Bilingual Education and the Factors of Success in South Africa and Australia

Neha Ganapathineedi

Abstract—Bilingual education is an academic setting where the curriculum is taught in two different languages. This implies the idea that students are taught in one language half of the time and another language half the time. However, this is not always the norm and in fact there are more situations along the lines of this: the students are taught in their native language and their textbooks are in their native language. The teachers will write on the board in a second language and make their students copy the notes down into their notebooks. They do it this way because if someone were to walk in, they would view it as actual bilingual education. Although, they are technically teaching the students in two different languages which means it is bilingual education, it is not a proper implementation of it and the problem is that more countries are implementing their bilingual education this way. The problem with this way of implementing is that the students are not actually learning which defeats the purpose of having a bilingual education program when they are learning the same or less than their monolingually educated counterparts.

Index Terms—Australia, bilingual education, bilingualism, education, factors of success, South Africa

1 INTRODUCTION

Bilingual education is an academic setting where the curriculum is taught in two different languages. This implies the idea that students are taught in one language half of the time and another language half the time. However, this is not always the norm and in fact there are more situations along the lines of this: the students are taught in their native language and their textbooks are in their native language. The teachers will write on the board in a second language and make their students copy the notes down into their notebooks. They do it this way because if someone were to walk in, they would view it as actual bilingual education. Although, they are technically teaching the students in two different languages which means it is bilingual education, it is not a proper implementation of it and the problem is that more countries are implementing their bilingual education this way. The problem with this way of implementing is that the students are not actually learning which defeats the purpose of having a bilingual education program when they are learning the same or less than their monolingually educated counterparts.

2 LITERATURE REVIEW
2.1 HISTORICAL CONTEXT

Bilingual education, when implemented properly, can help many populations, especially ones where the monolingual education is taught in a language that the majority of the population does not know. This can be seen with countries like South Africa where the majority of the education is in English or Afrikaans even though there are nine other official languages and not everyone living in South Africa can speak English or Afrikaans fluently.

However, the quality of the implementation of bilingual education varies throughout the world. With many first world regions like the United States, Canada, Western Europe, Australia, and New Zealand, the bilingual education is implemented well because the government usually does not try to get away with loopholes, such as making the textbooks one language and giving the instruction in another and calling it bilingual education, and actually try to implement the education properly. In Canada, there is Quebec and the other parts of French Canada. In Western Europe, the European Union connects the many different countries so the majority of the students even learn a third language from school by the time they go off to university [4]. In Australia, the Aboriginals have successful education programs especially since they “take the language rights of Aboriginal people into full consideration” [7]. New Zealand also has the Maori indigenous population and they make sure to emphasize their importance in the nation, so the education of the Maori tends to be fairly successful as well.

2.2 PROBLEM

These are examples of the good implementation of bilingual education but the quality of implementation changes where the government is not as strong or is not entirely focused on improving the education. In places like South Africa and Tanzania, if a child is not a part of the elite population or the upper class, they could potentially go to a bilingual education school where “-the texts available in class and the written work by both teachers and learners are and are required to be in English only” [3] but the teachers speak in the native language so it is considered to be bilingual education because there are two languages involved in the teaching process. This is a problem because one of the purposes of bilingual education is to help students who do not understand the language the curriculum at a regular school is taught in. This improper implementation that makes school materials in only one language and in a language that students do not understand takes away from the purpose of bilingual education. It is also a problem that the government considers this an acceptable form of bilingual education because the standard of these schools becomes that all the texts and notes are written in English and the students are expected to copy them down without understanding. What makes this method of “bilingual education” acceptable is that the governments that implement the education this way are technically implementing bilingual education because the students are speaking in their native tongues and their textbooks and writings are in another language, usually English. The amount of understanding the students have is not usually taken into account, only the amount languages they are being taught in so their education
can be considered as bilingual education. However, this kind of improper implementation could be stopped if an efficient bilingual education template or model was created that could be applied to any area.

### 2.3 HYPOTHESIS

Even though there are many places that have successful bilingual programs, there is not a set model that has been created yet. If one gets created, it will have a positive impact on the world because it will allow the bilingual programs that have improper implementation to become better developed. However, the success of these programs depend on some major main factors that have an influence on the implementation. My hypothesis is that the main factors that influence the success of bilingual education programs are parental involvement, the number of students that speak the language the curriculum is taught in, and the year the second language was introduced.

### 3 METHODOLOGY

#### 3.1 RESEARCH STUDY

The methods used to conduct the research are a correlational study and a comparative study and these forms were chosen in order to address the question of what the essential elements of a successful bilingual program are, specifically in South Africa and Australia. The correlational study will help me see if there is a possible connection between specific factors that are a part of the implementation of a bilingual education program and the success of the programs. Then, I am going to compare the difference between the two programs and take the elements that seem to cause the most success and combine them together to come up with one bilingual education model or program that would then be the most effective in bringing success and teaching the students what they need to know.

My intention behind asking this question is to determine specific factors and elements because currently, there are many different bilingual and multilingual programs, but not all of the programs are being set up efficiently. Therefore, my goal is to determine what the main factors of success of a bilingual education program are, which will allow me to establish a possible permanent template or outline for many potential bilingual programs to be modeled after, unlike now where people are building the programs however they see fit, regardless of how successful it will be.

#### 3.2 KNOWLEDGE GAP

The main knowledge gap with bilingual education is what the most effective model of a bilingual program would be, specifically one that could possibly be implemented everywhere in the world while overcoming barriers that could potentially decrease the programs such as cultural factors, geography, or wealth. Because I wanted to find a balance among different bilingual programs and ensure that my conclusion could be implemented in vastly different places, I chose South Africa and Australia as the two countries for my research, because they had some similarities between them, but remained mostly different, especially with their native populations.

#### 3.3 FACTS AND STATISTICS

The majority of people in South Africa do not speak English or Afrikaans as their first language or even their second language, with 22.7% speaking Zulu and 16.0% speaking Xhosa [11]. However, despite the fact that the majority of people do not speak English or Afrikaans, the school curriculums are usually taught in both of those languages. In Australia, the majority of people do speak English, but this can sometimes cause struggles for the Aboriginal population, an indigenous population in Australia, who are the minority and speak only a small amount of English. Another one of the reasons I chose South Africa and Australia is because of the stark differences in the roles of their governments on the bilingual education programs. According to Jie Li, a professor within the Department of East Asian Languages and Civilizations at Harvard University, many different policies have been established to help better the bilingual education of Aboriginals in Australia. There were many policies created in order to address the rights of Aboriginals and their education such as the Aboriginal Education (Supplementary Assistant) Act of 1989, which wanted to increase the amount of Aboriginals getting educations and increase the amount of Aboriginals that were employed, and the Aboriginal Education (Supplementary Assistant) Act of 2000, which worked to provide financial assistance to advance the education and other related activities of Aboriginals and indigenous people [7].

#### 3.4 HYPOTHESIS

I believe that the main factors that influence the success of bilingual education programs are parental involvement, the number of students that speak the language the curriculum is taught in, and the year the second language was introduced. After I determine the factors that are most influential on the success of the bilingual programs, I am going to find out how the factors are embedded within each program. For example, with the factor of second language introduction, I would see when the schools introduce the second language and how old the students are at the time.

Then to involve the comparative study and continue the example of the second language introduction, I would compare the age of introduction between Australia and South Africa and then say that the ideal model would start the students on their language learning path at the age or school year of whichever country starts them earlier. I will discover these various data points by looking at the levels of success for each of the programs based on reviews or studies done by other researchers such as Dr. Brock-Utne and Dr. Desai, who did their study over the language of isiXhosa and the determination of the various factors and their success will be done through the correlational study.

#### 3.5 SOURCE COLLECTION

The sources I got for the correlational study were found using various keywords and phrases such as “bilingual education” or “multilingual education” through academic databases and then I searched specifically for sources that were from the countries they were about such as the Australian Education Review, which was written and published in Australia. I also searched for theses or academic sources that were discussing either South Africa and Australia from a broad perspective. From there, I took the different factors and then I
combined them together to create a template or model that aimed to be universal and applicable to the majority of the world so the knowledge gap about what truly makes a successful bilingual program could be fulfilled.

3.6 HYPOTHESIS REASONING

My hypothesis is that the main factors of influence are parental involvement, administrative setup, and the age of second language introduction. The influence of parental involvement can be seen when Corinne Brion, an associate professor at the University of Dayton with a Ph.D. in Leadership specializing in quality education, said “rural children often do not have as many resources as students in cities, they have less-qualified teachers, and often their parents are unable to help with their schoolwork” [2]. Parental involvement or the amount of help parents give is not always something that can be controlled. Sometimes, students need help but in the case of bilingual students, because their parents do not understand the language the curriculum is taught in, they cannot help their children. This is why sometimes parents in areas of South Africa are unable to help their children because the textbooks are not written in languages other than Afrikaans and English beyond grade four [3]. According to Dr. Birgit Brock-Utne, who has a Ph.D. in Education and Dr. Philos in Political Science, and Dr. Zubeida Desai, a professor at the University of the Western Cape with a Ph.D. in Education, specializing in education in the mother tongue, the lack of curriculum in the language the students’ mother tongue causes a lot of trouble when students do not speak the language the curriculum is taught in and then are unable to learn as successfully [3]. The language of materials relates to the factor of administrative setup or framework because the schools and government could try and increase the amount of materials and the languages they are written in. However, because they are not, they leave a majority of the population not understanding what they are learning because it is being taught to them in a language they do not understand.

The age of second language introduction also has a large effect on the success of students as is evident by the European Union compared to the United States. In Europe, compared to the United States, people are able to speak more languages and have a higher percentage of the population that can speak different languages. In 2012, 54% of Europeans spoke at least one other language [13] compared to the United States in 2016, where only 21.6% of the population could speak another language [12]. One of the main reasons that Europeans were able to speak more languages compared to Americans besides exposure and close proximity to different cultures was because they had been required to learn other languages in schools. While many schools in the United States require at least two years of foreign language classes, many of the students start learning their second language in secondary school which is different from many Europeans who according to the Pew Research Center, a nonpartisan nonprofit that studies political and global issues, begin to learn their second language as a required subject in school between the ages of six and nine [4]. Many studies show that teaching children languages at a young age makes them more successful because at younger ages, children take in all the information around them and soak it up like a sponge [5]. This explains the disparity between the percentages of Europeans that speak a second language versus the number of Americans that speak a second language. This proves that students will be more successful and will retain their second language if they are taught at a younger age.

I believe that the bilingual programs in Australia will be more successful than they are in South Africa because Australia is a more developed country and as seen by their GDPs per capita, the economic output for the population, of $50,400 in Australia [1] and $13,600 in South Africa [10]. This means that Australia has a better economy than South Africa so they will be more likely to have better bilingual education programs because they have more money that they can put into them.

3.7 LIMITATIONS

Some limitations of the research is that the data is coming from various sources that were not all published in the same year and because of this, the timeliness of the data might be slightly inaccurate so that might cause my conclusion about the success of bilingual education programs in South Africa or Australia to be slightly inaccurate as well. However, this should not affect the bilingual education model that I come up with because the model will most likely only look at factors of success that are not affected by time such as language of instruction or teachers.

Another limitation might be that it will be somewhat difficult to compare the programs of South Africa and Australia because I am not studying just one South African bilingual program and one Australian bilingual program. I was initially unable to find enough data from just one program of each country alone so I had to find multiple different bilingual programs and gather data about them. Many of the various cultural and administrative differences between South Africa and Australia might make it somewhat difficult to compare the two accurately. Because more than one program had to be studied from each country, the programs within the countries themselves might be set up differently depending on how they were set up and who they were funded by so the data between programs from the same country might contradict each other.

Overall, the limitations seem to affect the comparative part of the study where I try and see which country has been more successful in setting up their bilingual programs but the proposed bilingual education model I hope to create does not really seem like it will be affected by that because my intention is to take any possible factors that leads to success and see how it can be shaped to ensure the further success in the students learning.

4 DATA COLLECTION & ANALYSIS

4.1 DATA COLLECTION - AUSTRALIA

The main goal of my research was to try and provide a definite bilingual education model that could be applicable to everyone and everywhere. This means whether there is a child from an upper class family from Western Europe or a child from the slums in India, this model would still be effective in teaching the students as much as possible. In order to get this model, I wanted to research the different factors of success of
bilingual programs in South Africa and Australia and this involved me looking through seven different academic sources, three about Australia and four about South Africa and throughout the seven sources, I had ten different factors of success.

The first source about Australia was the Lattimore Thesis, which was an undergraduate research study about the development of bilingual education in Australia and Peru. Throughout reading the paper, I collected various pieces of qualitative data that could be used to possibly discover the factors that influence success in bilingual schools in Australia and I was able to find data for all of the final ten different factors of success except for parental involvement. The second source about Australia was the research paper written by Jie Li. Throughout reading Li’s research, I continued my data collection method that I started with while reading the Lattimore Thesis and I was able to find four out of the ten factors of influence. The final source about Australia was the Australian Education Review which was a source from a textbook that covered bilingual and multilingual education in Australia and discussed how these programs were set up and the positive and negative effects of these programs. I was able to find data that fell under the themes of eight of the ten different factors but some of the data only aligned with each factor on time.

<table>
<thead>
<tr>
<th>Factors of Success</th>
<th>Lattimore Thesis</th>
<th>Li</th>
<th>Australian Education Review</th>
</tr>
</thead>
<tbody>
<tr>
<td>Language of Instruction</td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Language Policy</td>
<td>4</td>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td>Age of Instruction</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Definitive Terms</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Framework</td>
<td>1</td>
<td>4</td>
<td>15</td>
</tr>
<tr>
<td>Teachers</td>
<td>2</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Culture</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Location</td>
<td>1</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Materials</td>
<td>1</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Parental Involvement</td>
<td></td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

4.2 DATA COLLECTION – SOUTH AFRICA

The first source about South Africa was a UNICEF graphic, which displayed varying facts and statistics about South Africa’s education, specifically with a focus on their bilingual and multilingual education in relation to the country’s 11 official languages. From this source, I was only able to find data about the language of instruction, the language policies, and the culture. The second source about South Africa was the Mabiletja Thesis, which was a doctoral thesis that focused specifically on multilingual education and how it can be established effectively. Throughout this source, much of the data fell under only two out of the ten factors, which were framework and culture. The third source about South Africa was the Brock-Utne and Desai research study that researched how efficiently the students were able to communicate and write in isiXhosa and how their success in isiXhosa related to their success in English. The study helped show the lack of quality in the bilingual education of the school they were studying because the students were unable to write nearly anything in English that was remotely understandable. From this source, the qualitative data fell under the categories of language of instruction, language policy, age of instruction, framework, and culture. The final source about South Africa was a research paper done by Corinne Brion that was actually focused on Burkina Faso but was about how bilingual education could be used to increase education statistics like literacy rates, so it related to the topic. The various data collected fell under the themes and factors of language policy, framework, and parental involvement.

<table>
<thead>
<tr>
<th>Factors of Success</th>
<th>UNICEF</th>
<th>Mabiletja Thesis</th>
<th>Brock-Utne + Desai</th>
<th>Brion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Language of Instruction</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Language Policy</td>
<td>1</td>
<td>4</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>
4.3 SOURCE COLLECTION + DATA COLLECTION METHOD

All of the sources were found through searches within academic databases that were filtered to academic journals. If the sources were not found in the databases, then they were found from an educational place like a college or university so they were reliable sources and the sources were found to be by educational sources within South Africa and Australia. If they were not from a university, they were still considered reliable because they either came from an actual textbook like the Australian Education Review or they came from a reliable organization like the United Nations such as with the UNICEF graphic.

My data collection method for each of the sources was to open a separate document and copy or note down the different qualitative data that the authors linked to success or were heavily influential on the success of students or of the programs. I did this for each of my sources and then looked back at all the prior research I had done and organized them into ten different themes, which was how the ten different factors of success were created. From there, I went to each of the seven documents, one for each source I had and then I categorized each of the different data pieces I collected to fall under each factor’s category. The ten factors that came from the themes were language of instruction, language policy, age of instruction, definitive terms, framework, teachers, culture, location, materials, and parental involvement.

The data was coded from qualitative to quantitative to make the conclusions truly objective and not based on subjective analysis. This was done by taking all the data and organizing it into themes and then the number of data pieces was counted up under each theme. Whichever theme had the most data under it was determined to be the most influential factor and the lower the numbers got, the less influential it was.

4.4 FACTORS

The language of instruction is about the language used within schools and sometimes this corresponds to the official languages of the country or the other languages spoken so whenever a piece of data is labelled with this factor, it is because it is discussing specific languages or how to choose which language to make the language of instruction.

The factor of language policy is more focused on the political side of bilingual or multilingual education and it is more focused on the government’s actions and how they affect the bilingual or multilingual education. Because there are some policies promoting indigenous languages and minorities and there are some policies promoting English-Only ideas, any qualitative data that is discussing policy is marked under this factor in order to consider the political aspect.

The factor of age of instruction is about when the students start learning the second or third language and this is usually marking the data that is discussing when students start learning their second language or what year their native language is not used anymore and instead the second language is used. Any reference to an age or year of schooling is usually marked under this factor.

The factor of definitive terms is referring to whenever the source discusses how definitions of certain ideas are different in different people’s perspectives such as fluency. Whenever, a factor is marked definitive terms, it is because the definition needs to be clarified and seen as the same from everyone’s perspective if success is to occur.

The factor of framework is one of the more vague factors and it is discussing a lot of different things, whether it is talking about the different types of bilingual education models that are used within schools such as 50-50, 90-10, or immersion. It could also be talking about how the second language is used as a part of instruction and it could be talking about the different setups of the schools. A lot of things fall into this category because its main focus is on the setup of the school which involves many things.

The factor discussing teachers of bilingual or multilingual education is a factor that has a focus on all things teacher so it could be referring to the training of the teachers, their years of experience, and how it relates back to the education or school.

The factor of culture is focused on how the culture of the area perceives the education or the languages being taught. An example of this would be in South Africa, they revere English because they believe that because it is a global
language, it will benefit the children in the future. However, in Australia, sometimes indigenous languages are looked down on because they do not have much of a global impact. This factor is related to the perspectives of the people in the country and how they view the different languages, whether it is their native language or their L2, which is their second language.

The factor of location is focused on where the schools are located. An example of this is a reference in the Lattimore Thesis where the author discusses that a school in Peru was placed in a city and many students attended it but because it was not placed near where students from rural areas live, they were unable to travel as far.

The factor materials is discussing the materials necessary for the success in schools so it could be discussing textbooks in either of the languages of instruction or it could be discussing the materials and resources necessary to build an actual school itself and maintain it.

The final factor is the parental involvement factor and this factor is referring to how much parents are involved in their students’ educations and how much they participate and try and get involved with the school whether it is with asking questions, participating on boards, or having conferences with their child’s teachers.

4.5 DATA ANALYSIS

Once I collected all the data, I began looking for any patterns that emerged which resulted in the creation of the themes. I then made all of the qualitative data into quantitative data in order to increase the objectivity of the results. This also made it easier to do a comparison to see which factors of success had the most influence and it was determined that overall, between South Africa and Australia, the factors of success that were most influential on bilingual programs were language policy, framework, and culture.

For South Africa, the main factors of success were language policy, framework, and culture and for Australia, the main factors of success were also language policy, framework, and culture but many of the sources about Australia noted that the other seven factors had a minor influence on the success of students which the sources about South Africa did not note.

This pattern led me to believe that the most influential factors of success, in general, would be language policies, framework, and culture, and these factors will most likely be most influential and applicable in many different types of countries because there are many differences between South Africa and Australia that would have accounted for the disparity between most countries. This means that when creating a potentially highly applicable bilingual or multilingual education model, those things have to be kept in mind if an efficient model that will give students a proper education is to be created.

5 CONCLUSION

5.1 HYPOTHESIS VS. CONCLUSION

My initial hypothesis was that the main factors of influence were parental involvement, administrative setup, and the age of second language introduction. After my research and data collection over bilingual programs in South Africa and Australia, my conclusion is that the main factors of influence are language policy, framework, and culture.

The similarities between the hypothesis and conclusion are with the administrative setup and framework because both factors are very similar and involve the way that the bilingual programs would be set up and who would run them. The differences are that while parental involvement and age of instruction were found to have minor influence, they are not the most influential factors whereas language policy and culture have more of an influence on the success of students.

5.2 POTENTIAL BILINGUAL EDUCATION MODEL

The basis of a bilingual education model would be the factors of language policies, framework, and the culture. For language policies, some examples of policies that would want to be implemented are policies that promote all languages. In some places, there are a lot of English-Only policies so in order to promote bilingual education and create an effective bilingual education model, policies that promote all languages would help increase the effectiveness of a program by allowing students to speak their native language even if it is a minority language without fear of discrimination. Another aspect of a bilingual education model that would fall under language policy would be creating a set requirement under law that explains what bilingual education is. This would better bilingual education because a set definition of it under law would prevent people from just giving students a textbook in one language and teaching them in another language and calling it bilingual education. A final idea that could be implemented that falls under language policy is a test that students must take at the end of the year of their program. This will allow the government and other organizations to see how successful the students have been in learning and a specific requirement for number of students that must pass will help them determine if a program is a success or a failure.

The second aspect of the bilingual education model would be the framework or administrative setup of a program. The framework would involve various different things including things that might have been factors that were considered to have minor influence on either of the places. These things would be age of instruction, because students tend to learn languages easier when they are younger; number of students per classroom, because students tend to be more successful if there is a smaller student-teacher ratio; qualifications of teachers, because it needs to be proven that the teacher is fluent in both languages the program is being taught in; and the location, because some students live in rural areas that do not have as easy access to education so schools and programs should be implemented in those areas.

The final aspect of the bilingual education model based on my conclusion would be the factor of culture. Culture includes the beliefs, values, taboos, and stereotypes that people hold in their minds and these can potentially cause oppression and marginalization. The factor of culture is hard to manipulate because culture is what people believe and what their opinions are and manipulating people’s perceptions is quite hard and this is where a limitation of my conclusion and model come in.

5.3 LIMITATIONS + IMPLICATIONS

The main limitation is that culture would be the hardest factor to manipulate because it is dependent on the
taboos, beliefs, and stereotypes that people hold. Because it is very hard to change people’s opinions and beliefs, the factor of culture would have to be changed and manipulated through the factor of language policy. For example, in Australia, sometimes, the Aboriginal languages are not always valued and can be looked down upon because they do not have much of a global impact. This belief that they are not valuable is a cultural belief that could influence the success of a bilingual education program. However, getting people to change their opinions would be hard so instead of trying to influence the culture, a law or act promoting the preservation of indigenous languages due to their impact on history could be used to try and change the culture and increase the levels of success.

The implications of my conclusion and my bilingual education model are that students would be exposed to more languages which will allow them to be well-rounded and more knowledgeable about other cultures. My model would also help increase literacy rates because not only will students be able to speak and understand and read and write in one language but they will also be able to do it in another language. This model would also promote education development because specific types of programs that guarantee success would have to be implemented and this model would also promote more children going to school. In some places in the world, parents opt to pull their kids out of school after a certain point and this is because they need money so they send their kids to work. However, bilingual education would teach students a second language that will usually have a large impact like the lingua franca, English, and the potential job opportunities that come with these skills would push parents to keep their kids in school. The final idea that would guarantee success of the model was if an international organization like the United Nations was to watch over because not only would they be able to keep everything in check, but they would also be able to see if these programs and this model guarantee the success of students, which is what we need no matter where the child is in the world.

6 REFERENCES


