
- 2. Quantitative Data (student grades)

Before being allowed to conduct research, I had to obtain permission to do so from the Chief Education Officer of the PMC, Mr Shivaji Daundkar. This was necessary because I would be collecting sensitive government data (student grades) through my research. The terms of this permission were that:

- 1. Student, teacher and school anonymity would be preserved.
- 2. All data collected would not be shared and would be used for academic purposes only.

After receiving permission, I was able to conduct interviews with fifteen teachers, two government officials, and over thirty different students spanning different PMC schools and

media of education. My qualitative research totalled around three hours of extensive interviews in the regional language of Marathi. The exact questions asked can be found in the appendix, but it is important to know that minor modifications were made as and when appropriate.

The quantitative data (grades) were collected from from two schools. For purposes of anonymity, I shall refer to these schools as school P and school Q. Both schools operate from grades one through eight, are situated in a similar geographic area and fall under the same local administration. The only significant difference between them is thus in the media of instruction.

- School P: Each grade consists of three divisions, with 20 to 30 students in each division.
 Division A employs Semi-English as the medium of instruction, while Division B and C employ Marathi as the medium of instruction.
- 2. School Q: Each grade consists of two divisions, both of which employ Marathi as the medium of instruction.

Results

Through my research, I found that even Semi-English medium- the suggested compromise- was negatively impacting the learning of students in the PMC schools I studied. There are two sources of evidence for this conclusion.

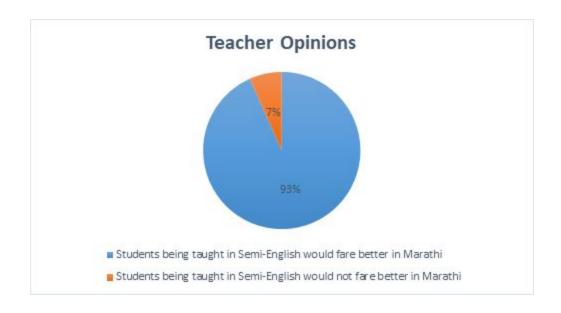
Qualitative Results

1) Teacher Interviews:

Thirteen of the fifteen teachers I interviewed from School P admitted that teaching students in English was ineffective and that the students were not able to grasp concepts clearly when taught in English.

Fourteen of these fifteen teachers admitted that their students who were being taught in English would fare better academically if taught in Marathi instead.

It is important to note that all these teachers taught both the Semi-English medium divisions and the Marathi medium divisions, meaning that their observations were based on an understanding of and experience with both media of instruction.



2) Government Official Interviews:

The Chief Education Officer of the PMC, Mr. Shivaji Daundkar also reaffirmed what the teachers had to say, stating: "It is true that our students learn better in Marathi than in any other language."

The other government official I was able to speak to (Mr. Ravindra Bokhare, ward head) also shared this sentiment, stating that "Students will always learn better in their mother tongue. English and Semi-English medium education is not constructive."

Thus the qualitative data strongly suggests that teaching students in Semi-English medium is inefficient as it leaves concepts unclear, and that students would learn better in Marathi.

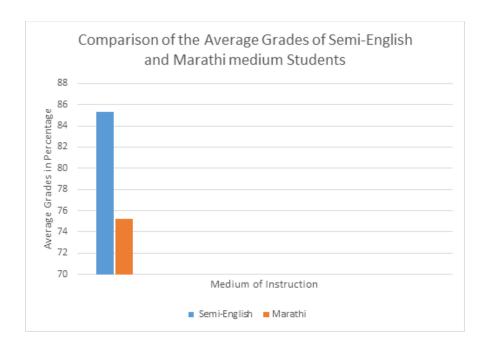
Quantitative Results

The quantitative results, however, tell a very different story.

In School P, I compared the average grades across all subjects scored by Semi-English medium students and Marathi medium students. This was done by taking the class averages of the end-of-year examinations.

This yielded a surprising result: the mean grades of the students studying in Semi-English were 85.3%, as compared to an average of 72% in Marathi medium, meaning that on average the scores of a student in Semi-English medium were 18.47% higher than those of a student in Marathi medium.

It is important to note that these students all studied in the same school and were taught by the same teachers- at face value, the only difference was in the medium of instruction.



This was extremely surprising, given that it contradicted the qualitative data to a large extent.

On deeper investigation and a follow-up interview with the principal of School P, I found that there was an intricate system at play.

When a student enrols into the school in first grade, his parents are given a preference of which medium they would like to enrol their child in- Marathi or Semi-English. At the end of every school year, however, the classes are reshuffled- only the "smarter" students are allowed to stay in Division A, which is the Semi-English medium class.

Additionally, there is no particular measure for this "smartness"- it is an ambiguous term. While interviewing students, I asked a fourth-grade girl about this system, and what had to be done to be moved into division A. She told me that students had to "memorize English poems, score very well on English tests and have high marks in general" to be considered for the switch.

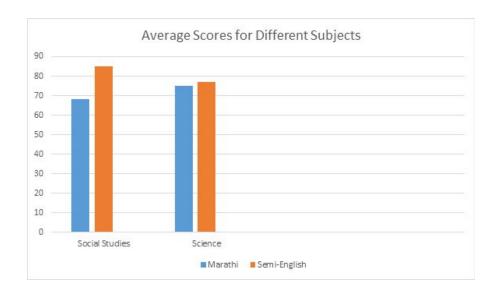
This system could explain the discrepancy between the qualitative and quantitative data- if only high scoring students are being pushed into Semi-English medium, it makes relative comparisons very difficult. When the principal was asked about this discrepancy, she too concurred that the higher grades for Semi-English students were due to "their superior work ethic and intelligence" as opposed to the language itself providing any tangible boost.

To assess whether the students in Semi-English are in fact more 'intelligent', I compared the grades of Marathi medium and Semi-English medium students- this time in the Social Studies subject. I decided to compare the Social Studies grades because both the students in

Semi-English medium and the students in Marathi medium are taught Social Studies in Marathi, by the same teacher.

This comparison shows that the mean score in the Marathi medium division is about 68%, whereas the mean score in the Semi-English medium division is about 85%- meaning that Semi-English medium students score on average 26.1% better than their Marathi medium peers when they are taught in Marathi.

The next comparison I made was looking at the subject of Science, which is taught in English to the Semi-English medium students, and in Marathi to the Marathi medium students. Here, the average scores are about the same- in Semi-English, the average is 77%, whereas in Marathi medium it is about 75%. This means that when Semi-English medium students are taught in English, their scores are only about 2.67% better than those of Marathi medium students.



Thus it seems that being taught in English is pulling the Semi-English medium students back- it is having a negative effect in terms of lower absolute grades and relative to the Marathi medium students (control group).

This system of class shuffling is problematic- it distorts the reality, which is that students in Semi-English medium are being negatively affected by learning in English. The PMC database reports that there are over 20 schools in Pune which follow this dual Semi-English/Marathi model. If such a policy of class shuffling is happening across these schools, it would distort the reality on a larger scale.

In conclusion, it is clear through both qualitative and quantitative analysis that teaching Pune's government school students in English (a colonial language that is not their mother tongue) is negatively impacting their learning. The following sections will aim to evaluate the impacts of such detrimental policies, as well as understand the reasons for their existence.

Analysis

If an English-medium education is disadvantageous to student learning, why is it still in place?

According to the politicians I interviewed, this is solely due to the demands of the parents of the students.

Mr Daundkar and Mr Bokhare admitted that the English-medium system was detrimental to the education of students, but that they were "pressured to continue it due to the demands of the parents." This is understandable-politicians are accountable to the demands of their constituents, in this case, the parents.

We have already seen that parents globally are aggressively demanding an English education because of its perceived socio-economic value. However, this presumes that English education is complete and results in fluency- a rather flawed assumption. In many government schools, the English-medium education is delivered by teachers who themselves do not speak English (Quartz, 2015). Due to problems of understaffing, teachers without requisite degrees and training are made to teach in a language they do not know. Parents enrol their students in English-medium government schools with the expectation of fluency, but if the teachers themselves are not fluent/qualified, it is highly unlikely that the students will become fluent. In this case, nobody gains- students do not learn concepts, and neither do their parents reap the socio-economic advantages of an English education.

Besides the parental pressure (a microeconomic force) shaping government education policy, there are also macroeconomic incentives for governments to implement English-medium education. Panikkar, who has analysed the macroeconomic scenario, believes that the governmental compliance with demands for English education is representative of a form of neo-colonialism wherein India is reordering its political and democratic intentions in accordance with the intentions of global players (Panikkar, 3). He believes that globalization and the power that capitalist institutions hold over the country has resulted in India seeking to achieve a "borrowed modernity" as opposed to developing a modern India along the lines of its own intellectual and cultural traditions like China did (Jacques, 220).

Relevance to the Economy

The significance of school-level education in India cannot be understated. Over a quarter of India's population is under the age of 14, meaning that India has one of the youngest populations in the world. It is imperative for India's economic growth that the educational systems made to impart skills to this young population are robust and efficient.

A robust educational system is not just a propellant for growth- it is a force for the "expansion of capabilities that people have" (Sen, 2013)- meaning that it is linked to economic development. The role of education in economic development has been reaffirmed both by economists and by international organisations such as the United Nations, which recognise that a lack of education often keeps the poor stuck in what is known as the poverty trap, restricting their upward mobility.



Figure 1: Poverty Trap (K. Seipp, 1)

In the above diagram, it is clear that low levels of education are a part of the trap- they result in low incomes and economic growth. This further leads to low levels of healthcare and education for generations, perpetuating the cycle. Low levels of human capital (as a result of poor education) hurt the supply side of the economy, meaning that the economy's aggregate supply (AS) is curtailed. If India were to build a stronger educational system, it would be an example of the usage of interventionist supply-side policies to shift the LRAS (long run aggregate supply) to the right, as in the diagram below:

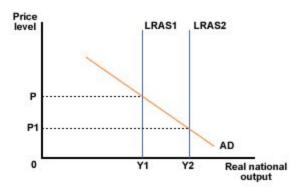


Figure 2: Rightward Shift of Long-Run Aggregate Supply (St.Pauls', 1)

The results of this are wholly positive for the economy- theoretically, an increased level of national output (Y2) can be produced at a lower price (P1), equivalent to shifting the production possibilities curve outward.

Thus building an appropriate system of education that does not compromise the learning of students, cultural values or economic potential must be India's top priority, due to its macroeconomic and developmental importance. But the pursuit of an English-medium education

may ironically be working against this goal, hampering India's progress on the road to growth and development.

Conclusion

The era of colonization led to the rapid dismantling and restructuring of educational systems in colonies, often to achieve cultural domination and economic gains. This dismantling was often hugely detrimental- in many cases, it reduced the provision of education and its accessibility in the colonies. Additionally, such restructuring enhanced the importance of the colonial language, making it language of business and governance. Consequently, this has led to an increased demand for education in the colonial language in ex-colonies. However, globally conducted research demonstrates that children learn best in their mother tongues, and that the ex-colonial language may have a detrimental impact on their learning.

My research thus aimed to analyse the impact of English as a medium of instruction in Pune's government schools- a local instance of a global problem. Through my qualitative and quantitative analysis, I was able to demonstrate that an English-medium education has a wholly negative impact on the learning of these students. This conclusion reaffirms global research in varied contexts, lending weight to the theory that students learn best in their mother-tongues.

This conclusion has economic impacts- given India's young population, it is clear that governmental education reform is of great importance so as to boost India's economic growth and development. However, the current system has flaws in its medium of instruction- students and parents are chasing an English-medium education for its perceived economic value, even though it may be paradoxically harmful to student learning.

This essay mainly focused on the economic impacts of the medium of instruction in ex-colonies and its historical context. However, another dimension worth considering is the psychological impact the medium of instruction has on student cognition. Additionally, certain variables such as teacher proficiency went untested in this essay, but provide scope for future exploration.

Bibliography

- Aspire, India Today. "The Price of Studying at Private Schools." *India Today*, India Today, 3 July 2017,
 - www.indiatoday.in/magazine/supplements/aspire/story/20170710-private-schools-price-st udying-1022075-2017-07-03.
- Benson, Carol, and Kimmo Kosonen. *Language Issues in Comparative Education: Inclusive Teaching and Learning in Non-Dominant Languages and Cultures*. Sense Publishers, 2013.
- Birchall, John, et al. "Macroeconomics." *The Consequences of Deflation*, textbook.stpauls.br/Macroeconomics/page_111.htm.
- Canvin, Maggie. "Chapter 5. Language and Education Issues in Policy and Practice in Mali, West Africa." *Global Issues in Language, Education and Development*, 2007, pp. 157–186., doi:10.21832/9781853599538-008.
- "Children Learn Better in Their Mother Tongue." *The Global Partnership for Education*, www.globalpartnership.org/blog/children-learn-better-their-mother-tongue.
- Groff, Cynthia. "Language and Language-in-Education Planning in Multilingual India: a Minoritized Language Perspective." *Language Policy*, vol. 16, no. 2, 2016, pp. 135–164., doi:10.1007/s10993-015-9397-4.
- Hovens, Mart. *Bilingual Education in West Africa Does It Work?* Distributed by ERIC Clearinghouse, 2001.
- Iwara, A.u. "Mother-Tongue Education: Problems and Prospects In A Post-Colonial African

- State: Nigeria." *Présence Africaine*, vol. 119, no. 3, 1981, p. 90., doi:10.3917/presa.119.0090.
- Jacques, Martin, et al. Da Guo Xiong Xin: Yi Ge Yong Bu Tui Se De Da Guo Meng = When China Rules the World: the End of the Western World and the Birth of a New Global Order. Zhong Xin Chu Ban Ji Tuan Gu Fen You Xian Gong Si, 2016.
- Kay, Stafford, and Bradley Nystrom. "Education and Colonialism in Africa: An Annotated Bibliography." *Comparative Education Review*, vol. 15, no. 2, 1971, pp. 240–259., doi:10.1086/445535.
- Kosonen, Kimmo. "The Use of Non-Dominant Languages in Education in Cambodia, Thailand and Vietnam." *Language Issues in Comparative Education*, 2013, pp. 39–58., doi:10.1007/978-94-6209-218-1 3.
- "Maharashtra Population 2011-2018 Census." *Religion Data Population of Hindu / Muslim / Sikh / Christian Census 2011 India*,
 www.census2011.co.in/census/state/maharashtra.html.
- Mataonline. "सेमी-इंग्रजीचे भवितव्य." *Maharashtra Times*, 9 Dec. 2017,
 maharashtratimes.indiatimes.com/editorial/ravivar-mata/future-of-semi-english-medium-sc
 hools/articleshow/62001128.cms.
- McCormick, Christopher. "Countries with Better English Have Better Economies." *Harvard Business Review*, 7 Aug. 2014,

 hbr.org/2013/11/countries-with-better-english-have-better-economies.
- "Millennium Development Goals (MDGs)." World Health Organization, World Health Organization, 25 June 2015,

- www.who.int/topics/millennium development goals/about/en/.
- Mody, Anjali. "India's Craze for English-Medium Schools Is Depriving Many Children of a Real Education." *Scroll.in Latest News, In Depth News, India News, Politics News, Indian Cinema, Indian Sports, Culture, Video News*, Https:////Scroll.in, 3 Jan. 2017, scroll.in/article/750187/indias-craze-for-english-medium-schools-is-depriving-many-childr en-of-a-real-education.
- Pritchett, Frances. "Minute on Education (1835) by Thomas Babington Macaulay." *Xu Bing:*Square Word Calligraphy Classroom The Miriam and Ira D. Wallach Art Gallery,

 www.columbia.edu/itc/mealac/pritchett/00generallinks/macaulay/txt_minute_education_1

 835.html.
- Rea-Dickins, Pauline, and Guoxing Yu. "English Medium Instruction and Examining in Zanzibar." *Language Issues in Comparative Education*, 2013, pp. 189–206., doi:10.1007/978-94-6209-218-1 11.
- Sen, Amartya. Development as Freedom. Oxford University Press, 2013.
- Shimahara, Nobuo, and Oskar Anweiler. "Education." *Encyclopædia Britannica*, Encyclopædia Britannica, Inc., 29 Aug. 2018,
 - www.britannica.com/topic/education/Education-in-British-colonies-and-former-colonies.
- Thomas, Maria. "The Cost of Getting a (Decent) Education in India Is Skyrocketing." *Quartz*, Quartz, 7 July 2015,
 - qz.com/india/445500/the-cost-of-getting-a-decent-education-in-india-is-now-staggering/.
- Tooley, James. The Beautiful Tree: a Personal Journey into How the World's Poorest People

 Are Educating Themselves. Viking/Penguin, 2009.

- VoxEU. "It Pays To Speak English." *Forbes*, Forbes Magazine, 9 Aug. 2011, www.forbes.com/sites/davos/2010/05/28/it-pays-to-speak-english/#26f8e5b669bc.
- "The World Factbook: INDIA." *Central Intelligence Agency*, Central Intelligence Agency, 26 Sept. 2018, www.cia.gov/library/publications/the-world-factbook/geos/in.html.
- "Cycle of Poverty Theory | The Diagram below Illustrates a Poverty Trap | Global Inclusion and Social Development | Pinterest | Economics, Economic Development and Business Studies." *Pinterest*, Pinterest, www.pinterest.com/pin/419679259010685038/?lp=true.

Appendix- A (Questions asked in Interviews)

QUESTIONS TO STUDENTS

- 1. What medium of instruction are you studying in?
- 2. Do you think you would learn better if you were transferred to another medium?
- 3. How competent is your teacher in the medium of instruction?
- 4. Do your parents help you at home with your studies?
- 5. Are your parents educated? What languages do they speak?
- 6. Have you ever faced any teasing/ bullying/ discrimination because of your medium of instruction? Have you ever teased anyone for these reasons?
- 7. Do you have any siblings who have dropped out of school? What medium were they studying in?

QUESTIONS TO PARENTS

- 1. Why do you believe that an English medium education is desirable?
- 2. Do you enroll your children in English tuition classes?

- 3. Do you think your children are receiving a sufficient knowledge of English through their schooling?
- 4. Are you able to help your children with their homework or studies?
- 5. Have your children ever been bullied or teased based on their medium of education?
- 6. Have your children dropped out of school? Have any of them gone on to further education?

QUESTIONS TO TEACHERS

- 1. Do you think students are learning better in medium than in ?
- 2. Do you think that Semi-English/ English medium education is detrimental to the education of your students?
- 3. Do you think students are bullied/ teased or that some sort of social hierarchy is created by medium of instruction?
- 4. How confident are you at speaking English?
- 5. What is your level of education?
- 6. Do you think Semi-English medium is a better way for students to acquire a balanced education?

QUESTIONS TO ADMINISTRATION

- 1. Many newspapers such as CareerIndia and the Indian Express reported in 2013 that the PMC would be switching all its schools to Semi-English medium. Is the switch to Semi-English medium happening? If so, what is the rationale behind it? How many schools have been converted? Where can this data be found?
- 2. Does the PMC have enough English speaking teachers to make this switch? What measures is the PMC taking to train teachers for these purposes? Where can this data be found?
- 3. Do you think that Semi-English leaves a halfway knowledge of both languages instead of mastery of one?
- 4. What are future policies that the PMC is working on with respect to issues such as these?
- 5. Is there any new and recent data that can be made available to me?