Feasibility Study on Establishing a Bilingual School

ASHESI UNIVERSITY COLLEGE

FEASIBILITY STUDY ON ESTABLISHING A FRENCH-ENGLISH BILINGUAL SCHOOL AT MEDIE IN THE GA-WEST DISTRICT FOR MR. AND MRS. PAINTSIL

APPLIED PROJECT

BY

NAA OKAILEY OKYNE

Applied Project Report submitted to the Department of Business Administration, Ashesi University college in partial fulfilment of the requirement for the award of Bachelor of Science degree in Business Administration.

SUPERVISED BY: Ms Nepeti Nicanor

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Declaration
I hereby declare that this Applied Project report is the result of my own original work and that no part of it has been presented for another degree in this university or elsewhere.

Candidate’s Signature: ……………………………………………………………

Candidate’s Name: Naa Okailey Okyne

Date: …………………………………………………………………………

I hereby declare that the preparation and presentation of this Applied Project Report was supervised in accordance with the guidelines on supervision of applied projects laid down by Ashesi University College.

Supervisor’s Signature: ………………………………………………………

Supervisor’s Name: Ms Nepeti Nicanor

Date: …………………………………………………………………………
Acknowledgments
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Executive Summary

Mr. and Mrs. Paintsils are a young couple who recently bought a plot of land at Akutuase/Medie and intend to develop the land by establishing a bilingual school on the land. The main objective of this study is to determine the feasibility, viability and desirability of establishing a bilingual school in Akutuase.

Secondary data collected from online journals, news articles and scholarly articles showed that bilingualism is being bilingual is important because it gives a person a competitive edge in the society and aids in communication. The best form of bilingual education is one where the pupil develops mastery over the two languages whereas the best structure is the 50/50 structure with both languages being used equally in schools. It is essential to study French in Ghana because Ghana has French-speaking neighbors and is also a member of bodies like the Economic Community of West African States (ECOWAS) where French is one of the languages for communication. Nonetheless, factors that would hinder the project of the clients include inflation rates which was 12.80% as at March 2017 and government establishing about a hundred community day schools.

To test for the viability, thirty parents were interviewed from neighboring towns around Medie. From the study conducted it was clear that there was no other bilingual school in the area and parent were willing to send their children to such a school provided it was at an affordable cost. However, financially, the project will not be feasible as the clients will not be able to recover their initial investments even after thirty years. The proposed solution therefore is a lean-start-up model where the clients run series of tests on generated hypotheses to assess the reaction of customers and make the necessary adjustments where needed. It is flexible and less costly as it does not require a large initial investment.
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CHAPTER 1: INTRODUCTION

1.1 Profile of Clients.

My clients are Mr. and Mrs. Paintsil, young professionals residing in Accra. Mrs. Paintsil has been working as a bilingual secretary in the education sector for the past five years. She studied at University of Cape Coast where she graduated with a first degree in French and English. She has hopes of furthering her education preferably branching into the field of school management. She is good at research and managing and loves to read during her leisure time. Mr Paintsil on the other hand works as an asset coordinator. He also completed his tertiary education at University of Cape Coast where he read mathematics and statistics. The couple are within the lower-middle income bracket. The couple recently bought a two-plot land at Akutuase/Medie in the Ga-West district where they are looking forward to establishing a French-English bilingual school targeted mainly at Ghanaians.

1.2 Context

Mrs. Paintsil, one of the clients, works as a bilingual secretary in one of the recognized bilingual schools in Ghana. Mrs. Paintsil, aside writing reports, answering phone calls and responding to parents’ concerns, also handles the admission process. Some of the challenges she has witnessed while on her job is that some parents, especially the Anglophones with little or no French background find it difficult to read the school newsletters which are in French or even help their children with their assignments. Additionally, she witnesses tragically how every academic year, pupils who will like to be enrolled into the school are turned down either because the tuition fee is too expensive or the pupils failed the entrance examination, since it is a requirement for pupils seeking to
enroll into grade 1 onwards to write French test. It is for these reasons that the Paintsil decided to use their land to establish a bilingual school.

1.3 Problem Statement

Mr. and Mrs. Paintsil own a two-plot land at Akutuase near Adjen Kotoku in the Ga-West district in the Greater Accra Region and they intend to establish a bilingual school on it to help Ghanaians acquire bilingual skills and experience to give them a competitive edge in the world of work as employers prefer employees who are fluent in more than one language. In addition, they want to meet the needs of the market that are not currently met by the current bilingual schools. Nonetheless, Mr. and Mrs. Paintsil do not know if there is a market for such a school in Ghana and at their intended location, Akutuase/Medie. They do not have the skills or know-how required to develop and manage such a school. Hence, the main problem is how to determine whether it will be feasible and desirable to establish a bilingual school at Akutuase.

1.4 Justification of the project

According to France diplomatie (2017), French is the sixth most spoken language in the world. It is one of the official languages for organizations such as the United Nations (U.N) and the Economic Community of West African States (ECOWAS). Sub-Saharan Africa and regions around the Indian Oceans make up 36.03% of the population that speak French. Additionally, there are twenty-six French speaking African countries, ten of which are in West Africa alone. (Chigozie, 2016). Also, Ghana was recognized by l’Organisation Internationale de la Francophonie (OIF) as an associate member in 2006. The country is bordering francophone countries such as Ivory Coast, Togo and Burkina Faso respectively (2013). However, based on personal experience, research and observation of the
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educational structure in monolingual schools in Ghana, French is often taught as a foreign language and an optional course at the senior high school and tertiary level. Nonetheless, the world has become a global village and highly competitive, thus knowledge in a second language is very essential to keep up with the competition.

1.5 Research Objectives

The purpose of this study is to find out if there is a market for a bilingual school at Akutuase. The objectives of this study are:

I. To determine the feasibility, viability and desirability of establishing a bilingual school in Akutuase.

II. To determine what education level to offer at such an institution.

III. To find out the regulatory and technical requirements of establishing a private bilingual school in Ghana.

IV. To find out key tools for establishing and managing a private school.

1.6 SWOT Analysis of The Paintsils

1.6.1 Strength

Mrs Paintsil studied French at the University of Cape Coast and has been working as a bilingual secretary for approximately six years. Based on her experience at the French school she is equipped with some skills and knowledge about the bilingual system. Additionally, Mr. Paintsil is well versed in accounting and finance hence can manage the financial issues of the school. Furthermore, the couple already have a site for the school.
1.6.2 Weaknesses

The couple fall within the low to middle income range so financing the project from their personal savings will be challenging. They do not have sufficient knowledge and technical skills in the establishment and management of a school.

1.6.3 Opportunities

Recently, most Ghanaians are interested in their children learning a second language. Also, there is a large expatriate market in Accra hence there is ready market for such schools. Furthermore, the current bilingual schools are insufficient to cover the demand. Lastly, Mrs. Paintsil is considering taking a course in school management which can augment her skills and knowledge.

1.6.4 Threats

The site selected for the school is in an isolated area which is yet to be developed. The area has sparse settlements and there is no infrastructure like good roads. A such, it is possible that parents will not want to enrol their children in a school at such a remote location. Also, the couple have not found out what the area has been zoned out for.

In the next chapter, the concept of bilingual education is explained based on literature review. Further explained in the chapter are the steps for establishing a private school and the elements for conducting a feasibility study
CHAPTER 2: LITERATURE REVIEW

This chapter covers the information from secondary and literary writings. The information covers bilingualism, bilingual education, how to set up a school, the business environment of Ghana, educational system in Ghana and how to conduct a feasibility study

2.1 Definition of bilingualism

To aid in communication humans use different methods. This could be in the form of sign language, symbols, imagery, music or poetry. Nonetheless, the commonest method is through language. According to Okal (2010), language is “a system of symbols designed for the purposes of communication”. It possesses a lot of attributes like being directed by rules, used as a medium for giving and receiving information, showing one’s sentiments, exercising authority and serving as an identity. The first language that any person learns is the one spoken by his or her family. This becomes their mother language. All the same, a person’s mother language may not necessarily be the common language of the locality. To aid in easy communication, one would have to adopt a new language. This language becomes a second language. Hence, a second language may be defined as “a language that is not the native language of the speaker, but which is used at work or at school”, per the Collins dictionary. Communicating in more than one language gives rise to terminologies like bilingualism and multilingualism.

Bilingualism is the ability to be proficient written and verbally in two languages. Multilingualism, on the other hand, is the ability to understand and speak several languages. Okal (2010) further goes on to explain that it is not only about speaking the
language, it includes being as equally proficient in those languages as one’s native language. Nonetheless, it has been observed that there is proficient domination in one language both in oral and written communication in a multilingual system as compared to the others.

As of 2009, there were 6,909 different languages in the world (Anderson, 2012). Out of this number, the ten most spoken languages are French, Malay-Indonesian, Portuguese, Bengali, Arabic, Russian, Spanish, Hindustani, English and Mandarin (Jamie, 2008). It is assumed that about 50 million people speak each of these languages as their first language and there are about a billion people in the world who speak more than one language. (Okal, 2010)

2.2 Importance of Bilingualism

Primarily, being proficient in a second language makes it easier to communicate in the world and gives an edge in the job market. Currently, the world has become a global village and with people engaging more and more in international trade, being bilingual helps to break the language barrier. Furthermore, studies have proven that being bilingual improves the executive function of the brain. That is the part of the “brain used for planning, solving problems and performing various mentally demanding tasks” (Bhattacharjee, 2012). This is because a bilingual often switches languages and this requires keeping track of changes in the environment like the people he or she may be interacting with as well as thinking in both languages. Additionally, knowledge of a second language helps to better appreciate one’s native language. After one has learnt another language, it makes it easier to compare the two languages in aspects like sentence structures and expressing tenses. Unconsciously, one begins to understand his or her native language and appreciate how it is structured.
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(Parisi, 2015). Finally, Myler (2017) also stated that studies have shown that bilinguals have a high resistance to dementia and Alzheimer’s disease compared to monolinguals. For example, bilinguals experience dementia symptoms five years after monolinguals with the same disease.

2.3 Bilingual Education

Andersson, Boyer &Southwest Education laboratory (1970) define bilingual education as

“Bilingual education is the instruction in two languages and the use of those two languages as mediums of instruction for any part, or all, of the school curriculum.”

Mr. Stephen May, an international authority in language rights, bilingualism and bilingual education finds this definition very important because, it does not take into account the programs where there the secondary language is thought as a subject alone or programs where there are bilingual students but they are there are not being instructed bilingually. (Cummins & Hornberger, 2008). Under the bilingual system, both the content and the mode of delivery must be in the two languages.

2.4 Models of Bilingual Education

Immersive bilingual education, have been put into many classifications. One of the classifications, given by Stephen May (2008), is that the program could be additive or subtractive. The program is said to be subtractive when it promotes monolingual learning in the dominant language (L2), such that the first language is either lost or replaced. On the other hand, the program is said to be additive when it enhances bilingualism and biliteracy in the long run. That is, the student gains another language.
Other forms of the program classification that Stephen May (2008) provided are transitional, maintenance, enrichment and heritage models of bilingual education. These classifications are explained below:

2.4.1 Transitional bilingual education: this begins at the kindergarten or primary school level. After 1-2 years, students are no longer taught in their primary language to improve the linguistics and academic proficiencies in the second language.

2.4.2 Maintenance bilingual education: this method tries to keep the identity and culture of the students (the minority language). Learning the second language (L2) may begin at an early stage, however, the main aim is to develop both languages side by side, with the first language (L1) serving as the building block for the other.

2.4.3 Enrichment bilingual education: “this focuses on teaching students, academic proficiency through the medium of second language, whereupon literacy in the second language can be attained” (Pacific Policy Research Centre, 2010). This program has the same goal as the maintenance program, however, “they specifically seek to extend the influence of the minority language in an integrated national society. The goals are more than linguistic. It aims for cultural pluralism and autonomy of cultural groups” (Pacific Policy Research Centre, 2010).

2.4.4 Heritage bilingual education: it overlaps with both the maintenance and enrichment programs. All the same, its differentiating factor is that its aim is to recover lost or dying out languages.

In my opinion, I believe the best form of bilingual education would be one that helps the child to be proficient in the new language as well as his or her mother tongue. The main
The aim of a bilingual education, after all, is to give the child an upper hand in the world through his or her knowledge of other languages and cultures. Thus, if the education results in the child losing his or her mother tongue, then it would be appropriate for the child to undergo a monolingual education which would at least facilitate communication with his or her immediate family members and society. Table 1 below gives a summary of these programs. It should also be noted that the aims provided are general in nature.

Table 1

*Summary table of the classification of the bilingual education program*

<table>
<thead>
<tr>
<th>Model</th>
<th>Immersion type</th>
<th>Aim</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enrichment</td>
<td>Additive/Strong</td>
<td>The aim is bilingualism and biliteracy as well as extension of the minority language and culture into the community and nation.</td>
</tr>
<tr>
<td>Heritage</td>
<td>Additive/Strong</td>
<td>The aim is rejuvenation of an indigenous language. The aim is usually bilingualism and biliteracy, although the heritage language can take priority.</td>
</tr>
<tr>
<td>Maintenance</td>
<td>Additive/Moderately strong</td>
<td>The aim is bilingualism and biliteracy, albeit somewhat limited. The student’s L1 is maintained so that it can become the basis for L2 learning, but the L2 is not developed or extended. The student’s culture and identity is affirmed.</td>
</tr>
</tbody>
</table>
Transitional Subtractive/weak

The aim is monolingualism. Instruction in the student’s L1 is temporary because the aim is to leave that behind and teach only using the L2.
The dominant culture and identity is affirmed.

Retrieved from (Pacific Research Policy Centre, 2010).

2.5 Academic Achievements

So far, it has been identified that students excel academically, under the two-way immersion system as compared to other forms of language teaching and learning. Language minority students, when tested in their native language, students learning a foreign language perform better because of their enhanced thinking ability (Greene, 1998; Thomas, 2002; Willig, 1985). May (2008), also pointed out that an additive education is bound to result in academic excellence whereas a subtractive program would not only weaken the students’ knowledge of the two languages but also result in poor academic performance over time.

Nevertheless, there is still a controversy as to whether scholastic accomplishment is always better under the two-way immersion or bilingual programs (Baker & DeKanter, 1981; Rossell &Baker, 1996; Rossell &Ross, 1986). Based on the research conducted by the Pacific Research Policy Centre (2010), findings proved that even though caution would have to be taken when drawing up a design for the program, its implementation and development, the bilingual or two-way immersion program cannot be fully rejected. Instead, the research found flaws in the previous researches conducted (by the names mentioned above) in the sense that they conducted a quantitative research to measure
uniform indicators of academic achievements like test scores forgetting that it would be hard to compare data as the methods of bilingual or immersion programs differ from school to school.

In 2006, Norm Gold conducted a study to measure the success of schools using the bilingual system in South Carolina. For this study “a school was considered successful when evidence showed that English learners showed proficiency in English and that both English learners and Latino students met grade level standards in language arts and mathematics in proportions like or greater than state averages” (Pacific Research Policy Centre, 2010). One of such school was Breeze Hill Elementary school. It had implemented the bilingual system for fourteen years (from 1999 through to 2005). The school followed a 70:30 model and had about 75% of its population being Spanish speakers trying to learn English. From kindergarten through to grade one, instruction was 70% Spanish and the method kept changing in the higher levels and by the time the kids were in grade four and five, instruction was mostly done in English. The program was designed in such a way that students could develop literacy in both English and Spanish. The teachers collaborated frequently to teach English language development to English learners in both the complete English immersion classes and bilingual classes (Pacific Research Policy Centre, 2010). When the students wrote the English tests, “English learners exceeded the Title III NCLB Annual Measurable Achievement Objectives for progress in learning English and for attainment of English proficiency and the school also met the target for English Language Arts in 2005” (Pacific Research Policy Centre, 2010).
2.6 Pedagogy

Countries adopt various immersion structures for their bilingual education program. In California, the bilingual programs have a 90/10 immersion structure, with 90% of the courses being taught in the minority language and 10% in the majority language (90% Spanish and 10% English). Other programs also use a 50/50 structure. Most elementary schools, however, practice a 100% two-way bilingual immersion program and move on to a 50/50 structure, when the students become teenagers (Pacific Research Policy Centre, 2010). In Ghana, instruction is done in the English language and French is taught as a subject, thus relating it to the definition of bilingual education given by Andersson & Boyer, Ghana does not practice bilingual education.

In 2007, the Centre for Applied Linguistics released a report that suggested features for a successful dual language education to pedagogy and many more. This information will be beneficial in helping the clients know how to structure the curriculum for their school. Some notable features from this report have been highlighted in Table 2 below.

Table 2

<table>
<thead>
<tr>
<th>Method</th>
<th>Detail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equitable Interaction</td>
<td>Promotes positive interactions between the teachers and students. When implemented evenly in a class with a mixture of L1 and L2 students, it helps both groups to perform better academically.</td>
</tr>
<tr>
<td>Targeted and Varied Teaching Techniques</td>
<td>Using a variety of teaching techniques that correlates with various learning styles. This method helps students with different language proficiency levels position their learning more efficiently to the curriculum.</td>
</tr>
<tr>
<td>----------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Student-Centred Teaching and Learning</td>
<td>This program should be student-centred. Reciprocal interaction is preferred to teacher-centred knowledge transmission and is associated with higher-level cognitive skills. In classrooms with mixed L1 and L2 students, a bilingual program should encourage students to share their linguistic codes and cultural knowledge with other students.</td>
</tr>
<tr>
<td>Sharing between learners</td>
<td>Cooperative learning strategies should be encouraging. In a classroom with ethnically and linguistically diverse students, academic achievement improves when students collaborate interdependently on common objective tasks and share work experiences. Additionally, students’ expectations and attitudes toward each other become more positive</td>
</tr>
<tr>
<td>Language through Common Task Orientation</td>
<td>Language transfer is not always a result of cooperative learning strategies, and attention should be paid to the type of task. Linguistic knowledge transfer will occur when cooperative learning strategy is focused around a language task that facilitates the students sharing language knowledge</td>
</tr>
</tbody>
</table>

Adapted from (E.R. Howard, Sugarman, J., Christian, D., Lindholm-Leary, K.J., & Rogers, D., 2007)
2.7 Analysis of the General Environment: Pestle

2.7.1 Political factors

Over the years, the number of years for schooling has fluctuated, depending on the ruling government. In 2009, under the governance of the National Patriotic Party (NPP), the number of years for senior high education was changed to four years. This was to solve the problem teachers faced concerning inability to complete the syllabus and students not being well prepared for the West African Senior Secondary Certificate Examination (WASSCE). However, after the New Patriotic Party (NPP) handed power to the National Democratic Congress (NDC) in 2012, the educational system was shifted back to the three-year system. This resulted in instability in the educational sector.

Moving on, His Excellency John Dramani Mahama promised to construct two hundred community day schools during his first year in office in 2013 according to The Daily Guide Africa (2016). Before the general elections on December 7, 2016, one hundred and twenty-three (123) of these schools were under construction. There was a change of government after the elections, which means that the duty has now fallen into the hands of the new government. There are doubts as to whether the new government will continue with the projects since they also have their own agenda. These schools ranged from primary to secondary schools and are in every region in Ghana. In Accra, some of such schools can be found at Kwabenya, around the atomic roundabout and Mallam, in the Ga East district. Nonetheless, these schools especially those in operation serve as competitors to my clients as they would both be competing for students. Also, since my clients are entering the education sector, changes in educational policies by the governing party will also affect their establishment even though it is intended to be a private establishment.
2.7.2 Economic Factors

The inflation rate in Ghana was 12.8% in March 2017. This was a 0.4% fall from the 13.2% inflation rate recorded in February 2017 (Trading Economics, 2017). Dr. Nyarko, a statistician for the Ghana Government reported that the transportation sector recorded the highest inflation rate of 40% (Ghana, Business News, 2016). This means that the cost of transporting building materials, students or travelling to and from work have also increased. Education had an inflation rate of 27.7%. Furthermore, on the regional basis, Accra was one of the cities that recorded an inflation rate (22.9%) higher than the country’s average of 19.2% (Ghana Business News, 2016). According to the World Bank (2016), the GDP of Ghana as at 2015 was $37.54 billion. By the end of the third quarter of 2016 it grew by 4.1% year-on-year (Trading Economics, 2017).

The World Bank reports that 48% of the youth (15 to 24 years) in Ghana are unemployed and in a survey conducted by The Ghana Living Standards Survey in 2012/2013, the urban areas reported a higher unemployment rate of 3.5% compared to the rural areas (0.8%). Each year, approximately 250,000 youth enter the labour market with just 2% being accepted into the formal sector. However, the survey was quick to add that 98.1% (10,517,394) of the total Ghanaian working population are employed in both informal and formal sectors (Allotey & Mensah, 2016). Finally, the minimum wage rate in Ghana beginning January 2016 is GHS 8.00 (Aidoo, 2017). Based on the information given above, it will be important to keep in mind that economic changes will affect education in terms of costs of maintenance, school fees and remunerations. Nonetheless, there is still a fraction of the population that is employed, hence there are working parents who can afford to take their children to school.
2.7.3 Social Factors

The population of Ghana for the first quarter of 2017, was estimated to be 28,510,387. The number of births recorded for the first quarter were 141,078 and the population growth for the year is estimated to have been 100,813 (UNDESA: Population division, 2017). This increase in population means more children who need to be enrolled in schools, therefore, driving market demand for schools in Ghana now and in the future.

Furthermore, Ghana after attaining a middle-income status in 2011, has been able to reduce the poverty levels in the country. In 2013, the poverty level in Ghana fell to 24.2% from 56.5% in 1992, thereby achieving its first millennium development goal target. Consequently, households in the urban centres have a lower poverty rate compared to those in the rural areas. Urban areas recorded 10.6% poverty rate whereas the rural areas recorded 37.9%. Nonetheless, on the regional level, the Northern, upper East and Upper West regions have the highest poverty rates (Cooke, Hague & McKay, 2016).

Moreover, Ghana is a cosmopolitan country made up of over 100 ethnic groups and three main religions (Christianity, Islam and Traditional). The largest are Akan, Moshi-Dagbani, Ewe and Ga. The official language of Ghana is English however nine languages have status of government sponsored languages some of which include Akan, Ewe, Ga, Gonja and Dagbane. (Commisceo Global, 2016). As an upcoming bilingual school, it is important to know the different mother tongues of the learners and how it will affect their learning of a third language (French) like pronunciations in addition to English which is a required language. Relating this to the models of bilingual education, the clients can adopt a transitional bilingual education.


2.7.4 Technological Factors

To help improve the teaching and learning, most schools resort to other tools like the use of computers, projectors and other electronic devices. To teach languages, there are online programs like lingua, Learn French lab and FluentU (Monaco, 2017). Also, students can watch videos and listen to audio to facilitate learning a new language and education. However, even though technology can enhance the learning of a foreign language, it is better to place the teaching of languages in the care of qualified language teachers (American Council on the Teaching of Foreign Languages, 2012). The technology programs can supplement what is being taught in class making the learning of the French language fun and easier.

Furthermore, there are eighteen internet service providers in Ghana (Obiorah, 2016) and these firms upon agreement can provide internet services to schools as well. This makes it easier to conduct research using search engines like google, yahoo, communicate and enhance teaching and learning. Advancement in technology like computers make it easier to store data, phones facilitate communication and CCTVs monitor movements and ensure security aiding in effortless operation and management of the school. This information will be beneficial in helping the clients know the teaching, learning and operational requirement for a school. Luckily for the lines there are telephone lines and poles available on the site.

In 2012, the government in partnership with RLG, distributed approximately 200,000 laptops to students and teachers in the Northern, Upper East, Western, Central and Volta regions (Modern Ghana, 2012). Currently, RLG is no longer in operation however, the clients can partner with other technology companies to get devices which will make learning and teaching more efficient.
2.7.5 Legal Factors

The Ministry of Education was established under the Civil service law 327, PNDC law 1993 with the intention of providing quality education to all Ghanaians. Some of its functions include: initiating and formulating policy options on education for the consideration of government and reviewing government policies (Ministry of Education, 2017). Subsequently, there is the Ghana Education Service (GES) which was established as part of the public service of Ghana in 1974 by NRCD 247 and next amended by NRCD 252, 357 AND SMCD 63 (Ghana schools online, 2012).

The Ghana Education Service (GES) supervises registration of schools in the sixteen districts of the Greater Accra region. Under the big GES umbrella, there are the national, regional, district and then circuit co-ordinators. Establishment and supervision of a nursery falls under the authority of social welfare. For the kindergarten and primary level, it falls under the jurisdiction of the GES. Inspections of the kindergarten and primary levels are done at the municipal or district level. On the other hand, Junior High school is supervised by the regional inspectorate team which is also under the GES. Despite being a private school, the curriculum and structure of the bilingual school needs to be aligned with the rules and regulations of the GES in that district or municipal jurisdiction (Interview with GES official, April 6, 2017). Every entity set up to make profits is expected to pay a company tax rate of 25% (Ghana Revenue Authority, 2017). This rate will affect the feasibility of the project in the sense that the clients will have to factor in this expense when creating their income statement.
2.7.6 **Environmental Factors**

The location of the school is a very important factor. The school needs to be situated in an area where the population is growing and with children of school going age to warrant a need for a school. Proximity of the school to homes is also a key factor for day schools. According to the Ghana Education Service there are several conditions that need to be considered in selecting a site. These include: ensuring that the school is not close to a dumpsite, lorry station or cemetery. Also, the land should not be in dispute neither should the school be in rented premises. Furthermore, for the safety and security of the children, the school must be walled, fenced or hedged with a gate with a security personnel present always and equipped with emergency resources like fire extinguishers to ensure safety. Additionally, there must be an assembly point void of electricity poles or communication lines to be used in times of emergencies like earthquake or fire outbreaks. Emergency exits must be available preferably in every classroom or office having two doors one in the front and the other at the back. Additionally, the general environment of the school must be clean. There must be litter bins at vantage points. The school must provide washroom facilities, safe drinking water and running water for washing hands. Thus, the clients are supposed to ensure that the school they intend to build meets all these conditions to prevent a shutdown by the Ghana Education Service (Interview with GES official, April 6, 2017).

2.8 **Education in Ghana**

Ghana operates a basic 6-3-3-4- education system: 6 years-primary school; 3 years-junior high school; 3 years-senior high school; 4 years-university bachelor’s degree. The sole official language for teaching is the English Language. Students continue to learn any of the eleven local languages taught in schools, French and English until junior high school 3.
Feasibility Study on Establishing a Bilingual School

(J.H.S.3). For the pre-tertiary level, there are three terms per academic year. Schools break for the Christmas, Easter and summer holidays. Hence the curriculum is structured around these holidays.

In the Education sector performance report for 2016 published by the Ministry of Education, there were fifty-nine thousand, one hundred and eight (59,108) schools in Ghana that offered basic education. Out of this number twenty thousand three hundred and ninety-four (20,394) were private. There was generally an increase in the number of children enrolled in all levels of basic education between 2014/2015 and 2015/2016. This increase was evident in the difference between the Gross Enrolment Ratio (GER) and the National Enrolment Ratio (NER) for the primary and junior high school levels. However, the kindergarten recorded a decline in GER by 5% while the NER declined by 3%. The difference between the NER and GER signifies the percentage of underaged and overaged children. Figures 3 and 4 show the gross and net enrolment ratios for basic schools and proportions of enrolment in private schools respectively. Detailed information on the various levels is given below.

Figure 3. Gross and net enrolment ratios for basic schools. Retrieved from (Education sector performance report, 2016)
2.8.1 Kindergarten (KG) /Pre-primary schools

Ghana had twenty-two thousand and fifty-two (22,052) pre-primary schools between 2014/2015 and 2015/2016. Total enrolment in both the private and public schools in the 2015/2016 academic year was one million seven hundred and seventy thousand five hundred and eighty-seven (1,770,587). The significant difference between the GER and the NER for the two years can be attributed to the fact that fewer numbers of kindergarten pupils being enrolled in their appropriate level. According to UNESCO (2006), the compulsory education age range is between 6 and 14 years. However, in Ghana, children are expected to be enrolled in kindergarten by age 4 (Amoah, 2015). Yet, because parents need to go to work, schools accept children into the kindergarten from age 3. An example is the French School in East Legon in Accra. Enrolment in private schools declined by 4.4% in 2015/2016. (Ministry of Education, 2016). Tables 3 and 4 show the number of kindergarten schools and the KG enrolment statistics respectively.
Table 3

*Number of Kindergarten schools*

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Public</td>
<td>13,263</td>
<td>13,505</td>
<td>13,305</td>
<td>13,492</td>
<td>13,828</td>
<td>14,145</td>
</tr>
<tr>
<td>Private</td>
<td>5,538</td>
<td>5,410</td>
<td>5,972</td>
<td>6,608</td>
<td>7,132</td>
<td>7,907</td>
</tr>
<tr>
<td>Total</td>
<td>18,801</td>
<td>18,915</td>
<td>19,277</td>
<td>20,100</td>
<td>20,960</td>
<td>22,052</td>
</tr>
</tbody>
</table>

Retrieved from (Education sector performance report, 2016)

Table 4

*Kindergarten enrolment statistics*

<table>
<thead>
<tr>
<th></th>
<th>National</th>
<th>Deprived districts</th>
</tr>
</thead>
<tbody>
<tr>
<td>KG GER (%)</td>
<td>98.4</td>
<td>99.4</td>
</tr>
<tr>
<td>KG NER (%)</td>
<td>60.1</td>
<td>64.2</td>
</tr>
<tr>
<td>Enrol. KG (4-5 yr)</td>
<td>1,491,450</td>
<td>1,543,314</td>
</tr>
<tr>
<td>Enrol. KG (4-5 yr)</td>
<td>911,305</td>
<td>996,232</td>
</tr>
</tbody>
</table>

Retrieved from (Education sector performance report, 2016)

2.8.2 Primary

The number of primary schools in Ghana have continued to rise with the total number of primary schools in 2015/2016 increasing by nine hundred and eighty. Enrolment for the 2015/2016 academic year was approximately four million. Enrolment rate in the private schools remained the same at 25.3%. This stagnation could be attributed to the poor economic conditions caused by the inflated cost of living. (Ministry of Education, 2016).
These factors may also affect my clients. Tables 5 and 6 show the number of primary schools and the primary school enrolment statistics respectively.

Table 5

*Number of primary schools*

<table>
<thead>
<tr>
<th>Primary</th>
<th>2010/11</th>
<th>2011/12</th>
<th>2012/13</th>
<th>2013/14</th>
<th>2014/15</th>
<th>2015/16</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public</td>
<td>14,431</td>
<td>14,360</td>
<td>14,112</td>
<td>14,142</td>
<td>14,405</td>
<td>14,664</td>
</tr>
<tr>
<td>Private</td>
<td>5,292</td>
<td>5,473</td>
<td>5,742</td>
<td>6,360</td>
<td>6,904</td>
<td>7,625</td>
</tr>
<tr>
<td>Total</td>
<td>19,723</td>
<td>19,833</td>
<td>19,854</td>
<td>20,502</td>
<td>21,309</td>
<td>22,289</td>
</tr>
</tbody>
</table>

Retrieved from (Education sector performance report, 2016)

Table 6

*Primary enrolment statistics*

<table>
<thead>
<tr>
<th></th>
<th>National</th>
<th></th>
<th>Deprived districts</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary GER (%)</td>
<td>99.4</td>
<td>96.5</td>
<td>105.0</td>
<td>107.3</td>
<td>110.4</td>
<td>111.3</td>
<td>98.8</td>
<td>103.9</td>
</tr>
<tr>
<td>Primary NER (%)</td>
<td>77.8</td>
<td>81.7</td>
<td>84.1</td>
<td>85.3</td>
<td>91.0</td>
<td>91.5</td>
<td>81.1</td>
<td>88.5</td>
</tr>
<tr>
<td>Primary GSR (%)</td>
<td>99.6</td>
<td>97.8</td>
<td>107.8</td>
<td>117.9</td>
<td>115.3</td>
<td>118.0</td>
<td>107.7</td>
<td>124.0</td>
</tr>
<tr>
<td>Primary NAR (%)</td>
<td>71.0</td>
<td>71.0</td>
<td>79.3</td>
<td>76.8</td>
<td>76.6</td>
<td>81.6</td>
<td>78.3</td>
<td>89.5</td>
</tr>
<tr>
<td>Enrol. Primary</td>
<td>3,962,779</td>
<td>4,062,026</td>
<td>4,105,913</td>
<td>4,117,152</td>
<td>4,342,315</td>
<td>4,354,176</td>
<td>1,082,971</td>
<td>1,132,055</td>
</tr>
<tr>
<td>Enr. Prim. (6-11yr)</td>
<td>320,154</td>
<td>3,430,573</td>
<td>3,126,472</td>
<td>3,434,146</td>
<td>3,578,821</td>
<td>3,583,941</td>
<td>888,935</td>
<td>964,103</td>
</tr>
<tr>
<td>Population (6-11yr)</td>
<td>4,112,511</td>
<td>4,211,217</td>
<td>4,000,857</td>
<td>3,835,594</td>
<td>3,933,682</td>
<td>3,916,406</td>
<td>1,095,930</td>
<td>1,089,756</td>
</tr>
<tr>
<td>% Private enrolment</td>
<td>19.3</td>
<td>22.1</td>
<td>23.1</td>
<td>23.2</td>
<td>25.1</td>
<td>25.3</td>
<td>7.8</td>
<td>8.9</td>
</tr>
</tbody>
</table>

Retrieved from (Education sector performance report, 2016)

2.8.3 Junior High Schools (JHS)

The number of Junior High Schools for 2015/2016 totalled fourteen thousand seven hundred and sixty-seven (14,767). General enrolment into the Junior High School level
was approximately one million six hundred (1.6 million). The percentage of private school enrolment was constant at 22.0% (Ministry of education, 2016). Tables 7 and 8 show the number of junior high schools and the enrolment statistics respectively.

Table 7

*Number of Junior high schools In Ghana*

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Public</td>
<td>8,462</td>
<td>8,336</td>
<td>8,818</td>
<td>9,076</td>
<td>9,445</td>
<td>9,905</td>
</tr>
<tr>
<td>Private</td>
<td>3,247</td>
<td>3,231</td>
<td>3,618</td>
<td>4,006</td>
<td>4,395</td>
<td>4,862</td>
</tr>
<tr>
<td>Total</td>
<td>11,709</td>
<td>11,567</td>
<td>12,436</td>
<td>13,082</td>
<td>13,840</td>
<td>14,767</td>
</tr>
</tbody>
</table>

Retrieved from (Education sector performance report, 2016)

Table 8

*Junior High School enrolment statistics*

<table>
<thead>
<tr>
<th></th>
<th>National</th>
<th>Deprived Districts</th>
</tr>
</thead>
<tbody>
<tr>
<td>JHS GER (%)</td>
<td>79.6</td>
<td>80.6</td>
</tr>
<tr>
<td>JHS NER (%)</td>
<td>46.1</td>
<td>46.1</td>
</tr>
<tr>
<td>JHS GAR (%)</td>
<td>86.3</td>
<td>88.1</td>
</tr>
<tr>
<td>JHS NAR (%)</td>
<td>43.9</td>
<td>44.5</td>
</tr>
<tr>
<td>Transition to JHS1 (%)</td>
<td>92.4</td>
<td>89.5</td>
</tr>
<tr>
<td>Enrol. JHS (12-14 yrs)</td>
<td>1335400.0</td>
<td>1385367.0</td>
</tr>
<tr>
<td>Enrol. JHS (12-14 yrs)</td>
<td>772979.0</td>
<td>792491.0</td>
</tr>
<tr>
<td>Pop. (12-14 yrs)</td>
<td>1678222.0</td>
<td>1718507.0</td>
</tr>
<tr>
<td>% Private enrolment</td>
<td>17.6</td>
<td>19.0</td>
</tr>
</tbody>
</table>

Retrieved from (Education sector performance report, 2016)

Based on the data above, the level that has the highest enrolment rate in private schools is pre-primary. Thus, the clients could consider setting up the school to cater for just that level.
2.8.4 Private/ International Schools in Ghana

These are schools set up by private individuals to cater for parents who want their children to acquire a universally accepted certificate such as the Cambridge certificates or quality education compared to the public schools. This makes it easier for students to study abroad and gives them an upper hand compared to their mates who attain only a Ghanaian education certificate which is not universally acceptable. Expatriate parents also send their children to these private schools as they constantly change countries of residence, hence they want an education which is universal so that in a different country, their children can still have the same standard of education. Such schools include the French schools, Swiss school (German instruction), British, American, Lebanese and Indian schools. Approximately 80% of these international schools are situated in Tema, Spintex and East Legon mainly because it is close to the residence of expatriates and the middle to high income earners. Examples of such international schools in Ghana include, Ghana International School, Liberty American School and Lincoln Community School (Holdsworth, 2016). In comparison, these schools will not be competitors to my clients as their designated site is in a different location and district.

2.9 Bilingual (French-English) Education in Ghana

Instruction in most schools in Ghana is done mainly in the English language. There are approximately fifteen schools that practice the French-English instruction method or teach only the French language in Ghana. The main players or competitors to my clients in the French learning market are outlined below:
2.9.1 Lycée Français Jacques Prévert d’Accra

It is a French international school located in East Legon at Accra. It was established by the parents’ association in 1963 mainly to educate the children of French national staff working at the various French-speaking embassies in Ghana (Lycée Français Jacques Prévert d’Accra, 2017). It is the only school that is permitted to follow the French curriculum because it was established by the French Embassy. The school runs from nursery to senior high school and it has a current population of approximately six hundred pupils. It has a large expatriate population with pupils of different nationalities. It practices a 70-30 structure, that is 70% of the teaching is done in French while 30% is done in English. The average tuition fee is approximately € 5000 annually.

2.9.2 Alliance Française

It is an international non-profit organization that aims to promote the French language and its culture around the world. It was introduced in Ghana in the 1960s and has various branches in Kumasi, Cape Coast, Tema, Accra and Takoradi. It offers French courses which are organized in accordance with the Common European Framework of Reference for Languages (CEFR). The institution focuses on oral and written comprehension, interaction and writing. It is also a center for taking the French international examinations and awards the internationally recognized French language diplomas. It enrolls both adults and children. The average fee is approximately GHS 1,500.

2.9.3 Ghana Institute of languages

It was established in 1961 by Dr. Kwame Nkrumah. It was formed to enhance the linguistic competence in modern languages of Foreign Service Personnel and civil servants. Currently, it is under the authority of the Ministry of Education with the National Council
for Tertiary Education (NCTE) being directly in charge of it. It comprises the school of languages, school of translators and school of bilingual secretaryship. It has branches in Accra, Kumasi and Tamale. Languages taught at the institution are French, Arabic, Chinese, Spanish, Portuguese, Russian and German (Ghana Institute of languages, 2017). The approximated annual fees is GHS 2,000.

2.10 Other Players in The Bilingual Education Market

1. **Holy Family bilingual school**: The school is located around Kaneshie in Accra. It was established by the Holy Family Catholic church in 1970 to educate the children of their congregation in both English and French. The school follows both the Ghanaian and Togolese O and A level curriculum. The school runs from nursery to senior high school and has a population of about four hundred and fifty students. The population is made of up 30% Ghanaians and 70% foreigners from countries like Benin, Nigeria, Cameroun and Gabon.

2. **Ecole Ronsard**: It is located on the Kinshasa road at East Legon in Accra. Currently, it has a nursery and primary department and is part of the Cambridge association of school.

3. **Ecole Bilingue**: It is located at New Achimota in Accra. It follows the British curriculum. It currently has about fifty pupils from nursery to primary two. 70% of its pupils are Ghanaian while the rest are foreigners from countries like Gabon. The school also offers French education to adults on the weekends.

4. **Little Sunflower International School**: It is located opposite bakeshop classics at Trade Fair in Accra. It is a trilingual school which teaches French, English and German. It
follows both the German and British curriculum. It currently has a nursery and primary
department.

5. **Ecole Française Adkel:** It is located at Airport West in Accra. It has a nursery and
primary department. It provides instruction in both French and English.

6. **Funhouse Nursery:** It caters for children between fifteen months and six years. It
is located behind Koala at Airport West in Accra.

### 2.11 How to Set Up a School

A private school is a school set up by private individuals and not the government. (Omeh,
2017) To set up a private school, it is very important to firstly find a conducive site. Parent
are not willing to send their wards to schools that are in isolated areas (Omeh, 2017). They
would prefer nursery and primary schools close to home so it is easier to pick their children
from school, cutting down on the risk involved in child movement. Secondly, the school
building is erected, the classrooms equipped with necessary facilities and equipment like
tables and chairs, computers and learning aids. In a Montessori school setting or for
children education, one needs plenty of toys. One needs a large video or television in all
classrooms to play educational videos or cartoons depending on the level. The next step is
to employ qualified teachers. Teachers should have at least a degree and experience in
childcare or play-work. Finally, the last step is to register the school.

On the other hand, Dasi (n.d) believes that to start a school, one must follow these steps:

#### 2.11.1 Strategic planning:

This must be the first thing an entrepreneur must do and it should be done in this order: creating a strategic vision for the school, assessing the needs or gap in the market, assessing the constraints in the market, aligning visions to
satisfy the needs in the market, setting immediate long-range goals, setting priorities and then setting benchmarks to serve as a guide.

2.11.2 Pedagogy: This is to be set in line with the vision of the school. The pedagogy should cover or consider the desired school culture, the classroom organization that is whether pupils will be separated by levels or age or whether education would be individualized. Additionally, the pedagogy should cover core subjects and extracurricular subjects, the teaching methods that will be employed, method of student assessment and extracurricular activities.

2.11.3 People and Organization: This covers the people or positions that need to be filled, the desired qualifications and responsibilities of employees. It also considers the desired organizational structure that best supports the vision and pedagogy. Nonetheless, the structure must be flexible so that it can be changed as the school matures.

2.11.4 Physical facility: The physical facilities needed should support the visions and pedagogy of the school and should also be in line with rules and regulations of government officials and financial resources. The physical facilities must meet the needs of the desired target market. It must be designed in a way that it takes into consideration the classroom organization desired, subjects taught (e.g. arts room, science laboratories, music rooms and so on), can be easily maintained, has general resources like libraries, sick bays, toilets, playgrounds, gymnasium and many more. It must also be designed with future expansion in mind.

2.11.5 Materials and supplies other than those used for core instruction: Provision must be made for materials and supplies needed for the library, the technology
used in the classroom and by teaching staff, physical education, maintenance, offices, health, security and many more.

2.11.6 Policies: This consists of the rules and regulations of the school. This can be communicated through regular newsletters, a student and/or parent handbook. It should also include a system of enforcement.

2.11.7 Forms: A new school owner must design forms which will record attendance, assessment, staff information, student information, enrolment, emergency procedures and discipline.

2.11.8 Time: This should be done considering the designing of the academic calendar, schedules and programs of the school. It must consider holidays, yearly or term schedules, school ceremonies and field trips.

I believe that all the points raised above are necessary when establishing a school, however, it is important to note that every establishment needs to have a name as it helps to create its brand and for easy identification. In Ghana, pre-tertiary schools must be registered with the Ghana Education Service. It is important to also note that all private schools must have a sign board in front of the school and the phrase “private school” must precede the commercial name of the school for all official purposes.

2.12 Feasibility Study

The purpose of this project is to conduct a feasibility study to determine the viability and desirability of establishing a bilingual school in Medie. Investopedia (2017) defines feasibility study as “an analysis of how successfully a project can be completed accounting for factors that affect it such as economic, technological, legal and scheduling factors.” Students of the university of Ibadan conducted a feasibility study and business plan on
establishing a private nursery and primary school in a town in Nigeria. The purpose of the project was to provide another source of education to serve the growing Nigerian population. At the end of the day, the quality of education provided by the new school was expected be a stepping stone for high academic performance at the secondary and tertiary levels. Thus, the need for a good school which complies strictly with the regulations of the Nigerian Education Service. The viability of the study was tested by conducting a market, technical, legal and environment and financial feasibility (Afolabi, 2012).

Testing for market feasibility included analysis of competitors, the potential market area, potential customers, marketing constraints and absorption rate. Technical feasibility analyzed how to deliver the product. This had to do with the location of the school, technology needed, labor, infrastructure and materials needed. Legal feasibility had to do with the rules and regulations and the laws guiding the establishment of a private school and its management. Financial feasibility was to verify if the project will be profitable in the long run by estimating future cash flows and expenses and the returns on the project (Afolabi, 2012).

Whether the clients could establish the school is unknown, however, similar studies have been conducted for other real estate projects like establishing housing units and it has proven very useful. Firms that adopt such methods include Devtraco Ltd, a real estate company in Ghana. Thus, these same factors will be used to test for the viability of the project in this report.

2.13 Introduction to Lean Start-Up Model

The lean startup was first proposed by Eric Reis, an entrepreneur in 2008. It is a “methodology for developing businesses and products” (Penenberg, 2011). The aim of this
methodology is to reduce the product development cycles by “adopting a combination of business-hypothesis-driven experimentation, iterative product releases and validated learning” (Adler, 2011). The reason why this methodology is important for startups is that it helps to reduce the chances of failure after investing so much initial capital and eliminate market risks. The principles held by the lean startup method are:

1. Instead of channelling so much energy into research and planning, entrepreneurs can come up with a series of untested hypotheses. These theories can be summarized into the business model canvas. The canvas is a “diagram of how a company creates value for itself and its customers” (Blank, 2013).

2. An approach called customer development is used to test the hypotheses. The entrepreneurs go out and ask potential clients and partners feedback on the various elements of the business model. They quickly go back and adjust the model based on the feedback and come back to test it again. The emphasis is on speed and quickly adjusting based on the feedback (Blank, 2013).

3. The lean start-ups develop the minimum viable products. These are products with just the basic features needed which can be used to test hypotheses and conduct customer development. Entrepreneurs use an approach known as the agile development to develop these products at a continuous and frequent basis. It prevents wastage of time and resources (Blank, 2013).

Below is a sample lean-model canvas
The next chapter will cover the various methods used in acquiring and analyzing data for this project.
CHAPTER 3: RESEARCH METHODOLOGY

This chapter covers the various research techniques used to acquire and analyze information. These techniques include, extensive secondary research, interviews, observations, site visits and lastly data analysis. All these techniques are further explained below.

3.1 Secondary research
This is a method used to collect secondary data. Secondary data refers to data referred to information collected by someone other than the user for other research purposes. For this paper, the sources for secondary data included:

1. The website of United Nations Department of Economic and Social Affairs which provided information on the prospects of Ghanaian.
2. The Education sector performance report published by the Ministry of Education which provided information on statistics for pre-tertiary levels.
3. The article by the Pacific policy and research centre which provided information on bilingual education.
4. Other sources such as online news articles, online journals and website posts.

3.2 Interviews
The interviews were conducted on five separate set of people who are: proprietors of bilingual schools, the clients, potential parents, existing parents and an official from the Ghana Education Service. The interviews were conducted face-to-face and the tool used
was an interview guide which can be found in the appendix. The purpose for the interviews were as follows:

1. **The clients** – To find out the capabilities of the clients, their weaknesses, the challenges they face, their reason for embarking on this project and the exact problems they needed solution to. This interview took place between December 2016 and January 2017 initially with Mrs. Paintsil alone at her workplace and later with both Mr. and Mrs. Paintsil at the site of their land.

2. **Existing and potential parents** – The purpose of this research intervention was to understand the reason why parents send their children to a bilingual school. This entailed face-to-face interviews at a French institution during its open day which took place on the 11th of February 2017 from 9:00 am to 12 noon. A total of seven parents were interviewed and they were selected through random sampling. These parents were from different countries (Ghana, Lebanon, Morocco, France, India and Nigeria). These parents had children ranging from three years to fifteen years. This meant their children would be enrolled into different classes in the school ranging from nursery to high school.

3. **Potential parents at the designated location** – Data was collected mainly through face-to-face interviews which lasted for a maximum of five minutes. A total of thirty parents were interviewed from the Nsawam, Pokuase, Amasaman, Adjen Kotoku and Kwabenya townships. The parents were selected through purposive sampling. The purpose of these interviews was to verify if there was a desire for a bilingual school.

4. **Ghana Education Service Official** – The purpose of this interview was to find out the rules, regulations and guidelines for establishing and registering a school in Ghana. The interview took place on the 6th of April 2017.
5. **Proprietors of bilingual schools** – The purpose of this interview was to assess competition, gather tips on how to manage and run a bilingual institution and assess the challenges that the schools face so that the clients can harness on them and have a competitive edge in the market. These took place between 7\textsuperscript{th} and 10\textsuperscript{th} March 2017.

3.3 **Site visit and Observation**  
There was only one site visit and this took place on the 26\textsuperscript{th} of December 2016. The visit was done together with the Paintsils. The purpose was to get familiarized with the earmarked site and assess the advantages and disadvantages of the site. Observations were also made on the culture and lifestyle of the potential market and potential competitors in the environment.

3.4 **Data Analysis**  
This method was employed to analysis the data collected from the primary research conducted. Valuation techniques were used to analyze the profitability of the project, pie charts and bar graphs were used to analyze responses on desirability for the school and what parents look out for in a school respectively and lastly excel was used to compute estimated revenue and cost streams. However, it will be important to note that the valuations made and cost and revenue estimates are just samples based on assumptions.

The findings from the various research methods employed can be found in the next chapter.
CHAPTER 4: RESEARCH FINDINGS

4.1 Interview with the Paintsilts

The interview brought to light the fact that, Mr. and Mrs. Paintsil have little to no information on how to run a school. It was the first time they were attempting to undertake such a project. Thus, they required assistance in matters like how to recruit teachers, the necessary procedures and skills required to establish a school, the investment required to undertake such a project and whether there was a market for such an establishment.

4.2 Interview with Existing and Potential Parents

From the interviews, it was deduced that parents wanted their children to attend the bilingual school because being proficient in a second language gave their children a competitive edge over their peers in the work world. Additionally, they indicated that it will make it easier for their children to communicate with others globally as French is one of the widely-spoken languages in the world. Finally, since some of the parents were French, they wanted their children to also learn their culture and know their roots. When asked why they chose that school, all the parents indicated it was because of its proximity to home, marketing and publicity, the reputation, the school structure, the curriculum and finally its status an AEFE school.

AEFE is a collection of French schools established by the French embassy all over the world. These schools follow a singular curriculum and structure. Thus, for parents who are constantly changing their country of work around the world, it is easier to move their children from one AEFE school to another.
However, a potential Ghanaian parent was skeptical about enrolling his children in the school because he feared they would not be able to fit into the Ghanaian society after attending such a school. Another Ghanaian parent also shared her misconception about the school, thinking the pupils were only taught in French.

Hence, in summary, factors that affect parents’ preference for bilingual education are: to aid their children with communication in the global society, to give their children a competitive edge in the business world and to help their children know more about their roots. On the other hand, factors that prohibit parents are lack of understanding of the bilingual education and the effects such an education will have on the social and cultural development of non-francophone children. This information is necessary for the clients because it will inform their decision on marketing and advertising, the kind of curriculum to implement and the model of bilingual education to adopt.

4.3 Market Feasibility

4.3.1 The Market Area
The Ga West Municipal was carved out of the Ga municipal which was created in 1988. In 2004, the municipal was divided into two with Amasaman becoming the capital of the newly created municipal. The municipal forms part of sixteen metropolis, municipalities and Districts in the Greater Accra Region. It covers a land area of about two hundred and eighty-four point four (284.08) square kilometers and has about four hundred and twelve communities. Towns within this municipal include Pokuase, Medie, Amasaman, Tantra Hills, Okaiman and Papase (Ga West Municipal Assembly, 2016). The regional Minister for the municipal is Hon. Ishmael Ashitey.
The population of the Ga West Municipal, per the 2010 population and Housing Census is two hundred and nineteen thousand seven hundred and eighty-eight (219,788). The population is youthful with people aged 15 years and below making up 33.4% of the total population. Two thirds of the population (38%) are employed as service and sales workers whereas 22.6% are employed as crafts and related trade workers. 50.4% of the inhabitant are sole proprietors, 31.9% are employees and 8.9% are self-employed with employees.

### 4.3.2 Potential Customers

Data collected showed that the potential market was made up of people who were lower to middle income earners. An average of the monthly salary for the parents was GHS 150.00. Ninety percentage of the parents did not fully understand the mechanics of a bilingual school but were interested in taking their children to such a school with levels from nursery to senior high school, provided the fees did not take up more than seventy percentage of their income.

![Cluster bar graph showing factors that parents look out for when selecting a school for their children.](image)

*Figure 2.* Cluster bar graph showing factors that parents look out for when selecting a school for their children.
4.3.3 Potential competition

There is no bilingual school in Akutuase or its surrounding towns. Nonetheless, the alternate source of competition will come from the monolingual schools. There are about three public and three private schools in the area. The public schools record high attendance because tuition is free even though the education is of poor standards. The private schools have a wider coverage with pupils coming in from as far as Nsawam and Kwabenya. Some of the competition in the area are; Rev. John Teye school, Amasaman cluster of schools, God’s Grace International school and St. Peters Catholic school.

After analysing all these parameters, it can be concluded that under market study, the project is desirable.

4.4 Technical Feasibility

4.4.1 Location and site of the school

Medie is situated in the Ga West district of the Greater Accra region off the Nsawam highway. It is about four kilometres from Amasaman and serves as a border town between the Ga West district and the Akuapim South district in the Eastern Region. The town was originally called “Akutuase” which literally means “underneath the orange tree.” As the Akutuase community grew, it engulfed Medie a small community growing on its outskirts and took on its name. The old Medie community which means “mine” became known as Medie Kitiwa meaning “little Medie” and Akutuase maintained the Medie name (Ghana Place Names, n.d). Attached as Figure 1 is a google image of the community.
To get to the site which is situated in a small community in Medie called Pabieman, one will have to take a bus bound for Nsawam and alight at the Medie bus stop. Afterwards one needs to pick a taxi from the taxi rank which is immediately behind the bus stop to Kofi Kwei. At the Kofi Kwei bus stop, the journey to the site is done by motor bike. The road from Medie to Kofi Kwei is half tarred. The untarred road begins from Papase. The Pabieman Township is underdeveloped. Most of the houses are made of mud and have thatched roofs. There is an elementary school in the area called God’s Grace International school however, the school has only Ghanaian pupils. The main language spoken by the residents is Ga.

The land which is a 2-plot land measuring 140 by 100 square meters was sold to my clients by NODMO properties. It is surrounded by other virgin lands which are yet to be inhabited. The area is mainly covered by sandy soil and the vegetation type found there are bamboos, maize and palm trees. On a mountain opposite the site is a stone quarry. Additionally, building materials like cement (diamond cement), wood and iron rods are sold in
neighbouring towns like Riyad City and Adjen Kotoku. Construction firms can also be found in those areas. Such firms include Noble Real Estate. The proximity of building materials and construction firms will cut down on cost when constructing the school.

Below is the site plan

*Figure 4.* The site plan of the land. The plot is outlined in red.

<table>
<thead>
<tr>
<th>PROS</th>
<th>CONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>The land is a virgin land</td>
<td>The area is far from the central business area</td>
</tr>
<tr>
<td>The area is yet to be developed so is an untapped market</td>
<td>The immediate road to the location is untarred making driving unpleasant.</td>
</tr>
<tr>
<td>Easy access to ready market in towns like Nsawam, Pokuase, and Adjen Kotoku</td>
<td>The location of the land in such a remote area may deter parents from bringing their children to the school</td>
</tr>
</tbody>
</table>
There are electricity and communication connection lines in the area which means it will be easier to get electricity and telephones to aid in operational activities.

Raw materials are easily accessible and priced equally as the ones in Accra.

From the interviews conducted, all the parents found the location unfavorable as it was far from their residence. Twenty parents were willing to enroll their children provided there was school bus services available which had already been factored into the school fees. Ten parents especially those living in Nsawam and Kwabenya were unwilling to send their toddlers to a distant place simply for schooling. They feared for the safety of their children as they are too young to travel such long distances. This response is depicted in the pie chart below.

![Pie chart showing parents’ acceptance of the earmarked site.](image-url)

*Figure 5.* Pie chart showing parents’ acceptance of the earmarked site.
4.4.2 Human resource required

This refers to the personnel needed to run the school. Per the guidelines provided by the Ghana Education Service, to start a school there must be enough teachers. In terms of qualification, they must have a minimum qualification of five passes including English, Mathematics and Science in the West African Senior Secondary Certificate Examination (WASSCE) or G.C.E. ordinary level. Untrained staff should be given in-service training after recruitment and finally, the head of the school must be a professional teacher who has taught for a minimum for five years. Below is a sample organogram for the school.

![Organogram](image)

Figure 6. Proposed organogram for the school. Retrieved from (Afolabi, 2012).

4.5 Legal and Environmental Feasibility

It is very necessary to understand the rules and regulations governing a project before execution. These rules and regulations must be strictly observed to prevent closure by the relevant authorities. Below are some key findings on the regulations for establishing a school that the clients must be aware of.

4.5.1 Guidelines for the establishment of private schools

The necessary steps for establishing a private school approved by the Ghana Education Service are:
I. Establishment of a school is a process and not a single event, it goes through stages and requires time.

II. Categories of schools that can be established under the Ghana Education Service include the following:
   a) Basic level schools, that is from KG to Junior High School
   b) Second cycle level schools – that is Senior High Schools
   c) Pre-tertiary professional institutes
   d) Computer (I.C.T) schools.

III. The Ghana Education Service approves and registers schools based on need and the quality of resources (human and materials) put in place to run them. These resources include the following:
   a) Physical structures such as classrooms, offices, washrooms, etc.
   b) Teachers and other auxiliary staff.
   c) Teaching and learning materials.
   d) General sanitation and conduciveness of the location of the school.
   e) Safety and security measures put in place.

IV. Physical structures

   1. School land

   A proprietor who intends to establish a private school should be guided by the following:
   a) The proprietor should contact the district education directorate at least two years prior to the establishment of the school to inspect the site for the school for approval.

   In choosing the site the following should be considered:
i. The site should not be too close to a refuse dump, a lorry station or a
   cemetery.

ii. The land should not be water-logged.

iii. The land should not be in dispute.

iv. The site should be about three kilometres from a similar facility.

v. The proposed land should not be less than two acres in size.

vi. The school should not be sited on a landfill.

vii. The school should not be in rented premises.

viii. The school could be in rented premises meant for a school with legal
document.

ix. The school must have a playing field.

2. Infrastructure

The following infrastructure must be in place:

i. Enough classrooms that measure length 8.25m, width 7.5m and height
   2.4m. These classrooms should take a maximum of forty pupils per class.

ii. Provision for the head office, staff, common room, library and a store.

iii. There should be a computer laboratory.

iv. Toilets at least two for staff, four for boys and four for girls.

v. Urinals at least two for boys, two for girls and two for staff.

V. The need for a school

The school must be sited in a catchment area where the population is growing and therefore
a need for the school.
VI. Teaching and learning materials

1. Furniture and equipment
   i. A set of standard furniture for each classroom.
   ii. Wall charts.
   iii. Teachers tables/chairs.
   iv. Well-furnished computer laboratory.
   v. Well-stocked library.

2. General sanitation and school health
   i. Provision of litter bins.
   ii. Availability of first aid box and oral medication.
   iii. Provision of safe drinking water.
   iv. Provision of running water for washing hands.

3. Safety and security
   i. The school should be walled, fenced, hedged with a gate.
   ii. There should be watchmen or security personnel.
   iii. There should be fire extinguishers/sand buckets.

It is after a proprietor has acquired all these resources that he may contact the Head office or nearest regional or district private schools’ coordinators for advice on registration.

4.6 Financial Feasibility

4.6.1 Key Assumptions
   1. The revenue items like school fees is assumed to increase by 20% every year.
   2. The registration cost is assumed to be incurred in year zero alone.
   3. There is an assumed 1.01% increase in expenses starting from year two.
4. The cost of capital of the present value is assumed to be the bank interest rate which is 25%.

5. The estimated school fees for year one is GHS 500 for pre-primary, GHS for primary and GHS 650 for Junior High School.

6. The number of pupils are estimated to be 20 in nursery, 25 in Kindergarten 1 and 2 then thirty for all the remaining classes in year one.

7. Enrolment will increase by 5% every academic year.

From the computations, the estimated cost of the project is approximately fourteen million Ghana Cedis (GHS14,000,000). The estimated revenue for year one which is the school fees is approximately six hundred and five thousand Ghana cedis while the estimated cost for the first year is approximately three hundred and sixty-five thousand Ghana cedis (GHS 365,000).

Table 9

*Budget for establishing a bilingual school at Medie*
### Feasibility Study on Establishing a Bilingual School

#### Project Development Budget for Proposed School Block for Mr. & Mrs. Paintsil at Medie

<table>
<thead>
<tr>
<th>Item</th>
<th>Development Budget</th>
<th>Notes</th>
<th>Sub-Total Cost (US$)</th>
<th>Total Cost (US$)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A Acquisition</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Land (for new development)</td>
<td>Purchase price</td>
<td></td>
<td>2,366.86</td>
<td>2,366.86</td>
</tr>
<tr>
<td>2 Due diligence if any</td>
<td>Estimate</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>B Construction Cost</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 New construction</td>
<td>Per sq meter ($380)</td>
<td></td>
<td>3,736,000.00</td>
<td>3,736,000.00</td>
</tr>
<tr>
<td>2 Construction contingency</td>
<td>% of construction cost (5%)</td>
<td></td>
<td>136,800.00</td>
<td>136,800.00</td>
</tr>
<tr>
<td>3 Tendering</td>
<td>% of construction cost (0.5%)</td>
<td></td>
<td>13,680.00</td>
<td>13,680.00</td>
</tr>
<tr>
<td>4 Permit &amp; Approval fees:</td>
<td>Estimate</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Development permit</td>
<td>Estimate</td>
<td></td>
<td>127.07</td>
<td>127.07</td>
</tr>
<tr>
<td>Environment permit</td>
<td>Estimate</td>
<td></td>
<td>125.32</td>
<td>125.32</td>
</tr>
<tr>
<td>Fire permit</td>
<td>Estimate</td>
<td></td>
<td>669.22</td>
<td>669.22</td>
</tr>
<tr>
<td>5 Utility charges (supply &amp; connection)</td>
<td>Estimate</td>
<td>139,279.72</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>C Infrastructure if any</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 External works including the following:</td>
<td>Estimate (6% of construction cost)</td>
<td>164,160.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parking and walkways areas</td>
<td>$</td>
<td>$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>On-site waste treatment &amp; disposal</td>
<td>$</td>
<td>$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>General fencing</td>
<td>$</td>
<td>$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Landscaping and horticulture</td>
<td>$</td>
<td>$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 On-site water storage facility - 40,000 litres capacity</td>
<td>Estimate</td>
<td>5,400.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>D Professional Fees</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Architecture, Engineering &amp; Quantity surveyor incl.:</td>
<td>Estimate: 10% of construction cost</td>
<td>273,600.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reimbursables &amp; consumables</td>
<td>$</td>
<td>$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environmental experts</td>
<td>$</td>
<td>$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Geo-technical assessment</td>
<td>$</td>
<td>$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Materials testing &amp; inspection</td>
<td>$</td>
<td>$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Legal fees</td>
<td>$</td>
<td>$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Estimator/cost consultant</td>
<td>$</td>
<td>$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Management services</td>
<td>$</td>
<td>$</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>E Project Financing Fees &amp; Cost</strong></td>
<td></td>
<td>$ 273,600.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Loan application fees</td>
<td>Estimate (1.25% of loan)</td>
<td>$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Financing fees</td>
<td>% of Loan</td>
<td>$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Construction interest/cost of financing</td>
<td>Bank loan during construction (14%)</td>
<td>$</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>F Miscellaneous Expenses</strong></td>
<td></td>
<td>$ 42,255.90</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Property taxes</td>
<td>estimate (1.5% of cost)</td>
<td>$ 41,040.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Contractor’s risk</td>
<td>Estimate</td>
<td>$ 1,215.90</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>G Furnishings &amp; Equipment</strong></td>
<td></td>
<td>$ 42,255.90</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Furnishings &amp; decorations</td>
<td>Estimate</td>
<td>$ 17,702.96</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Data &amp; communication</td>
<td>Estimate</td>
<td>$ 3,550.30</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Security facilities</td>
<td>Estimate</td>
<td>$ 237.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Development Cost Estimate</strong></td>
<td></td>
<td>$ 3,514,464.09</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total development cost excluding purchase of land</td>
<td></td>
<td>$ 3,512,097.23</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note 1 Utility*

- Borehole drilling services: GHS 8500
- Cables for internal wiring: GHS 4400
- Electricity connection and provision of prepaid mete: 5% of construction cost

*Note 2 Furniture*

<table>
<thead>
<tr>
<th>Furniture</th>
<th>quantity</th>
<th>unit cost GHS</th>
<th>Total cost GHS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Swivel chairs</td>
<td>5</td>
<td>1,477</td>
<td>7385</td>
</tr>
<tr>
<td>Classroom desk</td>
<td>50</td>
<td>250</td>
<td>12500</td>
</tr>
<tr>
<td>Storage cabinets</td>
<td>4</td>
<td>500</td>
<td>2000</td>
</tr>
<tr>
<td>Office table</td>
<td>5</td>
<td>300</td>
<td>1500</td>
</tr>
<tr>
<td>Teacher’s desk</td>
<td>3</td>
<td>250</td>
<td>750</td>
</tr>
<tr>
<td>Ceiling fans</td>
<td>5</td>
<td>132</td>
<td>660</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td></td>
<td>50000</td>
<td>50000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>74795</td>
<td></td>
</tr>
</tbody>
</table>
Table 10

Revenue streams for the project

<table>
<thead>
<tr>
<th>Class</th>
<th>Age</th>
<th>Number of children</th>
<th>Fees per child</th>
<th>Total fee per term</th>
<th>Total per year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nursery</td>
<td>3 years</td>
<td>20</td>
<td>500</td>
<td>10000</td>
<td>30000</td>
</tr>
<tr>
<td>KG 1</td>
<td>4 years</td>
<td>25</td>
<td>500</td>
<td>12500</td>
<td>37500</td>
</tr>
<tr>
<td>KG 2</td>
<td>5 years</td>
<td>25</td>
<td>500</td>
<td>12500</td>
<td>37500</td>
</tr>
<tr>
<td>Grade 1</td>
<td>6 years</td>
<td>30</td>
<td>600</td>
<td>18000</td>
<td>54000</td>
</tr>
<tr>
<td>Grade 2</td>
<td>7 years</td>
<td>30</td>
<td>600</td>
<td>18000</td>
<td>54000</td>
</tr>
<tr>
<td>Grade 3</td>
<td>8 years</td>
<td>30</td>
<td>600</td>
<td>18000</td>
<td>54000</td>
</tr>
<tr>
<td>Grade 4</td>
<td>9 years</td>
<td>30</td>
<td>600</td>
<td>18000</td>
<td>54000</td>
</tr>
<tr>
<td>Grade 5</td>
<td>10 years</td>
<td>30</td>
<td>600</td>
<td>18000</td>
<td>54000</td>
</tr>
<tr>
<td>Grade 6</td>
<td>11 years</td>
<td>30</td>
<td>600</td>
<td>18000</td>
<td>54000</td>
</tr>
<tr>
<td>JHS 1</td>
<td>12 years</td>
<td>30</td>
<td>650</td>
<td>19500</td>
<td>58500</td>
</tr>
<tr>
<td>JHS 2</td>
<td>13 years</td>
<td>30</td>
<td>650</td>
<td>19500</td>
<td>58500</td>
</tr>
<tr>
<td>JHS 3</td>
<td>14 years</td>
<td>30</td>
<td>650</td>
<td>19500</td>
<td>58500</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>340</strong></td>
<td></td>
<td><strong>604500</strong></td>
<td></td>
</tr>
</tbody>
</table>

Table 11

Cost expenses for the school

<table>
<thead>
<tr>
<th>Salaries</th>
<th>Unit cost</th>
<th>Number</th>
<th>Annual total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic staff</td>
<td>600</td>
<td>20</td>
<td>144000</td>
</tr>
<tr>
<td>Non-academic staff</td>
<td>550</td>
<td>10</td>
<td>66000</td>
</tr>
<tr>
<td>Auxiliary staff</td>
<td>500</td>
<td>10</td>
<td>60000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td><strong>270000</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Advertisement</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>School website (internet)</td>
<td></td>
<td></td>
<td>50000</td>
</tr>
<tr>
<td>Brochure</td>
<td>50</td>
<td>100</td>
<td>5000</td>
</tr>
<tr>
<td>Billboard</td>
<td></td>
<td></td>
<td>5000</td>
</tr>
<tr>
<td>posters</td>
<td>50</td>
<td>100</td>
<td>5000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td><strong>65000</strong></td>
</tr>
</tbody>
</table>

| Registration (one times cost) | 10000 |
| Miscellaneous          | 30000  |

| Grand total cost | 375000 |

| Cost without registration | 365000 |
4.6.2 Valuation techniques

1. *Net Present Value (NPV)*

From the computations, the project has a negative NPV of approximately six million Ghana cedis at an assumed growth rate of 20%. The negative NPV indicates that financially the project is not profitable. Furthermore, the assumed growth rate used is not feasible. This goes to show that the project will not be viable under the NPV valuation.

2. *Payback period*

This valuation helps to know how long it will take to recover the initial investment. From the computations, at the assumed growth rate of 20%, the clients are expected to recover their initial capital within eleven years. Using the discounted payback period which seeks to find the present value of all the future cash flows, the clients will not recover their initial capital even after thirty years. Hence it can be concluded that the project is not feasible under the payback period.

3. *Return on Investment (ROI)*

This is a measure of profitability by evaluating the performance of the business. It is calculated as the ratio of the net profit and cost of investment all expressed as a percentage. A positive value indicates feasibility of a project. From the computation, the project has an ROI of 1.616%. Since the value is positive, it means the project is viable under ROI computations.
Table 12

Valuation of payback, discounted payback and return on investment

<table>
<thead>
<tr>
<th>Discounting rate per the Bank of Ghana</th>
<th>25%</th>
<th>Year</th>
<th>Income</th>
<th>Operating expense</th>
<th>Profit</th>
<th>payback period</th>
<th>Discounted payback</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assumed annual growth rate</td>
<td>20%</td>
<td>0</td>
<td>(14,821,050.31)</td>
<td>(14,821,050.31)</td>
<td>(14,821,050.31)</td>
<td>(14,821,050.31)</td>
<td></td>
</tr>
<tr>
<td>Expected cash flow year 1</td>
<td></td>
<td>2</td>
<td>239500</td>
<td>390000</td>
<td>239500</td>
<td>(14,581,150.31)</td>
<td>(14,581,150.31)</td>
</tr>
<tr>
<td>NPV= Expected cashflows - initial outlay</td>
<td></td>
<td>3</td>
<td>870480</td>
<td>373465.5</td>
<td>497134.5</td>
<td>(13,728,666.81)</td>
<td>(14,147,237.96)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4</td>
<td>1044576</td>
<td>377097.965</td>
<td>667460.035</td>
<td>(13,061,170.78)</td>
<td>(13,873,831.58)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5</td>
<td>1235491.3</td>
<td>380860.7947</td>
<td>870640.4054</td>
<td>(12,188,530.34)</td>
<td>(13,587,884.76)</td>
</tr>
<tr>
<td>Return on investment (net profit/cost of investment)*100</td>
<td>1.616</td>
<td>6</td>
<td>1504189.44</td>
<td>384659.2723</td>
<td>1119530.168</td>
<td>(11,069,000.17)</td>
<td>(13,294,406.65)</td>
</tr>
<tr>
<td>Normal Payback period</td>
<td></td>
<td>7</td>
<td>1805027.32</td>
<td>377079.965</td>
<td>667496.035</td>
<td>(9,652,478.71)</td>
<td>(12,997,340.57)</td>
</tr>
<tr>
<td>Year for full recovery</td>
<td>10th year</td>
<td>8</td>
<td>2166032.794</td>
<td>392390.9237</td>
<td>1772641.87</td>
<td>(7,878,836.84)</td>
<td>(12,699,772.84)</td>
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<tr>
<td>balance outstanding</td>
<td>0.89</td>
<td>9</td>
<td>2599239.352</td>
<td>396314.8329</td>
<td>2202924.519</td>
<td>(5,675,912.32)</td>
<td>(10,404,131.32)</td>
</tr>
<tr>
<td>Total payback period</td>
<td>11 years</td>
<td>10</td>
<td>3119087.223</td>
<td>400277.9812</td>
<td>2718809.242</td>
<td>(2,957,103.08)</td>
<td>(9,112,171.40)</td>
</tr>
<tr>
<td>Discounted payback</td>
<td></td>
<td>11</td>
<td>374904.667</td>
<td>404280.761</td>
<td>333623.906</td>
<td>(11,825,385.79)</td>
<td>(9,950,000.39)</td>
</tr>
<tr>
<td>Year for full recovery</td>
<td></td>
<td>12</td>
<td>4491485.601</td>
<td>412406.8043</td>
<td>4369418.797</td>
<td>(4,464,682.86)</td>
<td>(11,544,793.03)</td>
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<tr>
<td>balance outstanding</td>
<td></td>
<td>13</td>
<td>5389782.721</td>
<td>420696.1811</td>
<td>5182826.530</td>
<td>(2,597,010.86)</td>
<td>(10,974,748.85)</td>
</tr>
<tr>
<td>Total discounted payback period</td>
<td></td>
<td>14</td>
<td>7761287.118</td>
<td>424903.1429</td>
<td>7412284.979</td>
<td>(1,213,158.89)</td>
<td>(10,496,556.84)</td>
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<tr>
<td></td>
<td></td>
<td>15</td>
<td>9313544.542</td>
<td>429152.1744</td>
<td>8822021.368</td>
<td>(1,020,553.78)</td>
<td>(10,339,902.13)</td>
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<tr>
<td></td>
<td></td>
<td>16</td>
<td>11176253.45</td>
<td>433443.6961</td>
<td>12978060.44</td>
<td>(8,100,761.68)</td>
<td>(9,954,134.55)</td>
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<td>1341594.14</td>
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<td>1566026.05</td>
<td>(9,577,573.54)</td>
<td>(9,207,546.11)</td>
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<td></td>
<td></td>
<td>18</td>
<td>1609360.97</td>
<td>442155.9444</td>
<td>18870410.05</td>
<td>(9,122,095.11)</td>
<td>(8,856,790.61)</td>
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<td></td>
<td></td>
<td>19</td>
<td>1931256.95</td>
<td>446777.7478</td>
<td>22726810.68</td>
<td>(8,500,890.25)</td>
<td>(8,505,029.89)</td>
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<td>20</td>
<td>23175079.15</td>
<td>451043.2483</td>
<td>27664645.92</td>
<td>(7,891,760.86)</td>
<td>(8,166,019.94)</td>
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<td>21</td>
<td>27810094.95</td>
<td>455553.6807</td>
<td>32945560.33</td>
<td>(7,328,211.83)</td>
<td>(7,971,760.86)</td>
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<td></td>
<td>22</td>
<td>33372113.48</td>
<td>460019.2176</td>
<td>39356427.56</td>
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<td>(7,538,988.25)</td>
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<td></td>
<td></td>
<td>23</td>
<td>4004653.78</td>
<td>464710.3907</td>
<td>47591133.92</td>
<td>(6,355,377.31)</td>
<td>(7,094,025.03)</td>
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<td></td>
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<td>24</td>
<td>4805584.13</td>
<td>469367.4218</td>
<td>57917755.55</td>
<td>(5,313,428.76)</td>
<td>(6,632,515.72)</td>
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<tr>
<td></td>
<td></td>
<td>25</td>
<td>5760702.96</td>
<td>473850.9687</td>
<td>68732634.57</td>
<td>(4,252,228.52)</td>
<td>(6,196,985.71)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>26</td>
<td>69220415.55</td>
<td>47850.9687</td>
<td>74617071.77</td>
<td>(3,061,500.50)</td>
<td>(5,769,098.00)</td>
</tr>
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<td></td>
<td></td>
<td>27</td>
<td>83340498.66</td>
<td>483781.4968</td>
<td>82617071.77</td>
<td>(1,606,288.00)</td>
<td>(5,310,914.00)</td>
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<td>28</td>
<td>9964898.4</td>
<td>488179.4118</td>
<td>99160189.99</td>
<td>(756,816.48)</td>
<td>(4,865,187.56)</td>
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<tr>
<td></td>
<td></td>
<td>29</td>
<td>119578318.1</td>
<td>494455.2059</td>
<td>110099029.02</td>
<td>(786,896.422)</td>
<td>(4,411,404.40)</td>
</tr>
</tbody>
</table>

Based on the analysis above, the project is not financially feasible as the clients will be making losses over a prolonged period and will not be able to recover their initial investment. Also, the project will be too costly for the clients who are within the lower to middle income bracket. Furthermore, since the potential clients at the location are lower income earners and do not fully grasp the idea of a bilingual education, there is a high probability that the parents may not patronize the school. As such, it will be cost-effective if the clients adopted the lean start-up model explained in the literature review.
CHAPTER 5: RECOMMENDED SOLUTION, LIMITATIONS AND CONCLUSION

5.0 Recommended Solution

5.1 How to Implement the Lean Startup Method

Step 1: Develop a strategic plan for the school. This entails the mission, vision and objectives of the school.

Step 2: Map out how the school intends to attain the goals and objectives using the lean start-up model canvas. An example of the business model canvas is illustrated in the lean-model canvas below.

Figure 7. Sample business canvas of a bilingual school for Mr. and Mrs. Paintsil
Step 3: Based on the information on the canvas, the clients generate a series of hypothesis to be tested. Examples:

*Hypothesis 1:* Renting a classroom from a headteacher or an enclosed space from a person in the community to teach French on the weekends to adults and children.

*Hypothesis 2:* Going to the homes of the interested customer segments and teaching them French using the materials available like textbooks, flash cards and audios.

*Hypothesis 3:* Having French games and movie watching as an extra-curricular activity in existing schools to pique the interest of the target market.

The chosen hypothesis for this test will be hypothesis one.

Step 4: The clients measure the customer reaction to the hypothesis and its productivity.

**Reaction:** Parents allowed their children to come for the classes. They were willing to pay GHS 1 as classes fee per child. About twenty children were present for the pilot test. They were mostly attentive during the video session. They sung along with the songs. After an hour and half, they begun to lose concentration and sneak home.

**Productivity:** Only children especially those from the kindergarten level to class five were present at these classes. All twenty children were at the beginner level of French and after a month they could recite the alphabet in French. Also, they could count from one to twenty in French and spell these numbers. The class size increased to twenty-five by the end of the month.

Step 5: Based on the feedback, the clients either improve on the hypothesis or develop a new one to be tested on the market.
Improvement: From testing hypothesis one, it was clear that there was a market for the service. However, the fee is too low thus, parents should be educated on the importance of the French language so that they increase the fee. Likewise, classes should last for only an hour and half and flash cards should be used for easy learning. This could also help to minimize electricity and internet costs.

The clients can run this cycle over and over until it finds a solution that helps in solving the problem. If this hypothesis is not working, the clients can test different hypotheses until they find a solution that satisfies the needs of their target market and is beneficial to them as well.

5.2 When to Use the Lean Start-Up Model

When to implement the model will be dependent on the hypothesis to be tested. For example, if the clients are to test the hypothesis on inculcating the bilingual teaching into the curriculum of the pupils in a school, then the model can be tested for a term. If it is to test the after-school course theory, then it can be used every weekend for a month. Nonetheless, the frequency in using the model is at the discretion of the clients.

5.3 Why the Lean Start-Up Model

I recommend the lean start-up model because it requires a low capital base compared to establishing a school. For example, when implementing hypothesis one, the only costs the clients will have to incur is the cost renting the space on the weekends. Secondly, the model is easy and flexible to use. In relation to hypothesis one, the clients need to use the model only on the weekends which are non-working days for the clients. They also determine what time of the day to test their hypothesis. Thus, it is not necessarily at a disadvantage to
the clients. Furthermore, it serves as a form of marketing and brand awareness for the school. Lastly, it informs the clients on their target market, their needs and how effectively to solve them.

5.4 Limitations
Some of the challenges faced on this project included cost constraints as the interviewees were dispersed in various locations across Accra. Additionally, there was the interview-shy parents and school proprietors and this affected the results. For example, some school proprietors were unwilling to disclose how much they charged as school fees. This made it difficult to assess the competition in the French-English bilingual market.

5.5 Conclusion
The world has slowly become a global village and communication is now imperative for survival in this new world. Being fluent in more than one language gives a person a competitive advantage in this saturated work market aside the added factor of understanding and receptiveness to a different culture. French is the sixth most spoken language in the world. It is also the official language of many international bodies like the United Nations and Economic Community of West African States (ECOWAS) that Ghana belongs to. It is should come as no surprise that initiatives are being taken to inculcate the French language into the everyday life of the average Ghanaian especially their education hence a bilingual education.

Deciding to establish a bilingual school or a new business requires a lot of planning and resources. For entrepreneurs who are not financially capable of embarking on such large projects adopting a lean start-up model can serve as a cost-effective way of slowly reaching their target or goal.
REFERENCES


Feasibility Study on Establishing a Bilingual School


APPENDICES

Appendix 1: Interview Guide Questions

1. Interview Guide for parents

   A. Which country do you come from?
   B. What job do you do?
   C. Do you have children? If yes, how many?
   D. What are the ages of your children?
   E. What schools do they attend?
   F. What factors do you consider when selecting a school for their children?
   G. Will you be willing to send your children to a school where they will be taught in both French and English?
   H. What are your expectations of a language school?
   I. What do you think are the possible setbacks or advantages of taking their wards to a bilingual school?
   J. How much are you willing to pay as school fees?
   K. Do you have any other concerns?

2. Interview Guide for proprietors of bilingual schools

   A. Can you tell me the history of the school?
   B. What is the mission and vision of the school?
   C. What is the current school population?
D. What curriculum or structure does the school follow e.g. British, French, O-level?

E. Upon completion, what certificates are the pupils given?

F. How are staff recruited?

G. What makes the school different from other schools?