UNIVERSITY OF EDUCATION, WUNNEBA

STAKEHOLDERS' PERCEPTION OF THE COMPUTERIZED SCHOOLS SELECTION PLACEMENT SYSTEM IN ASHANTI REGION

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DECLARATION

STUDENT'S DECLARATION

I, JACINTA GYAMFI – POKU, declare that this, dissertation, with the exception of quotations and references contained in published works which have been identified and duly acknowledged, is entirely the result of my own original research work, and it has not been submitted, either in part or whole for another degree elsewhere.

SIGNATURE……

DATE……....

SUPERVISOR'S DECLARATION

I hereby declare that the preparation and presentation of this work was supervised in accordance for supervision of dissertation as laid down by the University of Education, Winneba.

NAME OF SUPERVISOR: REV. DR. FRANCIS K. SAM

SIGNATURE……..

DATE…….

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DEDICATION

To my husband Mr. Yaw Agyeman Boadi and my children, my brothers Elvis Nimo and Nana Kwame Amponsah Gyamfi – Poku.

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LIST OF ABBREVIATIONS/ACRONYMS

GSS	Ghana Statistical Service
JSS	Junior Secondary School
MDGs	Millennium Development Goals
SSA	Sub Saharan Africa
SSS	Senior Secondary School
TVE	Technical Vocational Education
CAMFED	Cambridge Foundation for Education and Development
BECE	Basic Education Certificate Examination
GES	Ghana Education Service
JHS	Junior High School
PTA	Parent Teacher Association
SHS	Senior High School
SSSCE	Senior Secondary School
WAEC	West Africa Examinations Council
SPSS	Statistical Package for Social Scientists
CSSPS	Computerized School Selection and Placement System
EFA	Education for All
FAWE	Forum for African Women Educationalist
GES	Ghana Education Service
GEU	Girls' Education Unit
JSS	Junior Secondary School
MOE	Ministry of Education

PTA	Parent Teacher Association
SMC	School Management Committee
SSS	Senior Secondary School
Ghana	Education Service, Girls' Education Unit
STME	Science Technology and Mathematics Education
UN	United Nations
UNESCO	United Nations Educational, Scientific, and Cultural Organisation
UNICEF	United Nations Children's Fund
USAID	U.S. Agency for International Development

ABSTRACT

The Computerized School Selection and Placement System introduced in Ghana is yet to fully realize its usefulness as there are still elements of influence in the placement system far from the raw scores. The increasing level of inefficiencies therefore requires an investigation into stakeholders' perception on the CSSPS and its ability to resolve the challenges of the manual placement system. The study adopted a mixed research design involving the administration of questionnaires to 386 students, 302 teachers and 77 parent selected through multistage sampling procedure and, interviews conducted with head teachers. The data collected were analysed using both descriptive and inferential statistical tools. The results showed that stakeholders perceived the CSSPS as corrupt as parents and school administrators sometimes use money to influence officers at computerized secretariat in selecting and placing their wards to their choice of schools and also the politicians used their political power to sometimes influence the admission process. Stakeholders further perceived the system to have lapses regarding placing girls into boy's school and vice versa. The prospect include gaining admission to top schools, increase in the student population and reduction human errors. Challenges of the system are difficulty of getting preferred school and course as well as the failure of the system to select students with talents in sport. Thus, the study recommends establishment of verification and monitoring body, stiffer punishment for offenders of corrupt practices, and upgrading of the rural schools to match the standard of urban school to enhance the effectiveness of CSSPS to achieve its intended goals.

CHAPTER ONE

INTRODUCTION

Background of the study

The new Educational System introduced in Ghana in 1987 enables all pupils completing Primary six to move on to Junior Secondary School (J.S.S.) without selection. Thus, the ability range of J.S.S pupils is expected to be very wide. The goal set by the Ministry of Education (MoE) for this new education system is to make J.S.S leavers functional in the use of in all areas with ideas and skills and to enhance pupils learning. (Eshun, Gordon, Hutchful, Sorpe, Asare-Inkoom, Homiah, & Arthur-Dadzie 2005, p. iii).

The Computerized School Selection and Placement Systems (CSSPS) is the system with great importance to the Ghanaian school communities. However, this innovative and creative programme has generated ideas, opinions, perceptions among citizens of the nation, thus, stakeholders on how students are placed in their respective schools after Junior High Schools 'Basic Education Certificate Examination (BECE). A stakeholder is a person (or group) that has interest in the activities of an institution. To Campbell and Rozsnyai, (2002), defined stakeholder as students, society, and government participating in or benefiting from the provision of Education as cited in Kate, CSSPS).

In this dispensation without the knowledge on the use of modern technology, with increasing population, there is a need for such intervention to aid learning process: without such a help, fastness of service will be relegated to the background affecting development, and not all objectives will be realized.

The qualification rate is defined as the number of pupils which qualify for SHS (an aggregate score of 5-25 in the four core subjects and a fifth best performing subject and with no scores of 7 or more in any of the core subjects). This is the measure used by CSSPS, the agency charged with placing students in SHS. The Basic Education division within GES use the BECE pass rate measure when considering school performance (an aggregate score of 5 – 25 in the four core subjects and a fifth best performing subject). Both rates are considered in the report although the qualification rate is given most attention as this not only provides information about relative performance but also informs about an objective measure, that of transition to second cycle education (Babah, 2011).

Although significant strides have been made with expanding access to basic education in Ghana, with the sector on target to reach the Millennium Development Goal for universal basic education in 2015 many challenges remain. Some of the most pertinent include ensuring equitable access to progress the educational ladder.

In the absence of any pre-existing central definition of underperforming schools within Ghana, international measures of underperformance are considered and a suitable approach given the available data was adopted, namely a minimum benchmark approach. With this method a minimum level of achievement is identified and any school falling below this level is deemed to be underperforming. Two concepts of success at BECE are chosen, reflecting existing definitions within the education sector. The first is the BECE pass rate, which is defined as an aggregate score of 5-25 in the four core subjects and one best performing subject. In the BECE scoring methodology a score of 1 is deemed excellent and 5 is average. Thus any pupil scoring higher than 5 in any subject is deemed

to be an under average performance. The national pass rate for BECE in 2010 is 59%, which forms a minimum benchmark. According to this measure, any school in which less than 3 in every five pupils passes BECE is considered to be underperforming. The second measure of success within BECE exams is the slightly more stringent qualification rate, which is used to determine eligibility (though not placement) in SHS. Qualification requires an aggregate score of 5 to 25 in the four core subjects and a fifth best performing subject but no more than a score of 6 in any core subject. The benchmark value for qualification rate is 49% and thus any school in which less than one in every two pupils qualifies for SHS is deemed to be underperforming.

Prior to the inception of the Junior Secondary School (JSS) and the Basic Certificate Examination (BECE) as the entry assessment procedure for placement of qualified students into the second cycle institutions, the common entrance examination (CEE) was the assessment medium for qualification into the second cycle schools (thus,. present day Senior High Schools).

The Common Entrance Examination consisted of a four (4) battery subject examination papers which were written in one day. Some of the examinable areas were; English Composition, grammar and summary, Agricultural science, Mathematics, Pre-Technical Skills and others.

The entry requirements were based on aggregate scores of students. The scores were graded 1 to 9 with 1 being excellent and 9 a failure (Babah, 2011).

Again, apart from the legal aggregate of 30 as the cut-off aggregate for entry into Senior High School, individual endowed schools established their special qualification and placement standards which ranged from the terminology of “six-ones” and “nine-

ones". This phenomenon again created anxiety among students and other stakeholders.The importance of the use of modern technologies like CSSPS cannot be overemphasized in this world of technological advancement.

Education as a social system, according to Frimpong (2012) is not 'self-regulatory' but composed of human beings who have right to decide on their lives. In this context, Hedged and Schneider (2005) described school as a complex setting where students, teachers, administrators, educational planners, parents and government interact to shape child's educational experience. Adding that, education can be seen as fundamentally optimistic human endeavor characterized by aspirations for progress and betterment of the future generation and the society at large. This implies that education and society are both interrelated or inter-dependent in the sense that both mutually influence each other. That is, without education been it formal, informal or non-formal, it will be very difficult to build a stable society in which the people are capable and competent; and without society it will be difficult to develop and organize good educational system to train people.

In education, most systematic transformation efforts as asserted by Watson and Reigeluth (2008) involve stakeholders who are critical in achieving the desired changes. In this sense, an individual or groups in society who are closely involved in the schools' operations should have interest in educational activities in a country. At the same time, they should be able to question, contribute and offer constructive criticisms on educational policies and programmes developed and implemented by government through ministry of education in order to make the implemented policies and programmes very successful.

The term "stakeholder" in education typically refers to anyone who has invested in the welfare and success of a school and its students. In this case, stakeholders in education include school administrators, teachers, students, parents, society and the government. Campbell and Rozsnyai (2002) define stakeholder as students, society and government participating in or benefiting from the provision of education.

The history of Education in Ghana reveals a deteriorating trend after independence which was characterized by mismanagement by school administrators, limited access for the disadvantaged and dwindling enrolment in schools. In effect, making it an all-embracing educational package, integrating the earlier educational policies and concerns of all well-meaning educationists, with new educational thinking compelled governments to introduce a number of reforms to help build formal education in Ghana. These reforms were implemented to improve quality of teaching and learning, promote access and participation of stakeholders in education and improve efficiency in management through decentralization.

As part of the several reforms initiated to address the deficiencies that emerged after independence in Ghana education, it is an undeniable fact that after the fall of the Convention Peoples Party (CPP) in 1966, the most comprehensive educational programme which has ever been embarked upon in the country took place in 1987 under the Provisional National Defence Council (PNDC) regime as asserted by Oti-Agyen (2007). In 1987, the Government of Ghana adopted the new educational programme, commonly referred to as the New Educational Reforms (NER) to address all the deficiencies in the educational sector. The main objective of the 1987 reform was to achieve universal education, expand and increase access to secondary/vocational

institution and to reduce drop out of pupil in the education field. The reform was designed to restructure the entire educational system in the country, specially the basic level. In all, nine (9) years were proposed for the basic education, thus six (6) years for primary school and to be continued with three (3) years of Junior Secondary School. After the completion of basic education, three years of Senior Secondary schooling was proposed.

The new structure of the 1987 reform proposed active involvement of stakeholders like parents, the community in the educational process. Again, primary and junior secondary schools could be both terminal and continuing, thus from the Junior School one could continue to Senior Secondary School, Technical Institutions, Vocational Institutions in the country. The New Educational Reforms were implemented by the government of Ghana in September, 1987 throughout the country. In 1988, pupils in the primary school class six moved to the Junior Secondary School with the exclusive of the pupils who have already registered for the common entrance examination in 1987.

The government of Ghana mandated the West African Examination Council (WAEC) to evaluate the pupils after the basic education based on continuous assessment plus the detailed results of individual performance in Basic Education Certificate Examination (BECE). Until the year 2005, selection, placement and admission of pupils from the Junior High School to Senior High Schools, Technical/Vocational Institutes had been the sole responsibility of Heads of Senior Secondary Institutions who converged at regional educational centres to conduct the selection of candidates in the schools based on the candidates best six grades and other factors defined by the community in which the school is located. In this sense, selection and placement of qualified candidates into

Senior High Schools, Vocational and Technical Institution of their choice was performed manually by Head of both private and public second cycle institutions in Ghana.

School systems in Ghana are typically organized by a series of progressions through which the student population moves. At each successive step only a fraction of the population is selected and a fraction of the population is drops out from school. To reduce the incidence of school drop outs, selection of candidates into various levels of education in Ghana especially from first cycle to second cycle, has undergone tremendous changes from the pre-colonial era to this present date. Thus, from time to time the Ministry of Education and other stakeholders in education tries to evaluate and review its policies and programmes implemented to improve the mode of selection of candidates and also increased students' intakes into various schools over the past years. One of such policy is the Computerized Schools Selection and Placement System (CSSPS).

In an attempts initiated by Ministry of Education, Ghana to improve upon the manual system of selection and placement of BECE candidate into second cycle Institutions. The Ministry of Education (MOE), and other stakeholders in education identified the following short coming in the manual selection and placement system:

1. Prospective Junior High Schools pupils were restricted to choosing all their preferred Senior High Schools from one region of the country (Asare, 2010).
2. Loss of confidence in the old system by the public credibility of some heads on the selection process was very questionable.
3. The system caused a lot of anxiety, frustrations and confusion especially for parents of qualified candidates and was also susceptible to problems due to

movement of registration cards and delays in the placement of such candidates (Ginks, 2008).

4. Disadvantages of using grades in the old system instead of raw scores.
5. Difficulty in handling large number of documents as the number of registered candidates increased annually.
6. Alleged abuse by some heads of SHS/IT of their discretionary powers to select candidates.
7. Human errors in the processing the admission forms and loss of cards. (Asare, 2010, Ginks, 2008)

With the exploration in the growth and utilization of Information and Communication Technology charged the Ministry of Education and Ghana Education Service contracted a private software company in Ghana (Sisco Ltd) to developed a software to use the raw score of BECE candidates in the selection and placement of qualifies candidates into public and private second cycle schools in Ghana. This was a significant attempt by MOE and GES to make information and services available to parents, students, schools and other stakeholders in education. Again, the company was task to develop software to deal with the challenges that emanated from the manual system of selection and placement system. Two years was used by the IT consultant and the Ministry of Education to do the preparatory work to ensure a smooth take off.

In September, 2005, the manual school selection and placement system was replaced by Computerized School Selection and Placement System (CSSPS). The CSSPS seeks to use computers (electronics) to select and placed qualified BECE candidates into Senior High Schools (SHS) Technical Institutions (TI), Vocational Institutes based on the

candidates raw scores. The change of the selecting and placing JHSs graduates into SHSs in the country from manual system to computerized system was implemented with the aim of bringing transparency, bridging the gap of gender disparity that exist in our schools, promoting efficiency in the selection and placement processes and to also bridge the gap of opportunities for access into SHSs, particularly candidates in rural and urban schools. The system of selection was based on the performance of the candidate in the BECE. A very good raw score is required to again admission into SHSs in Ghana because of the limited number of place available. The CSSPS secretariat is headed by a Coordinator who supervises the placement process operated by a private IT Consultant on behalf of the Ministry of Education and the Ghana Education Service. The CSSPS Coordinator is supported by Nine (9) permanent staff, Ten (10) Regional CSSPS Coordinators and One Hundred & Thirty Eight (138) District Exam Officers.

To achieve the objectives of the CSSPS changes were made in the old system before its implementation in 2005. These include; grouping of second cycle schools into six categories of Public Senior High Schools in category 'A' to D' , Public Technical/ Vocational Institutions were placed under category 'T' and Private Second High Institutions were placed under category 'P'. candidates were required to choose six schools, adding that candidates would be allowed to choose only one school from category 'A' and a maximum of two from the category 'B'. Candidates are allowed to make five choices from category 'A', 'B', 'C' 'D' and 'T' but the sixth school would be selected from either category 'C' or 'D' or and 'T' or 'P'. Candidates with the interest to pursue purely Technical programme were allowed to select all the six schools from

category 'P'. Same privilege was given to candidates with the desire to pursue courses in the Private Senior High Schools.

In the 2014 academic year, the Ghana Education Service reviewed the guideline for the selection of second cycle schools and programmes by the BECE candidates. The review was necessitated by GES to ensure equal fair selection and distribution of students. Candidates were restricted in the selection of schools. The 2014 guidelines are as follows:

1. Public Senior High Schools have been put into three (3) groups namely: option 1,2 &3
2. Public Technical/Vocational Institutions have been put into option 4
3. Approved Private schools have been placed in option 5 for both Senior High Schools and Technical/Vocational Institutions

Again, the following conditions were provided by Ghana Education Service in the 2014 review to guide candidates in their selection.

1. Candidates must choose four (4) schools (1st to 4th choice) with corresponding programmes
2. Candidates must not choose one school twice.
3. May select all choices from option1
4. Should not select more than 2 schools from option 2
5. Cannot choose more than 1 school in option 3
6. Candidates who desire to pursue purely Technical/Vocational programmes may select all choices from option 4
7. Candidates have the liberty to select all choices from a mix of options 1, 2, 3,4 &

8. Choice of schools from a combination of regions allowed.

Selection and placement of candidates is based on a minimum of six subjects of each candidate. These subjects comprise four (4) core subjects and two (2) best subjects. The core subjects are: English Language, Mathematics, Integrated Science, Social Studies/Building Design and Technology. The two other best subjects are selected from other subjects. The raw score of the six selected subjects of each candidate is aggregated for each candidate for placement. For candidates to qualify for selection, they have to score not more than grade five in the core subjects of English, Mathematics, Social Studies and Science, and not more than grade six in any two other subjects. After placement, candidates get to know their placement status through the following means:

Short Message Service (SMS) short codes are announced for candidates to send a text message by texting the candidates' index number and the last two digits of the year in which the candidate wrote the BECE to 1060 on some selected mobile networks. This will inform the candidate of his/ her placement status including the programme to be offered by the student.

- Lists of all successful candidates and their schools placed are sent to:
- Regional and District Education Offices
- SHS and Tech/Voc. Inst.
- JHS
- Individual Result Slip are posted on the Internet
- Placement (ESS/ TI) Forms for individual Candidates are posted on the Internet for each qualified student

Candidates will have access to their Result Slip and ESS/ TI Forms by printing it from http://www.myjhsresult.net. The candidate must buy the CSSPS scratch card from accredited agencies in order to do this. These agencies are SIC-FSL, Agricultural Development Bank, Apex Bank and all Rural Banks, Ghana Post, Fidelity Bank and in 2013, Unibank. The introduction of the CSSPS gives room for re-entering candidates who for various reasons to defer their admission into SHS/ TI/ Vocational Institutes in their qualifying year are considered for placement. This policy is opened to candidates who sat for the BECE three years back.

Statement of the Problem

The computerized school selection and placement system (CSSPS) is an educational policy intended to improve the manual system of selection and placement of qualified Basic Education Certificate Examination (BECE) graduates into public and private Senior High Schools/Technical and Vocational Institutes (SHS/TVET) in Ghana. This new policy came with very good intentions such as achieving the government long–term objective of universal basic education, expanding, and increasing access to secondary school in Ghana; enhancing national integration through the system's ability to allow students to choose schools from more than one region; help improve teaching and learning since selection and placement in purely base on student raw scores; reduction in human error during the process of capturing registration data; offer all students equitable access to senior high school education; help bridge the admission gap between the urban and rural SHSs and vocational Institutes and Technical/Vocational Institutes transparent to all BECE graduates. The new system of selection and placement

of students also gave an assurance that, parents would no longer travel to look for places in SHSs for their wards. Through the use of modern technology like the use of the internet, mobile phones, parents can sit in the comfort of their homes to access the results and school placement without frustrations and time wasting.

However, about fifteen years into its implementation, the system has been accused by some key stakeholders especially parents and guardians on some emerging problems and criticisms coming out from the Computerized School Selection and Placement. These emerging problems had necessitated most angry parents and other educational stakeholders to express their challenges and reactions about the process particularly, some parents in Ashanti Region. These parents had always expressed their mixed reactions through the various media formats such as the Chronicle newspaper, Nhyira FM, Kessben FM all in Ashanti region and the District Education Offices on how a fraction of students not been placed in the senior high/technical/vocational schools on time. As such, some of the students gain admission in the second term whiles their mates engage themselves on academic work right from the first term in their first year. This has been a great concern to the parents, school administrators, teachers and the students who do not have admission in the first term in the region.

For many years of the implementation of the CSSPS, some parents and headmasters of some SHSs complained of having problem of gender mixed up: some female students placed in male single sex schools and vice versa (Asare, 2010). More so, The Chronicle newspaper published an article “Scam of the Placement System” indicating in their report that “some staff at the CSSPS Secretariat do manipulate the system to serve their parochial interests, instead of that of the nation” Again, a parent

interviewed by the paper in Ashanti Region, who was a victim to this scam, told the reporter that because some staff at the CSSPS had access to the placement before they are released by the GES, they are able to change some placements to favour those who are prepared to pay. Adding that, a student posted at Opoku Oware SHS can be removed and replaced with a student posted to different school like Toase SHS in Ashanti Region, if the parent of the latter pays the required bribe. The paper called the Ministry of Education and Ghana Education Service to investigate in the operation of the 'protocol culture' in the CSSPS to instill sanity at the CSSPS secretariat and ensure that pupils are selected and placed in second cycle institutions purely on merit (Aboagye, 2011).

In addition to the above reports, most of the callers on the radio attributed their challenges to the wide disparities on the status of SHSs in terms of their performance and public image, admission to the school have become very competitive paving way for some people to manipulate the process.

Furthermore, most parents had expressed their dissatisfaction on how the new system placed their wards in some of the SHSs in the rural areas where the schools have inadequate learning and boarding facilities to accommodate their wards. Educational stakeholders for years describe the new system as unfair, corrupt, frustrating and has not addressed its objectives such as providing a level 'playing field' for JHSs graduates from all manner of schools and no matter the location or disparity that exist between rural and urban schools.

Lastly, most of the teachers interviewed from some of the second cycle institutions in the region on Nhyira FM-Kumasi described the Computerized School Selection and Placement System (CSSPS) as unfair to the roles they play as sports

teachers in schools. The system makes it difficult for them to spot and admit candidates who have interest in sporting activities than academic work since selection is only based on academic performance of a student. Even though, the implementation of the CSSPS has begun to improve and speed up the selection process but the available literature and comments made by some stakeholders shows it has emanated its own challenges in addition to the problems that existed in the old system. It is in the light of these problems that this present study deemed it timely and appropriate to evaluate stakeholders' perception on the CSSPS in the Ashanti Region of Ghana.

Purpose of the Study

Stakeholders' perception on the Computerized School Selection and Placement System (CSSPS) and also to determine whether Computerized School Selection and Placement System (CSSPS) will affect intake in Rural and Urban Senior High and Technical Schools

Objectives of the Study

The study was designed to achieve the following objectives:

1. to find out the perceptions students, parents, and teachers hold about the CSSPS in Ashanti region.
2. to determine how stakeholders', perceive the intake trend of CSSPS in the Rural and Urban SHSs in Ashanti region?
3. to identify the prospects and the challenges of the CSSPS in Ashanti Region.

Research Questions

The following research questions guided the study

1. What perceptions do students, parents, and teachers hold about the CSSPS in Ashanti region?
2. How do stakeholders' perceive the intake trend of the CSSPS in the Rural and Urban SHSs in Ashanti region?
3. What are the prospects and the challenges of the CSSPS in Ashanti region?

Significance of the Study

The findings of the study may be useful to educational planners, policy makers, administrators, teachers, students and parents who wish to know more of the CSSPS. Furthermore, the findings from the study may enable MOE and GES to plan for the future and make adjustments or restructure the CSSPS where necessary to make it more functional.

Moreover, it would help the MOE and GES to develop teachers' preparation and in-service training programmes to energize and sustain teachers' interest in implementing CSSPS.

Finally, the information and knowledge provided by the study would not only add up to the study but may also whip up stakeholders interest in CSSPS in Ghana.

Organization of the Study

Chapter one is made up of introduction, which comprises background to the study, statement of the problem, purpose and objectives of the study, research questions, significance of the study, delimitation, limitation and definition of terms. Chapter Two covers the review of literature relevant to the topic. Chapter Three deals with the strategies adopted in data collection, the sample and sampling technique, research design, administration of research instruments and data analysis plan. Chapter Four presents the discussion, interviews and analysis of the main findings while Chapter Five presents the summary, conclusions drawn from the study and recommendations for improving the situation of school selection and placement in Ghana.

CHAPTER TWO

LITERATURE REVIEW

This section sought to review the work of several authors concerning stakeholders' perception and the computerized school selection and placement system is presented. Theories and authors' opinions are also considered under this section. The researcher focused on the following sub topics:

a. Stakeholders and their Roles in the Educational Sector
b. Perception
c. Theory of Selection
d. The Theory of Placement
e. Mechanism of selection and placement into Educational Institutions
f. Rural-Urban Schooling
g. The Role of ICT in Selection and Placement
h. Prospects of the CSSPS
i. Challenges of the CSSPS

Stakeholders and their Roles in the Educational Sector

Schools exist to serve the educational needs of the society within which they live and the world at large. This becomes reality when the society and other members play their roles as stakeholders by knowing how the school is performing. The major stakeholders in education are the central government (Ministry of Education), parents, teachers and students. The success or failure of the education process depends on the interaction of these group of stakeholders and the changing roles they play in, or are

assigned by the society in which they live, most importantly, it is the interactions of the child with the teacher in the contexts of the school and the community and with the parents and the family in the contexts of the home and the community that determine the outcome of the child's education. Such relationships among the stakeholders are pivotal in developing a country through education.

In an explanatory context, stakeholders in education are individuals or groups that have inter alia an interest in the quality of education and standard outcome of education. These include government, employers, students, academic and administrative staff, institutional managers, prospective students and their parents, taxpayers as asserted by Harvey (2004-17). On the part of Campbell and Rozsnyai (2002, p. 133) analytically define stakeholders in education as: Students, society, and government participating in or benefiting from the provision of education. In more general descriptive terms; it is the involvement of a significant number of persons in situations or actions which enhanced their well-being, such as their income, security or self-esteem (International Association for Public Participation, 2006). From the above, the researcher will define Stakeholder as a person or a group that have vested interest in uplifting the vision and the missions of an organization and serving as a check to the organization.

In 'The Varied Paths to Socialism,' Nyerere indicates the danger of a situation that lacks the participation of the people as:

> If the people are not involved in public ownership, and cannot control the policies followed, the public ownership can lead to fascism not socialism [...] socialism is only possible if the people as a whole are involved in the government of their political and economic affairs (Nyerere, 1968).

This statement by Nyerere draws attention to the importance of stakeholders' participation in the development of the educational sector and the society at large. In this sense there should be effective programmes and roles to engage parents, communities, students and teachers to embrace the philosophy and policies from the central government. This because the responsibility for children educational development is collaborative enterprise among Parents, Schools, Staff and the Community members

Short and Greer (2002) points out that, teacher should be empowered to occupy significant role in decisions making, control over their work environment and conditions, and opportunities to exhibit professional roles during teaching and learning as asserted by (Short and Greer, 2002). The teacher as a stakeholder is expected to possess the professional knowledge to lead the students in instruction. In addition to serving in an instructional role the teacher has additional responsibilities as a mentor, supervisor, counselor, and community leader. In this sense, teachers are expected to use their professional knowledge to guide students and parents during selection of schools and programmes into schools.

It is the primary aim of every parent to be assured that their wards will receive a quality education, which will enable the ward to lead productive rewarding lives as adults in a global society (Cotton and Wikelund, 2001). Parent's involvement as educational stakeholders help to influence student's behavior such as time management, study habits, eating practices, personal safety and general welfare of their wards both at home and school. Parents provide additional resources for schools to achieve their educational success. For instance, parent involvement with their ward's educational process by attending school functions, participating in the decision making process such as PTA meeting, assisting teachers in selecting schools and programmes for their ward,

encouraging students to manage their social and academic time wisely, and modeling desirable behavior for their children represent a valuable resource for schools across a nation.

Again, Short and Greer (2002), said students should be encouraged to form part in decision making though the primary role of a student is to receive knowledge at school. By involving students to be integral part of educational stakeholders meeting, forums, debars and selection of schools and programmes during registration make education a successful institution in a society. Encouraging students with shared decision making in schools arouse the interest and responsibilities.

In an interview with the Head of Public Relations at the GES, Parker Allotey on Citi FM made known to the public the role of stakeholders to help improve the new system of selection and placement of student in second cycle schools in the country, saying;

"We have had cause to review the CSSPS. After every round of the selection process, we do hold a stakeholder review meeting to take on board complaints of the general public and other stakeholders, and so yes, we do review the process." In relating to the assertion made by Mr. Allotey, indicate that stakeholders in education such as parents, students, and teachers form part in making decisions in improving Computerized Selection Policy. He ended his interview by calling Ghanaians to educate the illiterate parents/guardians and students the need of the CSSPS and the need to take interest in the education of their wards to a higher level.

Parents/guardians are also required to play their roles to enable their wards to attain the highest level of their education. Their roles include payment school and examination fees of their wards promptly, assist their wards to select Senior High Schools or Technical or Vocational Institutes and programmes, co-operate with the teachers/school counselors to determine the best programme option for their wards and to accept the selection and placement generated by the computer and the final placement list issued by the GES.

BECE candidates are required to learn hard to qualify for selection, since selection and placement are purely on merit and no other consideration. Teachers are to create conducive and competitive learning environment and assist all children in their learning processes. Again, they have to keep accurate and true records of pupils/students' performance since all records form part of the learner's carrier. Lastly, teachers are to complete all application form for the BECE candidates correctly during the registration process. Therefore stakeholders such as Community Based Organisations (CBOs), School Management Committees/Parent Teacher Associations (SMC/PTAs), District Assembly (DA), District Education Office (DEO) and Community and Religious Leaders (CRLs) are all to play their roles to improve and sustain the new way of selection and placement of students.

Perception

Human life is typically based on perception which helps in identifying problems from the environment and finding solutions to the identified problems. This comes as a results of how on perceive things from the environment with his or senses. The word

perception originated from the Latin word “perception, percepio” meaning receiving, collecting, and interpretation of sensory information in order to understand what goes around the environment. Current research by Philosophers and Psychologists view perception as far more complex as it was imagined in the 1950s and1960s,when it was perceive that building machine could take about a decade. Perception is one of the oldest and most fundamental fields within psychology. The oldest quantitative laws in psychology are Weber's-Fechner’s law. The law of Weber states that the smallest noticeable difference in stimulus intensity is proportional to the intensity of the reference whiles Fechner's law quantifies the relationship between the intensity of the physical stimulus and its perceptual counterpart Human and animal brains are structured in a modular way, with each structure processing different kinds of sensory information. Perceptual systems can also be studied computationally, in terms of the information they process. The study of perception gave birth to the Gestalt school of psychology, with its emphasis on holistic approach.

Perception deals with human sensory experience of the world around which involves both the recognition of environmental stimuli and actions in response to these stimuli. Through this process, Human beings are able to gather information about properties and elements of the environment that are critical to our survival. Perception expose us to the environment and able us to act within the environment.

According to the *Oxford English Dictionary*, “perception” is the process of becoming aware or conscious of a thing or things in general; the state of being aware; consciousness; understanding.” The process of understanding becomes a mediated experience, as it requires the use of the senses in order to process data. (Source:

"perception". In the International Dictionary of Education (1977), "perception" is defined as "the process by which the individual organized and make sense of his or her sensory experiences. One's perceptions of his or her environment constitute not only his or her reality but also from of reference for his or her behavior" (p.261).

Also, in Webster's Third New International Dictionary of the English Language, defines perception as "the art of perceiving, visual perception, the ability to perceive, especially to understand, the action of the mind in reforming sensations to the object which caused them; awareness, through the senses of an external object" (p. 358). The world around us is not psychologically uniform to all individual which accounted for different opinions, actions and definitions in perception has been defined in a variety of ways by different scholars. In a lay man's view, perception can be defined as an act of being aware of ones environment through sensation, which denotes an individual's ability to understanding.

Rao and Narayan (1998:p.329-330) definition of perception has similar features of the above definitions. However, they emphasize that perception ranks among the 'important cognitive factors of human behavior" or psychological mechanism that enable people to understand their environment. In their own words "perception is the process whereby people select organize and interpret sensory stimulation into meaningful information about their work environment'. They urge that the most important determinant of human behavior, stating that there can be no behavior without perception".

On the part of Shafers (1993), said "perception refers to the interpretation of sensory input by the brain" (p.12). He continues by saying "if you or I hear a sound, we are quick to interpret it as a voice, piece of music, or the humming of an appliance. When

an object passes through our visual field, we can easily label it as a person, a cat or an airplane. Adults are accomplice perceivers' (p.25)

According, Bootzin, (1993), define perception as "the brains attempt to describe objects and events in the world, based on sensory input and knowledge. By combing information provided by the senses with the knowledge derived from past experiences, the brain creates representations of people objects and events. Perception is actually part of the continuum of information processing by into perception, which blends into working memory, which one process leaves off and the next begins" (p.118).

Bartley, (1969) on the other hand argued that "although the term perception is usually restricted to aspects of experience, it has certain behavior implications. Perceptions of objects situations and relationship is often correlated with particular overt reaction if we are aware of difference in colour of apples, we will very likely select the red one for eating. Perceiving that a package is especially heavy we used both hands to lift its, otherwise we use one hand (p.98). From the above perception can be defined as the way an individual can use the senses to understand the real nature of an object or an issue.

Theory of Selection

Philosophically, selection of pupils or students into schools is solely based on the performance of the particular school, its aims and objectives, the programme the school has got to pursue and offer to the students as well as the end product the institution wants to have at the end of the programme.

In Microsoft Encarta (2007), selection is referred to as the range from which something can be selected. Research indicates that parent are supposed to know apply the results of their wards before they apply for placement in schools but this idea is been flouted upon by countries like England, Ghana where parents find system too difficult to comply and purely base their selection and placement of their ward on lottery.

A research by Tamakloe, Atta and Amedahe, (1996) in Ghana suggested that before one is selected into an institution he/she must be exposed to the entire contents of a course through instruction in relation to the established objectives. He cited the terminal and end of the academic year tests or other examinations in our educational institutions as examples. The Basic education Certificate Examinations conducted by the West African Examination Council (W.A.E.C) was also cited as a sort of exams used to evaluate students.

Another research conducted by Tamakloe et al (1996) found that before a student could be selected to the next educational ladder, one have to go through an examination administered by external body like the W.A.E.C. W.A.E.C also has stake in building a quality education in Ghana. It is an external examination body task to conduct exams for candidates at the completion of a course or a programme. These include the certification at the end of the basic and secondary education where Basic Education Certificate Examination and the West African Certificate Examination are released to the Junior High Schools and Senior High Schools candidates respectively.

Moreover there is abundant evidence that selection should be based on two selection principles. Evidence to this is asserted by Awure (1988), saying Quality Technical Apply Course (QTAC) applies two technical principles to select all applicants after application:

1. Eligibility – Applicants applying for a course must meet the Minimum Entry Requirements (example audition, English language proficiency, subject prerequisites). If an applicant /fails to meet the admission requirements for a course or a programme, the application is not considered for admission.
2. Merit – Applicants who do meet the Minimum Entry Requirements then compete for placement in their selected institutions. Students selection for placement are ranked in descending order,(thus from the highest score or grade) until all quota places are filled.

This principle of selection on merit is confirmed by MacLeod and Urquiola (2009) theoretical model predicts that competition in school selection system will lead to socio-economic stratification if admission is based on merit. This is in-line with the selection process in the computerized school and selection system which also base its selection on merit.

Similarly, Chade and Smith (2006) suggest that it is better for students to rank selected choice of schools in order of preferences. This suggestion is rightly in line with the guidelines explicitly instructed for school selection that "choices must be selected and listed in order of preference. Research by Lai, F., Elizabeth S., & Alain de Janvry (2009).also indicate that school selection should be carefully ranked by candidates in order of preference.

Broomer (1999) opined that selecting and allocating of candidates in the educational system where competition is at play should be based on lottery which is the fairest way for selecting. In line with this submission from Broomer, other researchers also suggest that selection should base on tossing of coin. Tamakloe et al (1996) says that

the examination administered by W.A.E.C help to provide information for placement. They further states that the grades or scores provided by W.A.E.C help school administrators to classify and group students who qualify into their selected schools with the appropriate programme to be offered.

Hooker (2009) argue that, selection of candidates into schools or their next level of education may not be the same in all the schools competing for the candidates but are strongly based on their objectives and aims of the school.

Evidence gathered from Ghana and other settings shows that students from less privileged background tend to apply to less selective schools than their wealthier counterparts as published by (Ajayi 2012).

The Theory of Placement

In Microsoft Encarta (2007) define placement as task of helping a student to find an appropriate course or class. Placing students into schools or class goes with activities such as admission, counseling, referral services, records, and follows ups. In Ghana, successful students are placed into their next educational ladder base on pre-requisite examination in Ghana such as BECE and WASSCE (West African Senior Secondary Certificate Examination) administered by the West African Examination Council. Based on the results submitted by WEAC enables the placement unit within the Ghana Education Service to put students in their correct ability level; students are tested for placement base on content of the given curriculum. Placement is pure base on student raw score performance.

According to David and Douglas (1991), examination results are often used by counselors, examination bodies, MOE, placement unit to help determine the most appropriate school, programme and situations in which to place the student. He further stated that assigning a person to a particular course of studies within an institution of higher learning is usually a narrower focus than determining eligibility for admission to the institution. David and Douglas (1991), further state that testing the ability of a student for placement usually involves competency or aptitude level of the student. Such tests are usually used to assess the general. Tests used for such purposes attitude of the students such as intelligence test scores are used as one of the specific abilities.

David and Douglas (1991), point out that placement (also called ability grouping or streaming) in education, is the process of putting students into different groups within a school, based on academic abilities. For years, countries like United Kingdom, Australia, New Zealand and South Africa prefer to use ability grouping or the streaming process as a way of grouping students into different "tracks" to facilitate learning The terms "placement" and "ability grouping or streaming" are often used interchangeably, Gamoran (1992) differentiates between the two. He explained the term "placement" as the process, by which students are separated into groups for all academic subjects, but "ability grouping," on the other hand, is the separation of students into groups within a class, based on academic ability performance. He further indicated that high ability groups are often assigned special work that is more advanced than the low performing students in the class.

Anastasi (1961), argue that placement is based on a single score. This score may be derived from a single test, such as intelligence test. If a battery of test has been administered, a composite score computed from a single regression equation would be employed. Examples of placement decisions include the sectioning of college freshmen into different mathematics classes on the basis of their scores on mathematical aptitude tests. It is evident that in this decision only one criterion is employed and that placement is determined by the individual's position along a single predictor scale.

Anastasi (1961) is again reported to have said that placement should base on student's high school GPA and ACT scores. Teachers can base on the students' GPA to advise the low performing students and organize remedial for such students. Placement recommendations allow students to begin where they are likely to do well, assisting them in acquiring both graduation and a minimum GPA.

Tamakloe et al (1996) said, in Ghana students are placed in their next class using their continuous assessment and terminal assessment being 40% and 60% respectively. At the basic school level, the continuous assessment and terminal assessment results are used to promote pupils from class to class. At the Junior High School, continuous assessment of students contribute 40% in the final grading of each student in each subject area at the end of the three – year period while the external examination administered by W.A.E.C takes 60% of the final marks. The 40% which serves as the internal marks for each candidate in each subject offered is equally weighted in terms of years. Currently, the mode of the assessment has been revised to 50% scaled for continuous assessment and 50% scaled for the final examination assessment.

Bailey, Jeong and Cho, (2010) suggested that, the score of the candidate being above or below the cutoff determines the success and the failure of the candidate where he/she should be placed. According to Bailey (2009), said, the performance of a candidate will determine the placement of the student to his/her selected school.

In addition, student performance standards are the actual things students must put up to demonstrate their proficiency at a specific level on the content standards (National centre for Research on Evaluation, Standard and Student Testing, 1999). Lai, F., Elizabeth S., & Alain de Janvry (2009) also noted that errors can have adverse effect on student's outcomes. In cases where students are placed to lower performing schools which normally lead to lower academic performance by some students.

A study by Ohuche and Akeju (1988) found that the admission grades or scores serve as a motivational factor to the student. He explained that students that start with good grade/score and placed in their next level of the educational ladder tend to strive hard under intrinsic motivation whiles counterparts with low grade/score strive to improve their performance under extrinsic motivation in the form of instrumental, achievement or social motivation.

Farrant (1996), states the inability of a student to tackle a course or programme leads to dropping out. The implication of this assertion is that the quality of students' entry grade/score has an effect on academic performance. Entry grade/score of a student serves as foundation on which further education is built. It has been established that student with low score are placed in low performing schools in the country.

Mechanism of Selection and Placement into Educational Institutions

Hevns (1974) assert that tracking is an institutional mechanism used to stratify applicants into high schools in America. It is often considered the principal means of academic stratification in high schools. He further reported his findings on students' initial curriculum placement in U.S. schools using data from High School and Beyond (HSB). He touched on the major criteria used for placement and on several structural properties that may specify the conditions under which some criteria may affect placement of others. The main reason for this focus is that the criteria that affect the track location of students can do much to shape the quality of students' educational experiences, as well as the nature of the tracking system itself, and thus the subsequent amount and kind of mobility in It.

Hevns (1974) further suggested in his studies that several characteristics of students may be associated with students' location in the tracking systems of high schools. Among these characteristics are gender, race-ethnicity, ability (as measured by standardized tests), socioeconomic status (SES), achievement (grades and/or test scores), and educational expectations or aspirations. In the case of Ghana almost all institutions of education in Ghana based on the results of examination organized by an accredited examination body such as WEAC for the selection and placement of new applicants into schools. In the higher education institutions such as Colleges of Education, Polytechnics, Universities and others use their own system of student selection. This is because in order to be placed in a higher education program, applicants were required to apply to the institutions individually with their grades obtained to the applied institution. Most of these higher institutions sometime base on Entrance exams

as a mechanism for selection and placement. This mechanism of selection into higher institutions differs from the mechanism of selecting BECE graduates into Senior High Schools in Ghana.

At the end of junior high school, students compete for admission to senior high school (SHS). Application to senior high school is centralized through a computerized school selection and placement system (CSSPS) which was introduced in 2005. The system allocates JHS graduates to SHS based on students' ranking of their preferred program choices and their performance on a standardized exam. . Every year, the CSSPS Secretariat processes the results of three categories of students for Selection and Placement.

- Category 1 : Qualified candidates who completed that academic year.
- Category 2 : Re-entry Candidates who completed 3 years back (Eg.2019 will be 2016-2018)
- Category 3 : Foreign Students (Ghanaians & Non Ghanaians). In general

1. Final year students submit a ranked list of choices, stating a secondary school, a program track within that school for each choice and the preferred accommodation in the school.
2. Students take the Basic Education Certificate Exam (BECE) which is a nationally administered by the West African Examination (WEAC) body.

3. Students who qualify for admission to SHS enter the pool of selection for Senior High Schools through the centralized computerized school selection and placement system (CSSPS) which was introduced in 2005
4. Schools declare their capacity for the current year and qualified students are assigned in merit order based on their aggregate BECE scores (comprising of scores in the four core subjects and best other two subjects), as follows:
   (a) In Round 1: Each student applies to the first choice in her ordered list of choices. Each school tentatively assigns its seats to applicants in order of their aggregate BECE scores, and rejects any remaining applicants once all of its seats are tentatively assigned.
   (b) In each subsequent round: Each student who was rejected in a previous round applies to the next choice on her list. Each school compares the set of students it has tentatively accepted with the set of new applicants. It tentatively assigns its seats to these students one at a time, again in order of students' aggregate BECE scores, and rejects remaining applicants once all of its seats are tentatively assigned.
   (c) The process terminates when no spaces remain. Each student is then assigned to his or her final tentative assignment.

The CSSPS emphasizes the importance of selection on merit as well as the prospect of displacement in its explanations of the application process. (Ajayi, 2012)

A notable aspect of the Ghanaian school selection system is that students have to register and submit their Senior High School applications before taking the entrance exam. In choosing schools and selecting programmes, candidates are free to select all their schools from the ten Regions in Ghana they wish under the CSSPS. This is due to the fact that all selection and placement of candidates is been done by the computer software in a centralized location.

According to Somuah (2005), in Ghana the CSSPS based on the following guidelines:

A. Total Score of six (6) subjects are used for selection. This comprises four (4) core subjects and two (2) best subjects.

The Core Subjects are

i. For Senior High School subjects considered include: English Language, Mathematics, Science, and Social Studies.

ii. For Technical Institutes subjects considered include: English Language, Mathematics, Science, and Pre-Technical Skills.

B. To qualify for admission a candidate's grade in any of the four (4) subjects should not exceed 5.

C. The minimum grade for each of the best other two subjects should not exceed 6; and if added to the four core subjects, must not exceed an aggregate of 30.

D. A candidate whose grade for any of the Core Subjects exceeds 5 or cancelled by WAEC will be deemed not qualified for selection and

placement. That is the CSSPS secretariat would not select that student for placement.

The nature of the CSSPS has changed since it was established in 2005. To begin, the number of permitted choices has increased over time. Students were allowed to list up to three choices when the CSSPS began in 2005, this increased to four choices in 2007 and to six choices in 2008. Moreover, Ghana Education Service introduced an additional reform in 2009 which was designed to improve the decision-making ability of students. This suggests that policy makers recognize the scope for improvement.

A statement signed by Mr. Sam Bannerman-Mensah, Director General, GES said all 2008/2009 BECE candidates will be given the opportunity to make additional choice of two schools and programmes in order to increase their chances of placement into SHS or Vocational Institutes. To that end, the Ghana Education Service (GES) in collaboration with the Computerized School Selection and Placement System (CSSPS) secretariat made an additional reform in 2009 which imposed further restrictions on the selection of choices by students.

The schools were put into six categories based on "available facilities", Public Senior High Schools in 'A', to 'D', Public Technical/Vocational Institutions under category 'T' and Private Senior High Schools and Technical Vocational Institutes in category 'P'. every candidate is required to choose a total of six schools, stressing that candidates would be allowed to choose only one school from category 'A' and a maximum of two schools from category 'B'. with this new policy, if a candidate makes five choices from categories 'A', 'B', 'C', 'D' and 'T' the sixth purely Technical courses may select all six choices from category 'P'. The same also goes for candidates who

desire to pursue course in private senior high schools. Selection and Placement process under the Computerized School Selection and Placement System (CSSPS) has undergone several reforms since it was first adopted in 2005 is making positive changes. Under the revised process, the cut- off point in the 2010/2011 academic year was reduced to aggregate 25 using the four core subjects and one best elective subject with the grade in each subject not lower than five. Previously, the qualifying grade was between aggregates six and 30 in the four core subjects and two best elective subjects. The 2010 BECE candidates are the junior high school pioneer products of the new educational reform introduced in September 2007 under which candidates were to write English Language, Mathematics, Social Studies, Integrated Science, Ghanaian Language as well as Basic Design and Technology.

These were contained in a statement issued by the Ghana Education Service (GES) and signed by the head of the Public Relations Unit, Charles Parker-Allotey. It said: "The CSSPS will still use the total processed raw scores that is mark out of 100 in the subjects instead of the grades (l-5) for selection". The changes to the selection process, according to the GES, were in response to suggestions at stakeholders meetings on the review of the CSSPS. "The principle of placement was based not only on choice but also on merit", the statement said and emphasized that "the computer places all candidates into their first choice schools using the order of merit", which means that some candidates may not get the school of their choice. The statement said Pre-Vocational and Pre-Technical had been re- designated Basic Design and Technology and "is being tested for the first time", while Agriculture and General Science had been combined to form Integrated Science. To qualify for

selection, a candidate's grade in any of the four core subjects should not exceed grade five, while the minimum grade of each of the two best elective subjects should not exceed grade six if added to the grades of the four core subjects and should not exceed a total grade of 25.

Another reform to improve the system came in 2011, when the CSSPS introduced a 30 percent Catchment Area Allocation (CAA) placement following a special directive by President John Atta Mills. Under the CAA, 70 percent of spaces are allocated using the usual system and a remaining 30 percent of spaces are reserved for students within a 16-km radius (catchment area) of each school. Students can request to be allocated through the CAA if they are in the catchment area of a school and have a strong preference for attending it. They are still assigned in order of their BECE scores. It is reserved for candidates who wish to take advantage of it, especially students who wish to stay with their parents as day students. To qualify for selection, candidates must have attended JHS in the catchment area. The most recent reform came in 2014, during a presentation on the topic: "Computerized School Selection & Placement System (CSSPS): My Role, Your Role" at the University of Education, Winneba by Kwasi Abankwa Anokye (the system administrator at the CSSPS). He lunched the new policy guiding Selection and Placement process for 2014/20015 academic year.

Guidelines 2014/2015 Academic Year

- Second Cycle Schools grouped into OPTIONS :
  - Public SHS : Three (3) groups namely options 3, 2 & 1

- Public Technical/Vocational Institutes. : option 4
- Approved Private Schools (Both SHS & Tech/Voc): option 5

Conditions for selection of Candidates:

Candidates:

- Must Choose 4 schools (1st -4th choice) with corresponding programmes
- Must not choose one school twice
- May select all choices from option 1
- Should not select more than 2 schools from option 2 Cannot choose more than 1 school in option 3
- Candidates who desire to pursue purely Tech/Voc programmes may select all choices from option 4
- Candidates have the liberty to select all choices from a mix of options 1, 2, 3 ,4 & 5
- Choice of schools from a combination of regions allowed.

Placement is based on six subjects

A minimum of six (6) subjects are used for all candidates for the selection. This comprises four (4) core subjects and two (2) best subjects.

The Core Subjects are

i. For SHS/TI

English Language

Mathematics

Integrated Science

Social Studies/Building Technology

ii. Two other best subjects

The two (2) other best subjects are selected from the rest of the BECE subjects. Six (6) Subjects used for selection & placement

- Raw scores of candidates are used.
- Placement on Merit
- School and Programme options linked

Selection at Cut-off Point in the event of a tie between candidates during the selection and placement process, the computer will consider key subjects Selection at Cut-off Point in the event of a tie between candidates during the selection and placement process, the computer will consider key subjects (English, Mathematics, Int. Science & Social Studies in that order) for the Programme chosen and select the candidate with the highest score in that programme category.

Example; In the event of tie between two candidates obtaining the same total score for six subjects

SUBJECT	A) Ohemaa's Score (each out of 100)	B) Serwaa's Score (each out of 100)
English	83	83
Mathematics	79	79
Science	78*	71*
Social Studies	70	72
RME	64	67
Ghanaian Language	71	73
TOTAL	445	445

The above table shows an example of a tie between two candidates, Animuonyam and Apam, obtaining the same total score for six subjects. From the above, it will be observed that even though each of the two candidates obtained a total score of 445 out of 600. Animuonyam stands a better chance of being selected first to a school they both selected because her score in Integrated Science is higher than that of Apam. (Detailed on the instructions of the placement register is shown in Appendix III.)

Rural-Urban Schooling

According to Merrian-Webster (2011), rural is defined as "of or relating to the country, country people or life……" Though rural has been defined simply in the dictionary food but the definition of rural is not an easy task. In general context, the definition of rural must relate to the population size, population density, and infrastructural development to a country, city or a place of living. In Ghanaian context the definition of rural community is characterized by the following conditions

- Inability of residents to afford their basic needs such as shelter, cloths and food.
- Absence of basic infrastructural projects such as health, education, water, electricity and access of roads.

In Ghana, communities with a population above 5,000 are considered as urban (Nukunya, 2003). In addition, he said that, heterogeneity of the population as well as presence of social amenities is important factors to classify urban and rural communities as asserted by Nukunya. Many studies have point to the fact that, access in education differs from the urban to rural locations in Ghana. Urban areas have better access to basic and senior secondary school education than the rural areas in Ghana. This happens as results of

numerous advantage schools in the urban areas enjoyed over their counterparts in the rural schools and also the perception people hold against the rural schools in the country. To deal with the access gap situation the ministry introduced the Computerize selection to find solution to the problem.

In African, second cycles education is more accessible to students at the urban area than their counterparts in the rural communities due to the neglect by the government and donor agencies in the rural communities (Boaduo, 2005). In this sense, it is a fact that urban schools provide a high quality of education, making students selecting the urban school as their preferred choice than the rural schools. Page (2007) also found that the location of the community within which a student lives influence the selection of schools and the area of study with respect to the students' geographical area of location. This is because many rural households depend on their children to assist them in the farms especially in their busy times of the agricultural year.

Acheampong and Stephen, (2002) in their study reported that the admission or access gap that assist between the rural schools and the urban schools is due to the fact that teachers sent to the rural schools perceive living in rural areas involves a greater risk of diseases and less access to health care in the rural areas. Teachers posted in rural schools may see it to limit their opportunities to further the education but their colleagues in the urban areas have the opportunity to further their education easily. Roemer (1998) argue that justice requires leveling the playing field by rendering everyone opportunities equal in an appropriate sense; and letting individuals choices and their effects dictates further outcomes. In this sense, things must be done to uplift the status of the rural

schools to match the schools in the urban area. This and other incentives will motivate teachers and student to accept rural placement by the placement unit.

The Role of ICT in Selection and Placement

The introduction of ICT in the twenty-first century has made tremendous changes in all sections of an economy which has also had a major impact in the selection and placement of students from one level to another level. The Computerized School Selection and Placement System used by the Ministry of Education Service is just one of the administrative functions of the service, which employs the use of ICT for the placement of students into schools. With the use of computers and internets school administrators can easily register BECE candidates, the ministry of education in collaboration with WAEC can also use computers to arrange candidates seeking admission to senior secondary schools in Ghana in order of merit. More importantly with the use of electronics in the new system of selection has helped students and parents with mobile phone to access their result and placement without toil and frustrations as it existed in the old system.

Havey (1993) says, the effectiveness use of computers in education is an important factor to determine which countries will succeed in the future to achieve its national goals. Following this idea, many educational practitioners, policy makers, Ghana Educational Service accepted the use of computer technology as the bedrock of quality socio-economic activities and quality education, particular to promote quality teaching and learning (President's Committee on review of Education in Ghana2002).

According to Smaldino S.E, Lowther D. L. and Russel D. J., (2008).supported the idea that ICT serves the some important purposes in the educational sector:

1. It helps to facilitate management and administrative activities.
2. It is used as an object of instruction and
3. For teaching, learning and instructional purposes

Kulik, Chen and Kulik (1992) said another positive aspect of placement is that since it separates students by ability, student's work is only compared to that of similar-ability peers, preventing a possible lowering of their self-esteem that could result from comparisons with the work of higher ability students, or inflating the egos of the high-ability students when compared to low-ability, same-age students. Since high self-esteem is correlated with high academic achievement, tracking should, theoretically, promote academic success for low-ability students. Supporters of placement also note that it allows for higher achievement of high-ability students. Kulik, Chen and Kulik (1992) found that high-ability students in placement classes achieved more highly than similar-ability students in non-placement classes. Another factor of ability grouping that has been advocated is the Joplin Plan that refers directly to ability grouping for reading. These groups are generally more interchangeable and less defined.

In another study, Argys, Rees, and Brewer (1996) found that high- placement students' achievement dropped when lower-ability students were integrated into the same class. Both of these studies suggest that placement is beneficial to high-placement students. Placement can also encourage low- ability students to participate in class since tracking separates them from intimidation of the high-ability students. Some supporters of placement also view placement as an effective means of allocation since it helps direct students into specific areas of the labor market.

In a forum held at the La Palm Beach Hotel in Ghana for the African E-governance experts, Dr. Somuah noted that the Directorate has come out with a network connecting all government agencies. He described the e-government efforts in the country as successful since they have touched the lives of ordinary Ghanaians, citing the case of the Computerised School Selection and Placement System (CSSPS) and GCNET e-projects. With the CSSPS e-project, the use of computers to arrange candidates seeking admission to senior secondary schools in Ghana in order of merit has resulted in efficiency, transparency and simplicity in the selection process. This is a system that is equitable and responsive to citizens' concerns and has replaced the old system, which was subject to human errors and manipulation. More importantly with the new system, students with mobile phone access are able to text their index numbers in to get their results.

Prospects of the CSSPS

The introduction of the CSSPS has brought enormous potential benefits in the selection and placement system in Senior High schools, among which are:

1. The CSSPS, though embattled with many challenges seem to have instilled some level of sanity, fairness and ease into the admission of students into the selection of schools.
2. It has also brought about improvements in certain hitherto dilapidated schools due to the fact that, some of the student whose parents happen to be influential people have risen to the occasion by speaking and gathering resources to make those schools in which their children are much better.

3. It has also; to some degree wiped out the rot of bribery in the admission process.
4. It has also brought in the virtue of merit in the selection of students into certain school and has indirectly influenced the drive of students, school authorities and parents to provide conducive environments and material for the studies of their wards.
5. It has promoted regional integration by enabling candidates to choose schools from any of the ten regions within the country.
6. It has put an end to anxiety, frustrations and confusion that qualify candidates were going through due to delays in the placement of such candidates, also to the benefits of the schools it has also help in ensuring that schools do not take more than their limits in order to hence good learning environment
7. Again the system has made it easy access to placement results through SMS where a candidate only texts the candidates ID and instantly receives a reply on his/her placement status indicating the secondary school where he/she was placed and the program.
8. The environment in which students live, learn and the ways in which people work and live are constantly being transformed by existing and emerging technologies. The CSSPS is a clear example of how technology can support student performance, positive attitudes and motivation to create meaningful learning and the acquisition of basics skills and knowledge. (Asare 2010 & Aboagye 2011)

Challenges of the CSSPS

The CSSPS system has many challenges as computer errors are bound to happen irrespective of how one does data validation since systems can never be 100% accurate. Among the problems and criticisms are the following:

1. There have been allegations of corruption in the media (Aboagye, 2011) in spite of various assurances from the Ministry of Education. There have been allegations that most heads of schools and workers at the secretariat do take money from parents and school administrators and manipulate the system so that their wards are posted to school of their own choice.
2. There is a problem where male's students are posted to girl's schools and vice versa.
3. There are many districts without internet and mobile phone connectivity which makes checking the results online very difficult, if not outright possible.
4. The Secretariat in charge of the CSSPS has faced criticisms and complaints from parents and guardians for failing to place their wards in their selected schools.
5. Some parents who find their wards placed in the private schools have complained about the high cost of schools fees in the private schools.
6. The distributive nature of the system, make it difficult for students who are placed in schools far away to cope with distance.

Most these problems have been attributed to the registration process in the schools where most students, parents and teachers in charge make mistakes in shading wrong codes, some people think the CSSPS is not working well (GINKS, 2008). It also alleged that some heads of schools do not make available to candidates the

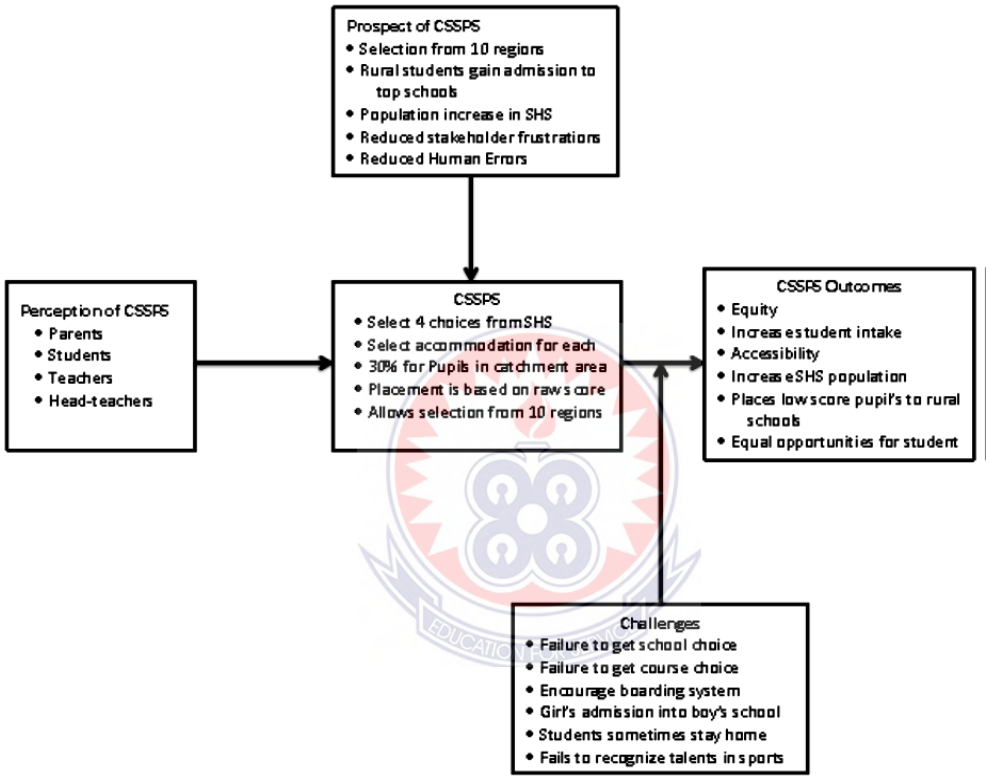
WAEC register which lists all schools with designated codes for correct shading. It is also reported that about fifty thousand errors is been committed annually during the registration process (Ginks 2008, Asare 2010)

Conceptual Framework

The study focuses on the perception of stakeholders like parents, students, teachers and head-teachers on issues relating to the computerized system of placement of student into the various senior high schools in Ghana. The CSSPS in Ghana was introduced in Ghana to replace the manual system of selecting students into the various SHSs in Ghana with the aim of removing the challenges or bottlenecks of the manual selection system. The computerized student placement into the senior high schools involved the selection of four choices from the numerous SHS in the country. The students are also required to select accommodation for each choice of school. The students are allowed to select schools from the sixteen regions of Ghana. The system also ensures that 30 percent of enrollment is allocated to the catchment areas of the schools. The secretariat of the CSSPS places students in their chosen schools based on raw scores. The raw scores are computed on subjects like mathematics, science, English, social studies, pre-tech and additional best subject. The prospects of the CSSPS considered in the study include rural students gaining admission to top schools, population increases in SHSs, reduction in stakeholder frustrations, and reduction human errors. The CSSPS introduction was aimed at ensuring equity in the student enrollment system into SHSs, increase students intake, increases accessibility, increase SHS population etc. However, these targeted outcomes of the CSSPS is largely challenged by several factors including

failure to get school choice, failure to get course choice, encourage boarding system, girls admission into boy's schools, students sometimes staying home for not getting their chosen schools and fails to recognize talents in sports. The discussed concept is presented in Figure 2.1.

Figure 2.1: The Conceptual Framework on CSSPS



Source: Author's Own Construct (2020)

CHAPTER THREE

METHODOLOGY

This chapter outlines the research method used in seeking Stakeholders Perception on Computerized School Selection and Placement System. The research method and procedure used in the study are described under thematic areas like research design, research approaches, population target and assessable, sampling and sampling procedure, instruments, pilot testing, data collection procedure, data analysis and ethical issues.

Research Design

According to Johnson (2009), research design is the blueprint for fulfilling research objectives and answering questions. Saunders, Lewis, and Thornhill (2009) add that it is the general plan of how a researcher chooses to go about answering the research questions. This research adopted the mixed methods approach and instruments to elicit data. The qualitative research approach provides an insider's perspective as well as in-depth insight into the phenomenon under study. The study employed the sequential explanatory mixed methods design, where quantitative data analysis is followed by qualitative analysis. The qualitative aspect was added to support the findings and to add depth to the study. The quantitative method on the other hand, enables the quantification of variables, generalization and answering of research questions. According to Rubin and Babbie (2001), qualitative research has the ability to provide the researcher a comprehensive perspective resulting a deeper understanding. For Bell (2004), whiles the qualitative approach offers the researcher insight and understanding into the individuals'

perception of the world, quantitative approach makes statistical analysis and generalization possible.

Denzin and Lincoln (2000) argue that although both qualitative and quantitative approaches ask questions, that of the qualitative approach focus on how social experience is created and given meaning whiles the quantitative approach focuses on measurement and analysis of casual relationships between variables and not possess.

In this case, Tashakkori and Teddlie (1998) were of the view that, mixed-methods approach takes advantage of the strengths of both quantitative and qualitative approaches and are able to complement the weakness of inherent in each method.

In addition, Creswell, (2003) was also of the view that a researcher might collect both quantitative and qualitative data concurrently and merge the data to form one interpretation of the data. This will help the researcher to merge both the semi-structured questionnaires and the interview from the participants in the context in which they were commenting on the research problem. This means the combination of qualitative and quantitative research paradigms has a high tendency to achieve both in-depth and insider perspective of the phenomenon under study as well as quantification of variables to provide answer to the research questions. This offered an opportunity to the researcher to use multiple approaches such questionnaire and interviews in answering research questions outlined in this research. The survey was adopted to collect data on stakeholders' perceptions of the computerized school selection and placement system, the influence of CSSPS on the selection of students into rural and urban senior high schools, the influence of the CSSPS on the intake of girl-child enrolment in SHS as well as the prospects and the challenges of the computerized school selection and placement system

in the Ashanti Region. The most appropriate paradigm for any research project however, depends on the objectives.

Population

To Saunders et al. (2009), the population of a study is the full set of cases from which a sample is taken. In this study, the populations consist of all Junior High Schools students in public and private and all students in senior high schools as well as the students in Technical/vocational institutes in Ghana. In addition to the students, parents, teachers, headmasters/mistresses in JHS & SHS in Ghana were all involved in the study. The target population of the study comprised all parents, teachers, and students and headmaster/mistresses in Junior High Schools, and second cycle schools in Ashanti Region of Ghana. (Statistical Unit: Ashanti Regional Directorate of Education, 2019). There were 1794 and 945 public and private Junior High Schools respectively and 103 and 69 public and private Senior High Schools respectively, making a total of 2911 accredited schools in the Ashanti Region. There were 91347 JHS3 students and 56096 SHS 1 students all totalling 147443 students. (GES, Ashanti Regional Directorate School Census, 2019). The accessible population comprised the first year students in the Senior High Schools and final year students in Junior High Schools in Ashanti region were used for the study. The first year SHS students were selected for the study because of their immediate past experience in the school selection and placement system. Final year Junior High student were also considered for the study because of their expectations in the selection and placement processes into from JHS to SHS. In addition to the students, parents whose wards were in JHS 3 and SHS 1 were also considered to form part of the

population of the study. Head masters/mistresses, teachers in the selected Junior High Schools and Senior High Schools also formed part of the accessible population of the study. The Junior and Senior High Schools in the region were clustered into five geographical zones. At each zone three (3) JHSs and three (3) SHSs were selected, having a total of thirty schools for the study from the region. The research considered public, private, rural and urban schools among the schools selected for the study. All the schools chosen were mixed-sex institutions in the region.

Sample Size Calculation

On the basis of the finite nature of the teachers and the student population, the De Vaus (2002) sample size proportion formula was employed in the calculation of the appropriate number of teachers and students to sample from the selected schools for the study. From the calculation, out of the total student population of 10,949 JHS 3 (8,698) and SHS 1 (2,251) students of the selected schools, the appropriate and representative sample size for the study was 386 students. From the teaching population of 1,245 of the selected JHS (975) and SHS (270), the appropriate and representative sample size calculated was 302 teachers. The calculation carried out using the De Vaus sample size formula (refer to appendix IV).

Sample and Sampling Procedure

As observed by Saunders *et al., (*2009), sampling provides a valid alternative to a census when it is impracticable to survey the entire population, budget constraints make it impossible to survey the entire population, and time constraints prevent surveying the

entire population. Sampling saves time as it entails making fewer data entries and making available results quickly (ibid).

The selected students and teachers were sampled through a multistage sampling procedure. In the first stage of the multistage sampling procedure, the Junior and Senior High Schools in the region were clustered into five geographical zones as shown in Table 3.1. In the second stage, simple random sampling by balloting procedure was employed to select three areas/towns/districts from each of the five clustered zones. In the third stage of the multistage sampling procedure, the Junior and Senior High Schools of the selected three areas/towns/districts from each of the five clustered zones were categorize into rural and urban schools on the basis of the Ghana Education Service approved classification of schools in Ashanti Region. It is therefore important in this study to find out factors that influence the selection of students into the rural and urban schools since the introduction the Computerized School Selection System in terms of access to Senior High School.

Table 3.1: Five Geographical zones of SHS

Zones	Areas/Towns/Communities/Districts
1) The Adansi/Amansie zone	Adansi North, Adansi South, Amansie Central, Amansie West, Asante-Akim South, Asante-Akim North, Asante Akim Central, Akrofuom , Bekwai Municipal and Obuasi Municipal
2) Atwima/Ahafo zone	Atwima Mponua, Atwima Nwabiagya, Atwima Kwanwomma, Bosomtwe, Obuasi Municipal, Offinso Munipal, Offinso North, Ahafo-Ano North, Ahafo-Ano South and Ahafo Ano South West.
3) Kumasi Northern	Kumasi Metro and Bosome Freho

4) Kumasi Southern zone	Kumasi Metro Ejusu/juaben, and Asokore Mampong Sekyere zone
5) Sekyere	Kumawu, Sekyere Afram Plains, sekyere Central, Sekyere East, Sekyere South, Kwabere, Mampong Municipal, Afigya Kwabre, Kwabre East, Kwahu Afram Planes and Ejura/Sekyeredumase district.

Source: Ashanti Region Directorate of Education (2020)

In the fourth stage of the sampling procedure, simple random by balloting procedure was employed to select thirty (30) Junior and Senior High Schools from the region. In the fifth stage of the multistage sampling procedure, the student of the selected schools were stratified into girls and boys and simple random sampling balloting employed to select from each strata until the required sample size for each class in a selected school was exhausted.

However, the convenience sampling technique was used to select parents from each of the selected senior High schools and Junior High Schools who formed part of the study. In this sense Students whose parents or guardians stay within the district were visited and used for the study. Again, some parents were contacted during the re-opening day of school and others were also contacted during the Parent Teacher Association meeting held at the schools. Lastly, the purposive sampling techniques were used to select all the teachers used for the study.

Data Source

The study employed both primary and secondary sources of data. The primary data collected comprised BECE results showing the raw scores of students placed in SHS

and field notes from the observation of school infrastructure and learning activities in the sampled schools. Secondary data was obtained from books, school records and official documents and websites.

Research Instruments

A scan through the literature showed most prior studies used the questionnaire to collect survey information which helped provided structured and numerical data but the choice of research method (mixed method) influence the researcher to adopt the used of questionnaire administration, structured interviews and observations to elicit information. These instruments were self - designed and aimed at collecting data from the respondents to find answers to the research questions by the researcher.

Questionnaires

In the view of Leedy and Ormrod (2005), questionnaires offer participants the advantage of answering questions with the assurance of anonymity for their responses. Questionnaires are fast and convenient and given the level of education of both the teachers and students in the schools, it was not likely for them to misinterpret the questions and give misleading answers. The use of questionnaires ensured that quantifiable responses were obtained for the purpose of establishing relationships between the identified variables and the responses.

One set of questionnaire was filled by students, parents and teachers. The questionnaire contains 43 items and was divided into six sections (A-F); except three were open ended questions. The closed ended items are largely on a five point Likert

scale to show the degree of responses per the purpose of the study. The purpose of employing the closed ended items was to facilitate the completion rate, restrict respondents' responses and to fast truck coding and analysis of the data while the few open-ended questions gave the respondents the opportunity to express their opinion on the questions concerned.

Section A

This is section was made up of personal data and/or socio-demographic variables of the respondents. It was to collect data on respondents' sex distribution, ages, and academic and professional qualification.

Section B

This section was a 23-item questionnaire on perception of stakeholders to CSSPS which was adopted by the researcher. The items were rated on a 5-point likert scale format ranging from strongly agree to strongly disagree.

Section C

This section used the 7-item which was designed by the researcher to measure the influence of CSSPS on students. Admission in rural and urban SHS. The items were rated on 5-point response format ranging from strongly agree to strongly disagree.

Section D

This section used the 7-item questions designed to elicit information on the prospects of the Computerised School Selection and Placement System from the respondents since its introduction. There were ranges of statements from which respondents are to indicate the extent of agreement or disagreement.

Section F

This section used the 7-item which was designed by the researcher to elicit the challenges facing CSSPS since its introduction. The 5 point likert scale was used to measure the instrument ranging from strongly agree to strongly disagree**.** Refer to Appendix 1 for details of questionnaires.

Interviews

A mixed-method designed was used by the researcher (semi-structured questionnaires and interviews) to take advantage of the strengths of both quantitative and qualitative approaches and are able to complement the weaknesses inherent in each method (Tashakkori and Teddlie 1998). This made the researcher interviewed six headmasters/mistresses and some selected from the urban, rural schools under studied to get their in-depth understanding of the Computerised School Selection and Placement System. Again, both the formal and the informal (conversation) type of interview was used in order to let participants feel comfortable and secure. This was also used to enable participants who could not express themselves well in the questionnaire to provide the needed information. Refer to Appendix 11 for details of the interview guide.

Validity and Reliability of Research Instrument

Validity (trustworthiness) and reliability demonstrate integrity and legitimacy of research (Aroni, Goeman, Stewart, Sawyer, Abramson and Thein (1999). To ensure validity, the instrument was pilot-tested with one Senior High School and a Junior High School in Mampong Municipal Assemble.

According to Gibson (2005), a pilot study ensures that the proposed instruments are capable of fulfilling the purpose for which it is intended. It also ensures that respondents truly understand the questions asked, as well as find out about the relevance of each question. A relatively small sample of 50 students 5 teachers, 20 parents and 2 headmasters were selected for the pilot run. Data obtained from the questionnaires were entered into Statistical Package for Social Sciences (SPSS), a software package that helps one to check for reliability using Cronbach's Coefficient Alpha. The results showed Alpha values ranging from 0.116 – 0.705, with most of the set of variables tested falling below 0.70. Consequently, since studies (e.g. Wallen & Fraenkel, 2001) have shown that Cronbach's Coefficient Alpha values of 0.70 and over are deemed to indicate good scale reliability, items in the questionnaire for students were reconstructed and put under various themes, as discussed earlier. The face validity of the study was ensured through consultation with professionals at the CSSPS secretariat and academicians in this area of study. The questionnaire items were also based on tested, reliable and validity research of Gyepi-Garbrah (2010).

A second pilot study was run in the same school and the reliability of the data was tested again using SPSS. This time, the results showed an overall improvement. Alpha values ranged from 0.664 to 0.926, with most of the values falling above 0.70 for the set of variables tested. Based on the results of the reliability analysis for the second pilot run, the questionnaires were adopted for both students, teachers and the parents. In addition, an interview was also conducted for the two headmasters who were selected for the study. As a result, some of the questions in the interview guide were also changed for better understanding.

Lastly, interviewees were given a simple written summary of the quantitative finding (interview) at end of the first draft (after peer review by a colleague) to cross-check and confirm the summaries made. Data entry checks were made to identify wrongfully inputted and missing data.

Data Collection Procedure

Before actual data collection, formal written letters were sent to the Ashanti Regional Education Office for cover letters to the selected schools in the region. In some cases, the researcher was invited to meet with the heads of the schools for further interaction before granting his permission. The researcher personally administered the questionnaire to the respondents with the help from two assistants employed by the researcher. This gave the researcher the opportunity to explain some items in the questionnaire that seem unclear to the respondents, and again gave an opportunity to the researcher to emphasize the importance of the study to maximize response. The researcher used four days in each school in administering and collecting of the questionnaire. On the first visit of each school, the headmaster/teachers/students were briefed on the scope of the study. The second day was used by the researcher and his assistants to distribute and guide the teachers and the students to respond to the questionnaires. The third day was used to distribute and administer questionnaires to parents. A total of 765 questionnaires were completed and returned by the teachers, parents and the students.

On the fourth day, the researcher used it to interview the selected headmasters in each geographical zone. It must be noted that, the interview was done at the convenient time of the interviewee. The use of interviews offered the researcher the opportunity to get in-depth understanding of the Perception Stakeholders in Education on CSSPS. The informal (conversation) type of interview was used in order to let participants feel comfortable and secure. All the administered questionnaires in the three schools were collected on the same day. Each recorded interview lasted an average of twenty-five (25) minutes with each head. An audio recorder was used to capture the interviews, which were later transcribed. Prior to each interview, briefing sessions were conducted with the interviewee to explain the purpose of the research, to urge them to be as honest as possible, and to express their opinions without being pressured or influenced by the peers. During these briefings, participants were also assured of confidentiality and anonymity. With these measures in place, the participants were able to voice out their candid opinions and made the sessions lively.

Lastly, the researcher expressed his appreciation to all the respondents and the interviewees after the collection of data.

Ethical Consideration

The issue of ethics is very paramount in this study because the study involves human beings and as a researcher has the rights to seek new knowledge to enrich his study, he was careful not to infringe on the rights and values of the research respondents. In this study, due respect was accorded to all the respondents at all times. The ethical integrity of this study started by submitting a letter introducing the researcher and the

need to be assisted to collect data for his thesis as well as the purpose of it from the Head of Department (MPHIL, Leadership, UEW-K) to the Heads of the participating schools. The purpose of the study was duly explained to the participants before commencement and participants were assured of anonymity in the individual school reports even through the final thesis would end up on the shelves of the UEW-K library as public material. Data collected was treated confidentially and information regarding academic achievement in the sample schools was personally collected from the relevant departments and handled as confidential materials and therefore was not disclosed or discussed with anyone.

Data Analysis Procedure

Data from the questionnaires were transferred into a spreadsheet from which an SPSS data file was created. Frequencies were employed to describe the population's demographic variables. The four research questions were analysed using descriptive methods like frequencies, percentages, mean and standard deviation. Research question 1 and 2 were analysed using mean values of the variables. The research question 3 on issues related to gender equity was analysed using trend analysis method. The research question 4 was analysed using the Kendall's rank test. The level of agreement of the respondents was further tested using Chi^2 analysis. The reliability of the quantitative data was also measured using slit-half reliability (Cronbach's alpha coefficient of .05). The analyses were put into tables while the field notes were transcribed and processed into individual reports for the sampled schools. Thematic analysis was appropriately chosen considering the fact that Crabtree and Miller (1999), argue that it is a useful tool in any

analysis and interpretation regardless of the anthological and epistemological position of the researcher and allows data to be used in a systematic manner so as to increase the accuracy and sensitivity in the understanding and interpretation of data. The responses given to the questionnaires were coded and organized before being analyzed statistically. The content analysis technique was adopted to identify the recurrent themes in the qualitative data for presentation on Chapter Four.

Summary

This chapter draws the methodology used for the research. Discussions about the research design, population, sample, instruments and pilot study have been made. Descriptions of data collection and analysis have also been highlighted. Among other things it has shown that in this study, a total of 765 survey instruments were distributed to 386 students, 302 teachers and 77 parents from 30 JHS/ SHS/SHTS in Ashanti region. A set of questionnaire was designed to obtain information on participants' perceptions on the Computerized School Selection and Placement System, influence of the CSSPS on students' admission in rural and urban SHSs, the influence of the CSSPS on gender equity in schools and the prospects and challenges of the CSSPS. Information from the questionnaires was transferred into a spreadsheet from which an SPSS data file was created. Descriptive statistics and Chi^2 analysis were adopted to analyze data sets. Also, six (6) headmasters were interviewed to have the views of them on the CSSPS. The findings are presented in Chapter four.

CHAPTER FOUR

DATA PRESENTATION, ANALYSES AND DISCUSSION

The chapter presents data, analyses the data and discusses the results. The salient areas discussed by the chapter include the socio demographic characteristics of the key respondents (parents, students and teachers) of the study, the perception of the stakeholders on the CSSPS, the influence of CSSPS on student's admission in rural and urban senior high schools, the influence of CSSPS on girl child intake in senior high schools, the prospects of the CSSPS, and the challenges of the CSSPS in Ghana.

Socio Demographic Characteristics

The socio demographic characteristics of the studied teachers, students and parents are discussed in this section of the study. The key socio demographic characteristics examined include sex and age. The result of the section is shown in Table 4.1.

Table 4.1: Socio Demographic Data of Respondents

Variable		Teacher	Student	Parent	Total
Sex	**Female**	143(47.2)	151(39.1)	42(54.5)	**335(43.8)**
	Male	159(52.8)	235(60.9)	35(45.5)	**429(56.2)**
Total		**302(100.0)**	**386(100.0)**	**77(100.0)**	**765(100.0)**
Age					
	Below 20 years	0(0.0)	374(97.0)	2(2.6)	**376(49.2)**
	21-25 years	0(0.0)	12(3.0)	4(5.2)	**16(2.1)**
	26-30 years	7(2.3)	0(0.0)	12(15.6)	**19(2.5)**
	31-35 years	9(3.0)	0(0.0)	15(19.5)	**24(3.1)**
	36-40 years	21(6.9)	0(0.0)	11(14.3)	**32(4.2)**
	41-45 years	63(20.7)	0(0.0)	18(23.4)	**81(11.1)**
	46-50 years	78(25.9)	0(0.0)	7(9.1)	**85(17.1)**
	51 years +	125(41.3)	0(0.0)	8(10.4)	**133(17.4)**
Total		**302(100.0)**	**386(100.0)**	**77(100.0)**	**765(100.0)**

Source: Field Survey (2019)

Table 4.1 shows that the majority (57.1%) of the surveyed respondents were males whereas 42.9% were females. The majority (52.8%) of the surveyed Teachers were males with 47.2% females. The majority (60.9%) of the studied students were also males with 39.1% females. These results are not surprising since the teaching profession and the various teacher training colleges are dominated by the male gender, a phenomenon of the Ghanaian educational ladder. However, the majority (54.5%) of the studied parents were females with 45.5% males.

Table 4.1 further shows that the majority of the surveyed respondents were below years, 4.2% were between 21 and 30 years, 5.9% were between 31 and 40 years, 17.5% were between 41 and 50 years, and 14.1% were 51 years or more. The majority of the surveyed teachers were above 41 years with 41.3% above 50 years. This phenomenon is possible under condition that; majority of the teachers have a lot of experience in teaching. Almost all the surveyed students were below 20 years and this is not surprising since they were selected from junior high and second cycle schools in the Ashanti region of Ghana. However, the age distribution of the studied parents was highly varying with some even below 20 years and others above 61 years or more.

Research question one: What perceptions do students, parents, and teachers hold about the CSSPS?

The perception of key stakeholders of the second cycle education in Ghana with regards to the introduction of the computerized selection system is discussed in this section. This research question sought to compare the perception of the teachers, students and parents in the computerized selection system at the second cycle level. It furthers

examined the statistical significance level of the agreement between the studied groups of respondents using Chi^2 test. The result is presented in Table 4.2.

Table 4.2: Perception of Stakeholders on CSSPS

Variable	Teacher	Student	Parent		Chi^2 test
	Mean(SD)	Mean(SD)	Mean(SD)	Total	
Candidates can only select four choices from second cycle schools of different options.	1.39(.88)	1.82(1.20)	1.56(.70)	1.66(1.10)	71.87***
Candidates select a programme and an accommodation for each choice.	1.23(.67)	1.54(.96)	1.26(.52)	1.42(.86)	46.33***
Candidates have limited numbers of school(s) to select from each option.	1.26(.71)	2.23(1.41)	1.58(.98)	1.86(1.28)	1.43***
30% of seats in each Senior High School are reserved for students whose Junior High School is within 16km of the school.	1.62(1.12)	2.99(1.39)	2.36(1.13)	2.50(1.43)	2.60***
30% of seats reserved for candidates in the catchment area has helped to increase the chances of admissions for candidates who wants stay closer to their family and home.	1.36(.93)	2.07(1.26)	1.65(.94)	1.81(1.19)	1.10***
BECE placement is based on candidate's raw BECE raw score and the four selected Senior High Schools choices.	1.62(1.16)	1.94(1.23)	1.53(.64)	1.80(1.18)	62.18***
Candidate's raw BECE raw score combines students total percentage scores in the four core subjects and his/her next too best subjects for placement.	1.63(1.12)	2.04(1.43)	1.47(.58)	1.86(1.31)	83.08***
Parents, Guardians and School administrators sometimes use money to influence officers and workers at computerized secretariat in selecting and placing their wards to their choice of schools.	2.39(1.49)	2.33(1.68)	2.39(1.58)	2.34(1.62)	91.04***
Politicians like MP's, Regional	2.07(1.55)	2.31(1.63)	1.97(1.25)	2.21(1.58)	70.10***

Ministers DCE's and Ministers used their political power to sometimes influence the admission process of the CSSPS.					
The 30% quota given to students from the community in which the school is located by CSSPS has created room for wards to be accepted through the pressure from some members of the old students association.	3.11(1.56)	2.74(1.44)	2.23(1.19)	2.82(1.48)	84.31***
The 30% quota given to communities of which schools are located by the computerized system has also created room for wards to be accepted through the pressure from the traditional council.	3.02(1.62)	2.61(1.57)	1.56(.82)	2.66(1.59)	83.49***
Headmaster/mistresses were obliged to admit students from the community in which the school is located, despite the grade/raw score of the student.	3.57(1.49)	3.37(1.61)	2.23(1.34)	3.34(1.59)	1.04***
The computerized system allows students select schools from any of ten regions in Ghana.	1.44(.96)	1.46(.98)	1.49(.75)	1.46(.95)	35.97***
CSSPS has created room for late placement and admission (second term admission) of students to the SHS.	1.72(1.16)	2.09(1.36)	1.60(.89)	1.93(1.28)	47.23***
There were instances where the computer placed girls into boy's schools or vice versa.	3.33(1.38)	2.89(1.60)	2.14(1.26)	2.97(1.54)	2.24***
CSSPS of admission has led to overcrowding in schools. That the headmasters continue to admit students even after they have absorbed their quota given to them.	2.45(1.52)	2.47(1.55)	2.17(1.29)	2.44(1.52)	37.07***
Government contributed less toward the development of less endowed schools since the well-endowed schools could admit more than their quota.	2.35(1.39)	2.52(1.50)	2.13(1.23)	2.43(1.45)	43.76***

The computerized system has been successful in allocating students to their choice of school.	3.45(1.57)	3.30(1.60)	3.27(1.33)	3.35(1.57)	78.81***
The computerized system has reduced the pressure on the headmasters/mistresses from the old students, traditional council, DCE's etc in the admission of wards into the school.	2.23(1.40)	2.61(1.46)	2.21(1.19)	2.46(1.45)	64.04***
There is less active contributions from the old students towards the development of the school since the inception of the computerized system.	2.45(1.48)	2.54(1.46)	2.96(1.30)	2.55(1.46)	45.37***
The computerized system has reduced the burden of some parents to find schools for their wards.	2.51(1.42)	1.90(1.26)	1.53(.64)	2.07(1.32)	90.52***
The computerized system has reduced parents' influence on heads of schools with money.	2.34(1.32)	2.53(1.45)	2.01(1.06)	2.43(1.38)	55.51***
The computerized system has abolished corruption from the system.	3.68(1.41)	3.57(1.53)	3.58(1.25)	3.61(1.47)	85.95***

Rank:[Strongly Agree=1, Agree=2, Not Sure=3, Disagree=4 & Strongly Disagree=5]
NB: *,** & *** indicates Significance @ 10%, 5% & 1% respectively
Source: Field Survey (2016)

Table 4.2 result shows that surveyed teachers, students and parents agreed that candidates can only select four choices from second cycle schools of different options (PER1), select a programme and an accommodation from each choice (PER2), have limited number of school(s) to select from each option (PER3), and that 30 percent of seats reserved for candidates in the catchment area has helped to increase the chances of admissions for candidates who wants to stay closer to their family and home (PER5) as indicated by the approximate mean value of 2.0. The studied respondents (parents, students and teachers) were statistically in agreement with regard to their opinion on the mentioned parameters of the CSSPS ($p<.000$). The perception of the students, parents and

teachers in terms of school and programme choices is consistent with the study of Chade and Smith (2006) that suggested that it is better for students to rank selected choice of schools in order of preferences. Lai et al. (2009) also indicate that school selection should be carefully ranked by candidates in order of preference.

Table 4.2 further shows that the surveyed teachers, students and parents agreed on several issues regarding the CSSPS including BECE placement is based on candidate's BECE raw score and the four selected senior high school choices (PER6), candidates BECE raw score combines students total percentage scores in the four core subjects and their next two best subjects for placement (PER7), parents, guardians and school administrators sometimes use money to influence officers and workers at the computerized secretariat in selecting and placing their wards to their choice of schools (PER8), politicians also use their political powers to influence the CSSPS (PER9), the computerized system allows students to select schools from any of the ten regions in Ghana (PER13), CSSPS has created room for late placement and admission of students to SHS (PER14), the CSSPS of admission has created overcrowding in schools (PER16) and the government contributed less towards the development of less endowed schools since the well-endowed schools could admit more than their quota (PER17) as indicated by the approximate mean value of 2.0. The issue of consideration of raw scores in the placement process is consistent with the study of Anastasi (1961) that reported that placement should base on student's high school GPA and ACT scores. Bailey, Jeong and Cho (2010) also suggested that the score of the candidate being above or below the cutoff determines the success and the failure of the candidate where he/she should be placed.

Bailey (2009) further indicates that the performance of a candidate will determine the placement of the student to his/her selected school.

Table 4.2 shows that the students, teachers and parents surveyed were not sure the computerized system has been successful in allocating students to their choice of schools (PER18) and reduced the level of corruption in the student placement system (PER23) as indicated by the approximate mean response value of 3.0. Lai, F., Elizabeth S., & Alain de Janvry (2009) noted that errors in the computerized selection system can have adverse effect on student's performance. However, Ohuche and Akeju (1988) indicate that the basis of the selection process on the individual raw scores is a motivation for the students to work extra hard to meet the score requirement in order to be offered their desired programmes and schools. Therefore, to achieve the desired goal of the CSSPS, there is the need to ensure effective application of the system. In instances where students are placed to lower performing schools which normally lead to lower academic performance by some students. However, whereas the surveyed teachers and students were not sure of several perceptions including issues that the 30 percent quota given to the communities of which schools are located creates room for wards to be accepted through the pressure from the old students association (PER10), the 30 percent quota given to the communities of which schools are located creates room for wards to be accepted through the pressure from the traditional council (PER11), the headmasters or headmistresses are obliged to admit students from the community in which the school is located despite the grate or raw score of the student (PER12), and instances the CSSPS placed boys in girls' schools (PER15), the parents agreed with these perceptions. Consistent with the perception of the stakeholders was that a reform to improve the system in 2011 ensured that CSSPS

considered a 30 percent Catchment Area Allocation (CAA) placement following a special directive by President John Atta Mills. Under the CAA, 70 percent of spaces are allocated using the usual system and a remaining 30 percent of spaces are reserved for students within a 16-km radius (catchment area) of each school (Somuah, 2005). Statistically, Table 4.2 shows that there was relationship between these perceptions of parents, teachers and students at a significance level of 1% as indicated by the Chi^2 result.

From the Table 4.2, whereas the surveyed students and parents were not sure of the perception that there is less active contributions from the old students towards the development of the school since the inception of the computerized system (PER20), teachers were in agreement with the perception. Also, though the teachers and parents agreed with the statements that the computerized system has reduced the pressure on the headmasters or mistresses from the old students association, traditional council, DCEs (PER19) and many others like parents (PER22), the students were not sure that is really happening. The teachers were not sure that the computerized system has reduced the burden of some parents in finding schools for their wards (PER21) but the parents and students were in agreement with the perception.

Research question two: How do stakeholders' perceive the intake trend of the CSSPS in the Rural and Urban SHSs in Ashanti region?

The influence of CSSPS on the admission of students to rural and urban senior high schools is examined in this section of the study. This research question sought to compare the views of the studied teachers, students and parents on the key issues. The agreement

level of the group of respondents was compared through Chi^2 test analysis. The result is presented in Table 4.3.

Table 4.3: Effect of the CSSPS on Student Admission into Rural or Urban Senior High Schools

Variable	Teacher	Student	Parent		Chi^2 test
	Mean(SD)	Mean(SD)	Mean(SD)	Total	
The computerized system allows a level playing field for both rural and the urban schools.	1.99(1.46)	2.51(1.49)	2.17(1.17)	2.32(1.48)	84.48***
The computerized system has led to the increase of students' intake in rural SHS schools.	1.89(1.30)	2.09(1.09)	1.71(.87)	1.99(1.15)	89.80***
The computerized system places pupils with low score to the rural schools.	1.96(1.29)	2.68(1.59)	2.31(2.42)	2.42(1.51)	1.01***
The CSSPS has been able to reduce the rural-urban gap in the access to second cycle education.	1.98(1.33)	2.37(1.22)	1.65(.56)	2.19(1.24)	1.50***
The computerized system has created equal opportunities for all students in spite of their geographical location (both rural and urban areas)	2.41(1.46)	2.16(1.21)	1.62(.61)	2.19(1.28)	86.95***
The computerized system allows rural students to gain admission to top urban schools	2.21(1.35)	1.98(1.11)	1.66(.59)	2.03(1.17)	90.82***
CSSPS has increase infrastructural development in rural schools.	2.39(1.49)	2.55(1.43)	2.09(1.21)	2.46(1.44)	42.20***

Rank:[Strongly Agree=1, Agree=2, Not Sure=3, Disagree=4 & Strongly Disagree=5]
NB: *,** & *** indicates Significance @ 10%, 5% & 1% respectively
Source: Field Survey (2019)

Table 4.3 shows that the teachers, students and parents surveyed agreed with the statements that the computerized system allows a level playing field for both rural and the urban schools (SN24), the CSSPS has led to increase of students intake in rural SHS (SN25), the CSSPS has reduced the rural-urban gap in the access to second cycle education (SN27), the CSSPS has created equal opportunities for all students in spite of their geographical location (SN28),the CSSPS allows rural students to gain admission to top urban schools (SN29) and the CSSPS has increase the infrastructural development in rural schools (SN30) as indicated by the approximate mean response value of 2.0. However, whereas the students were not sure the CSSPS places pupils with low score to the rural schools (SN26) the teachers and parents agreed with the statement.

Table 4.4: Paired t-test of the Influence of the CSSPS on Student Enrollment into SHS

Variable		N	Mean	SD	Std. Err.	t	df	Pr(|T|>|t|)
CSSPS	Urban	5	558	74.64	33.38	-4.80	4	0.0087
	Rural	5	1681.2	596.4	266.7			
Diff			**-1123.2**	**523.25**	**234.2**			

Source: Field Survey (2019)

The result of the mean comparison t-test of paired data of the Table 4.4 shows that there was statistical significance difference between students' enrollment into urban and rural SHS (t= -4.80, p > 0.0087, df= 4). Thus, there was significant difference in the enrollment of students into urban SHS and rural SHS during the introduction of the computerized selection system. The computerized selection therefore influenced the selection of students into SHSs in the urban and rural settings.

Research question three: What are the prospects and the challenges of the CSSPS?

The prospects

The research question was formulated to find out the opinions of teachers, parents and students on the possible prospects of the CSSPS in Ashanti Region, Ghana. The agreement level of the group of respondents was compared through Chi^2 test analysis. The result was presented in Table 4.5.

Table 4.5: Prospect of the CSSPS

Variable	Teacher	Student	Parent		Chi^2 test
	Mean(SD)	Mean(SD)	Mean(SD)	Total	
The computerized system allows candidates to select schools for any of the ten (10) regions.	1.44(.81)	1.56(.95)	1.58(.75)	1.52(.90)	62.12***
The computerized system allows rural students to gain admission to top schools.	1.53(.95)	1.85(1.11)	1.44(.60)	1.71(1.04)	48.48***
The computerized system has increased the student population in senior high schools.	1.34(.63)	2.12(1.10)	1.83(.98)	1.83(1.01)	1.50***
The system has relegated anxiety, frustration and confusion among stakeholders.	1.67(1.11)	2.12(1.14)	1.81(.95)	1.94(1.13)	76.59***
CSSPS has restore confidence in the selection and placement of candidates in SHS.	2.66(1.55)	2.51(1.31)	1.79(1.00)	2.50(1.39)	86.18***
CSSPS has reduced human errors as much as possible during registration and placement of candidates.	2.13(1.42)	2.20(1.28)	1.71(.98)	2.14(1.32)	45.00***

Rank:[Strongly Agree=1, Agree=2, Not Sure=3, Disagree=4 & Strongly Disagree=5]
NB: *,** & *** indicates Significance @ 10%, 5% & 1% respectively
Source: Field Survey (2019)

The result of the Table 4.5 shows that the surveyed teachers, students and parents agreed with the statements that the computerized system allows candidates to select

schools from any of the ten regions in Ghana (SN37), the CSSPS allows rural students to gain admission to top schools (SN38), the CSSPS has increased the student population in senior high schools (SN39), the CSSPS has reduced the level of anxiety, frustration and confusion of stakeholders (SN40) and the CSSPS has reduced human errors in the registration and placement of candidates (SN42) as indicated by the mean response value of 2.0. In choosing schools and selecting programmes, candidates are free to select all their schools from the ten Regions in Ghana they wish under the CSSPS (Ajayi, 2012). This is due to the fact that all selection and placement of candidates is been done by the computer software in a centralized location and hence reduces the level of frustration of parents from searching for schools for their wards. However, the surveyed teachers and students were not sure whether the CSSPS has restored confidence in the selection and placement of candidates in SHS (SN41) whereas the parents were in agreement with the statement.

Challenges of the CSSPS

The challenges of the computerized placement system in the selection of students to senior highs schools in Ghana are discussed in this section of the chapter. The views of parents, teachers and students have been compared on the challenges of the CSSPS. The agreement level of the group of respondents was compared through Chi^2 test analysis. The result of the section is presented in Table 4.6.

Table 4.6: Challenges of the CSSPS

Variable	Teacher	Student	Parent	Kendall Rank Test	
	Mean(SD)	Mean(SD)	Mean(SD)	Mean Rank	Rank
Difficulty of getting preferred school	1.36(.59)	1.57(.98)	1.32(.47)	2.96	1st
Difficulty of getting preferred course	1.28(.47)	1.84(1.15)	1.56(.79)	3.21	2nd
Encourages boarding system	1.57(.84)	2.50(1.30)	1.61(.79)	3.91	5th
Cases admission of girls into boys schools	2.43(1.47)	2.42(1.38)	1.87(1.03)	4.14	6th
Cases of students staying at home because of the outcome of the system	1.50(.72)	2.14(1.30)	1.61(.89)	3.53	4th
Fails to look at students with talents in sports	1.47(.82)	1.96(1.28)	1.38(.78)	3.26	3rd

Rank:[Strongly Agree=1, Agree=2, Not Sure=3, Disagree=4 & Strongly Disagree=5]
Source: Field Survey (2019)

From Table 4.6, the approximate mean response of the teachers, students and parents of 2.0 indicates that the respondents agreed that the CSSPS has also created a number of challenges including the difficulty of some students getting their preferred choice of schools and courses, encourages boarding system, promote cases of admission of girls into boys schools and cases of students staying at home because the outcome of the system is unpleasant and the system also fails to look at students with talents in sports. This is consistent with the study of Chen (1999) that reported that with the CSSPS, many students fail to get their preferred choice of school.

The Kendall's rank test of Table 4.6 shows that the difficulty of getting preferred schools with the least mean rank of 2.96 is ranked the highest since the least Likert Scale was 5 (Strongly Disagree) and the highest was 1 (Strongly Agree). Therefore the surveyed respondents perceived the difficulty of students getting their preferred schools as the greatest challenge of the CSSPS placement process. This was followed closely by

the difficulty of getting preferred courses, the failure of the system to look at students with talents in sports and the possible cases of students staying at home because of the unpleasant outcome of the CSSPS as they were ranked second, third and fourth respectively. The least two ranked challenges of the CSSPS as perceived by the surveyed respondents were its encouragement of the boarding system and the possible cases of admission of girls into boys schools.

Mode of Admission of Students and Satisfaction with the CSSPS

The mode of student enrollment into senior high schools is discussed in this section of the study. The objective of this analysis was to examine the extent of protocol since the introduction of the computerized selection system in the senior high schools student selection process. The result is presented in Figure 4.4. The section further examines the stakeholder's satisfaction with the computerized selection system at the second cycle level as presented in Figure 4.5.

Figure 4.4: Mode of Admission of Students

The result of the Figure 4.4 shows that the majority (61.3%) of the students during the period of the study were enrolled in the various studied senior high schools through the computerized selection system. However, a significant proportion of the students of 38.7% were also enrolled in the studied senior high schools during the period of the study through protocol. This therefore indicates that the enrollment of students through protocols or 'back-doors' is still significantly high in the senior high schools even after the introduction of the computerized selection system. This evident in the result of Figure 4.5 that shows that both the studied students and teachers were not satisfied with the CSSPS in the selection or enrollment of candidates into the senior high schools. This therefore indicates that the CSSPS has not yet aided policy makers in achieving educational goals as Havey (1983) indicates that the effectiveness computerized system in education is an important factor to determine which countries will succeed in the future to achieve its national goals. However, achieving the national goals is dependent on the effective application of the CSSPS in the selection of candidates to the various senior high schools in Ghana.

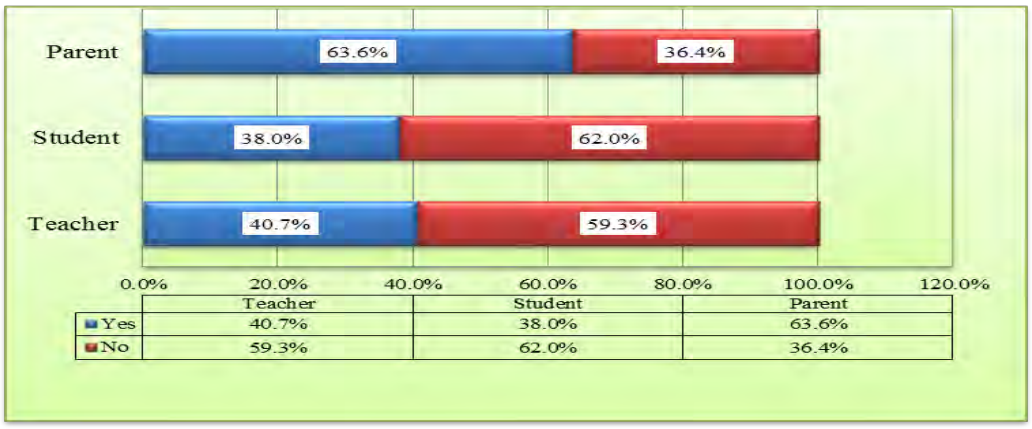


Figure 4.5: Stakeholders Satisfaction with the CSSPS

Those who said they are satisfied with the outcome of the computerised school selection and placement system gave reasons as follows:

a. CSSPS has decreased bribery and corruption.

b. CSSPS has reduced the frustration of parents in search of schools for their wards.

c. CSSPS is transparent and cost effective.

d. Students get their choice of school/programme.

e. Selection is strictly based on merit.

On the other hand, respondents that were not satisfied with the CSSPS gave the following reasons:

a. The mode of selection is still not fair to students
b. There is still corruption in the system.
c. It only favours students from a rich background
d. The system is expensive and cumbersome since it involve the use of technology and the purchase of three access cards to check results, check placement and access admission letters and placement forms together with Internet charges.

Again, the following are the reasons respondents gave about what they think should be done to improve the C.S.S.P.S.

a. Stakeholders should be given enough education on the system through the media, seminars and during PTA

meeting before involving them in the selection of schools and programmes

b. All stakeholders must be encouraged during the selection process.
c. There should be strict supervision at the CSSPS centre.
d. Schools should be categorized for easy selection.
e. There should be avoidance of influence on CSSPS officials.
f. Mistakes identified with the system should be resolved as and when they occur.
g. Detailed raw score of results must be shown on candidates certificate
h. Heads of second cycle institutions must be given a quota to admit student with talents in sports, cultures and other special talents.

Qualitative analysis

Interview results with headmasters

In all, a total of 6 headmasters (3 males and 3 females) from the selected schools took part in the interview. The participants were JHS head teachers, headmasters from the urban, rural and private SHS. Each interview was recorded with a voice recorder between the interviewee and the interviewer. The voice recorder was used to capture the interviews, which were later transcribed. Transcribing the data was done verbatim to try and maintain how respondents expressed themselves by preserving all the local terms and grammatical expressions.

Stakeholders' perception about CSSPS

To explore stakeholders' perception on CSSPS programme, four questions were asked during the interview with the selected heads of schools. These are as follows.

1. Should JHS students continue to select schools, programs and accommodation before seeing their results?

   Most of the comments that came from the heads indicated that they need changes in the selection process. Below are some of the comments made by the heads that called for changes.

   I have had problem with the way candidates in the Junior High Schools select their school, programs they want to pursue and their accommodation before gaining access into Senior High Schools. I have worked as a teacher in SHS for 18 years and a headmaster for 8 years and I must be frank with you, we must make changes in our selection process into SHS. It would be better for JHS graduates to see their results (grades/ raw score) before they select the schools, program and their accommodation in their preferred schools. (Head)

   For nothing at all, they can select their school before they write their BECE but the selection of programmes should be done after the students have been placed in their schools. This will helped professional counselors in the High Schools orient and counsel the students and their parents before they select programs they want their wards to pursue based on the grades and the raw score the student had. We have had a lot of problems with students and parents appealing to us to change programmes and accommodation on their wards placement form. We have instances where students and parents come in to change students program in their placement form during second and third term in the first year. All these happens because they had no or poor orientation on selection of programmes for the carrier (Head urban)

   Is bad to force parents and wards to select schools, accommodation and programmes to be pursued at school before seeing the real BECE results of their wards. They have

to see the grades and the raw score of their wards to inform them in their decision making on the selection school, accommodation and programmes to be pursued at SHS. Reports from parents and students had proven to us during orientation of students and parents that school and programme selection are forced on them by their JHS heads and teachers. They should change it to how SHS graduates select tertiary institutions and programmes in Ghana. Selection must purely be based on the student performance in an external exams. We have a lot of instances where many students had run from Home Economics class to other class because they were not informed at JHS it was compulsory for all Home Economics students to pursue either Biology or chemistry in addition to their main courses. The only solution to these problems is to know their results and be guided by parents, heads and professional counselors in the selection of schools and programmes. (Rural head) However, one head saw nothing wrong with students making selections before seeing his/her results. Below is the comment he made.

There is nothing wrong to allow Students and parents to select the schools, programmes and accommodation before they write the BECE or getting to know their grades and raw scores. I say this because, during the selection process the students are guided by professional teachers who have series of academic records of their students. Again, we know most of the JHS base the selection of schools and programmes on the series of mocks students write. Parents are been invited by teachers and base on students mock performance before choices are made for the Students. More to it, it would be a time waiting if JHS graduates are given the chance to select schools and programmes after the release of the BECE. We are all aware school academic year begins in the middle of September whiles first year students are enrolled in various SHS in the middle of October each year one month late from the day the academic year begins.

Again, the early selection of schools and programs prepare students for a strong competition among student, because one has to work hard before he/she can gain admission into SHS. (Private head)

2. How do you see Fairness, Corruption and Transparency in the CSSPS since its implementation?

General comments on corruption was somehow negative, they still perceive corruption in the new system but has promoted some level of fairness and transparency in the system as compared to the old system. The following are some of the comments the heads made.

> The new system for selection of students from JHS graduates to gain access into SHS has brought fairness in the placement of BECE graduates as compared to the Manual System of Selection into SHS. The introduction of electronic in the new system such as the use of computers and internets helps to compute the raw score of every candidate for easy distribution of almost all the JHS graduates in the recognized SHS institutions in Ghana. This has really brought fairness in the distribution of students into schools. To add to this, the system is much transparent because the system is only based on the performance strength of a student's raw scores.
>
> On the issue of corruption, I can say we heads of second cycle Institutions have no hand in the new system to indulge ourselves in corrupt practices. This is because selection and placement is not done by us, we only admit and work on the list we have from the Regional Education Office, if corruption still exist in the system then is at the door steps of the secretariat. (Head)
>
> The system since introduced has brought fairness and transparency in the selection and placement processes in terms of distribution of students into schools, which has helped increase enrollment in schools especially in our rural schools as compared to the previous system of selection. (Rural school head)
>
> To talk about corruption, it still exist in the new system , I can say it with authority and evidence that some parent and private school administrators pay bribes to some workers at the secretariat and some 'agents' in the system for better placement of their wards. Private school administrators pay for their

students to be placed in better schools so they can advertise with it to increase their school admission. (Rural school head)

We were told this new system was introduced to prevent corruption that existed in the manual system of placement but for years new corruption still exist in most of the school and at the secretariat. Most of the heads in the SHS under declare their first year student population to the secretariat which will aid them admit students as protocol students or supplementary list which they take GH 1000 – 1500 depending on the status of the school and the program the student wants to offer. (Rural school Head)

The system is not fair and transparent, is full of favoritism and corruption. We had a number of instances where a student in our JHs had a raw score 352 out of 600 but was not offered an admission in his first and second choice schools, but in that same school some students who had below the raw score of 352 in that same JHS were admitted in my first and second choice schools which the better candidate was rejected. Again, if truly the only criteria for selection is based on the raw school of a candidates then the system is in to relegate other students with special interest in sports and other co-curricular activities which form part our educational curriculum.

To comment on corruption is at its hull mark both at the secretariat and the public schools. (Private school head)

The last comment brings to the bare that the system has not achieved its objectives relating to fairness and corruption from the placement process

3. How do you perceive the use of students' raw scores better than the use of the grades?

The general perception was that, most heads prefer the use of the raw score since it has brought competition among students especially the selected core subjects but a head from one school was no importance of the use of raw score for placement. The following views were expressed by the heads.

The use of the raw score by the new system for selecting BECE graduates is better than the grading system which was used in the old system. This has created tough competition among students at JHS. It has also helped to increase student performance in the four core subjects (Mathematic, English, science and social Studies) which are used for the school placement (urban school Head)

The used of the raw score has helped in the selection process of the CSSPS, in that it has make selection and placement easier than the previous system where grades were used. This has helped resolve issues of tier in the new system. (Urban school Head)

I prefer the use of the raw score for placement of JHS graduates in their access to SHS to the use of their grades. The use of the raw has created competition among students because you need to score high marks in Mathematics, English, Integrated Science and Social Studies plus two other subjects to gain a placement. The higher you score, the better you stand in gaining admission in your choice of school. The grading system played a great disadvantage to some students during selection of students. How can one score 90% in a subject and have the same grade with a colleague who had say 76%. This is not fair is better to compute the raw score of each candidate and use it for the school placement. This system should continue. (Rural school head)

How useful is the use of the raw score for placement of BECE graduates? I don't see its importance us a head and a parent, it's only relevant to the CSSPS secretariat to use the student's raw score for placement into SHS, it ends there, and the score cannot be used again. The most dangerous thing is that, we only see the aggregate score of six subjects thus the four core subjects plus two other subjects without knowing the breakdown score of each subject on his/her placement form or certificate. Decisions on student's results cannot only be made on his/her aggregate score but on individual subjects. Since that detailed results is not given we only make decisions on what we have on the certificate which are the grades. The use raw score is useless if detailed results are not meant for the public to make decisions on it, since it ends after placement of the student and can

only use the grade on the certificate throughout the educational and job carrier of the holder. (Private school)

4. Should the selection process be reverted to the heads of schools?

It observed from the general comments from the interview that heads wants part of the work of the CSSPS revert to them especially the programme selection of students. Typical comments expressed by heads who think part of the process be revert to the school heads.

I wouldn't say the whole process of selection and placement should be reverted to the heads of second cycle institutions but part of the process should be given the heads to operate in their schools. The secretariat can do the computation of the BECE raw score of the students and the distribution of the student in their respective schools whiles selection of programs should be controlled by the heads of the SHS after guidance, counseling and orientation have been given to the parents and students of each program and its benefits to the student and the society. We have had a lot of problems about students calling to change their program on their placement form from the secretariat. (Urban school head)

The secretariat should be allowed to continue their work to compute the raw score of students and continue to place students in their choice of schools. Where I think should be revert to the heads is the selection of programmes to the students. Most students come to change their programmes after orientation meanwhile they were placed according to the quota needed for each programme in each school. (Rural school head)

Others believe the secretariat should continue with the whole process because they see most heads as corrupt. A comment made by a head.

The CSSPS has its challenges to be solved but never should we revert the selection and placement system to our heads at SHS. The nation made a change to this new system because our heads were corrupt and people had no trust in our heads when it comes to admission of new students in each academic year. Though

we still have corrupt practices in the new system but it can easily be controlled in the new system then to revert it to the school heads (Private school head)

Influence of CSSPS on students' admission in rural and urban SHS

Two questions were asked to explore the influence of CSSPS on students admission in the rural and urban SHS.

1. Has the CSSPS promoted equal level playing field for all students and schools in the country?

Some of the heads believe that the system has promoted equal level playing field for all schools and students in the country whiles others thought otherwise. The following comments were raised:

> The introduction of this new system has brought a level playing field to all BECE candidates at JHS. It has enable students to select their schools across the nation no matter your gender, geographical location (rural or urban) from rich or poor background, it does not consider these things. What matters most is to have a good score. A good raw score will determine your school. (Urban school Head)

> The system gives equal chances to all students whether rural or urban, rich or poor, public or private schools in the country. It must be known to all Ghanaians that, the CSSPS has helped increase the enrollment of students in our rural and private schools in the country as compared to the old system of placement of JHS graduates. Rural SHS can now match their school population with some of the schools in the urban sectors. This improvement of enrollment has come due to how the schools are well grouped. Each candidate would at least have rural school on the selection of schools form because of the restrictions attached to the new system. (Urban school head)

For years now, I think the system has promoted a level playing field for BECE graduates in Ghana whether poor or rich, from rural or urban, male or female. It has created an opportunity for all parents to select schools outside our region of residence. Again for years since its existence, I have witness a number of students from poor homes and in rural areas like ours gaining admission into first class urban schools and some students moving from their rich home and urban schools to attend school in the rural areas. The rural schools now receive students with better raw scores and grades than previously where we only had rejected students by the urban schools. (Rural school Head)

I don't believe the system is providing a level playing field for students. I say this because, during the selection of schools all the rural SHS are grouped under option 1 and 2 whiles the best urban schools are group under option 3 with a strong restrictions on the number of schools to select from option 3.(Rural school head)

Again, the introduction 30% catchment area reserved for JHS within 16km catchment of an SHS only serve as an advantage to the urban schools in the country and a disadvantage to the rural comminutes. This is because if a student opt for the 30% catchment schools it means he is restricted to select all his four SHS within 16km radius from his/her JHS. We can all attest to it that it may be difficult for JHS in the rural area to locate four SHS 16km away from their villages as compared to the JHS in the urban areas. (Rural school head)

We always say "private sector is the engine of economic growth" but this is not the case when it comes to selection and placement of JHS graduates in SHS. Private school are always at the disadvantage. We only have most students of our students with a low score below 200 out of 600 and the rejected students who were not placed are posted to or come to the private schools.

2. Does the governing authority of the CSSPS play a major role in terms of JHS graduate gaining an access to a rural or urban SHS in Ghana? The general

comment on this question was somewhere negative. Comments raised are as follows.

No one has an authority over the system. It becomes difficult for someone to manipulate the system to place a group of students in rural schools and a group in urban SHS. This is impossible, such negative perceptions must stop. The performance, program and the status of the schools selected by the student will determine the chance of the student gaining access in a rural or urban SHS. (Urban school Head)

The system is controlled by human beings which one cannot trust all the authorities and the workers at that secretariat. We know there are manipulations going on there. We all live in the society and we know the deals that go on there. There are agents that take money from parents just to change or have good schools for their wards and it works. How does it work? They manipulate the system, raw score are tempered and schools are changed in favor of some students. This corrupt practices shows how the authorities determine JHS graduates access in rural or urban schools. (Head)

They play a major role in terms of JHS graduate gaining an access to a rural or urban SHS in Ghana. This happens to the graduates that fail to gain access in their four restricted selected schools. In most case such students are placed in the rural schools which students did not select as their choice of school. This happens because such affected students are not given the second chance to select another school for placement. (Rural school head)

Prospects of the CSSPS

To examine the prospects and challenges of the CSSPS a question was asked to seek the headmasters/mistresses view on that.

1. What are some of the prospects and challenges in CSSPS since its implementation?

General views were raised by almost all the heads interviewed on the prospects and challenges of the CSSPS.

The introduction of the CSSPS has reduced burdens and cost on parents in search of placement and schools for their wards. It has also saved cost and reduction of burdens on the heads of institutions in the selection process of students. The system place students without toil on parents and heads as compared to the old system.

The system has also enhanced national integration through the system's ability to allow students to choose schools from more than one region as it used to be in the past.

The implementation of the system has helped improved teaching and learning in JHS since selection and placement is done on merit especially the core subjects Mathematics, Science, English and Social studies.

The system has introduced efficiency and speed in the selection and placement process in terms of registration of candidates, checking results and school placements This are done electronically through a Short Messaging Services (SMS)

Lastly, the implementation of the CSSPS has helped increased the school enrollment in our rural schools and private schools in the country since placement of students is given on the vacancy declared by an institution.

Challenges of the System

The system is expensive and cumbersome because every application of the system is based on technology. Is also expensive because from registration of candidates, checking of results and schools need the buying of internet bundles and access cards to complete the process.

Complaints from parents for high cost of school fees in the private schools for the students placed in the private schools.

Students that are placed in schools far away from their homes find it difficult to cope with the distance.

Several allegations and complaints of the other stakeholders describing the system as not transparent, unfair and corrupt on the media.

Human errors still exist in the system from the period of registration to the release of results. This has made the system placing female students in male schools and vice versa.

The system has failed to control transfer of students from one school to another school. This has made students moved from school to another school especially students that are spotted with special talents in sports.

Students in the JHS give little importance to other subjects like Religious and Moral Education, Basic Design and Technology, Ghanaian Languages and others as compared to the core subjects which are constantly used for their placement.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

The conclusion and the informed policy and managerial recommendations required to reduce the challenges in the CSSPS to enhance its effectiveness are presented in this chapter of the study.

Summary of Research Process

The study focused on stakeholder's perception on the CSSPS in the Ashanti region as information in this area is essential to ensure higher level of enrolment, easy accessibility and equitability in the SHS placement system. It should however be emphasised that CSSPS introduced in Ghana is yet to fully realize its usefulness as there are still elements of influence in the placement system far from the raw scores. The increasing level of inefficiencies therefore requires an investigation into stakeholders' perception on the CSSPS and its ability in resolving the challenges of the manual placement system. The study employed the mixed research design and involved the administration of questionnaires to 386 students, 302 teachers and 77 parents selected through multistage sampling procedure and further conducting an interview with head-teachers of selected senior high schools using an interview guide. The result for the study was analysed using primarily descriptive methods. The descriptive analytical tools employed included means and standard deviations. The variables were also evaluated using Chi-square method. The interview data was also analysed using content analysis.

Based on these findings, the study recommended establishment of verification and monitoring body, stiffer punishment for offenders of corrupt practices, and upgrading of the rural schools to match the standard of urban schools**.**

Summary of Key Findings

- The result showed that stakeholders perceived the CSSPS as corrupt as parents, guardians and School administrators sometimes use money to influence officers and workers at computerized secretariat in selecting and placing their wards to their choice of schools and the politicians used their political power to sometimes influence the admission process. Stakeholders further perceived the system to have lapses regarding placing girls into boy's school and vice versa, creation overcrowding in schools, the limited contribution of the government in developing less endowed schools to bridge the gap between rural and urban schools.
- Some of the perceived benefits of the system were the creation of room for late placement and admission, reduced the pressure on the headmasters/mistresses from the old students, traditional council, DCE's, reduced the burden of some parents to find schools for their wards, led to the increase of students' intake in rural schools, reduced the rural-urban gap in the access to second cycle education, created equal opportunities for all students in spite of their geographical location and also allowed rural students to gain admission to top urban schools.
- The computerized system was perceived to allow candidates to select schools from any of the ten regions, allowed rural students to gain admission to top

schools, has increased the student population in senior high schools, has relegated anxiety, frustration and confusion among stakeholders, has restore confidence in the selection and placement of candidates in SHS and has also reduced human errors as much as possible during registration and placement of candidates.

- The key five challenges of the CSSPS identified include the difficulty of getting preferred school; the difficulty of getting preferred course, the system fails to look at students with talents in sports, there are cases of students staying at home because of the outcome of the system and the system also encourages boarding system.

Conclusion

Stakeholders in the educational sector in Ghana generally had greater hopes about the CSSPS resolving the numerous challenges encountered in the enrollment of students into Senior High Schools. This believes of the stakeholders largely emanated from their perception of the system. The stakeholders had several perceptions of the CSSPS including the requirement of the selection of four choices from second cycle schools from different options, accommodation and programmes were selected for the different choices, candidates have limited number of school(s) to select from each option, 30% of seats reserved for candidates in the catchment area has helped to increase the chances of admissions for candidates who wants stay closer to their family and home, the computerized system allows selection of schools from any of the ten regions in Ghana, BECE placement is based on candidate's raw BECE raw score and the four selected Senior High Schools choices, candidate's raw BECE raw score combines students total

percentage scores in the four core subjects and his/her next too best subjects for placement and others. These perceptions of the stakeholders therefore indicate that there is limited knowledge gap of the stakeholders on the computerized selection system. However, the stakeholders also perceived the CSSPS as corrupt as parents, guardians and School administrators sometimes use money to influence officers and workers at computerized secretariat in selecting and placing their wards to their choice of schools and the politicians like MP's, Regional Ministers DCE's and Ministers used their political power to sometimes influence the admission process of the CSSPS.

Some other perceived lapses of the computerized system was that it has the potency of placing girls into boy's school or vice versa, created overcrowding in schools, the government contributed less toward the development of less endowed schools since the well-endowed schools could admit more than their quota and the system has also failed to eliminate corrupt practices. Parents perceived the CSSPS as not transparent and full of corruption practices. The workers at the secretariat perceived by parents to have agents that take money from parents, school administrators to have their wards placed in better schools at the secretariat. Parents often pay between Gh¢1500 and Gh¢2500 to agents from the CSSPS secretariat for placement of their wards in relatively better senior high schools. The computerized system is often manipulated by the workers at the secretariat by changing figures and schools on their database. Moneys are also taken from parents to add the names of their wards to protocol list of the schools. Unsurprisingly, the headmasters/headmistresses perceived the system to have eliminated corruption on the steps of their offices and had been shifted to the door steps of the CSSPS Secretariat.

However, some perceived benefits of the CSSPS were that it has created room for late placement and admission (second term admission) of students, reduced the pressure on the headmasters/mistresses from the old students, traditional council, DCE's etc in the admission of wards into the school, reduced the burden of some parents to find schools for their wards and the parents' influence on heads of schools with money. Parents perceived the new system of selection and placement to have saved them travelling cost in searching for schools for their wards. Thus, the parents, teachers and students still have enormous misgivings about the computerized selection system.

The computerized selection system however significantly influenced student's admission into the rural and urban senior high schools. The computerized selection system was perceived to have allowed a level playing field for both rural and urban schools, led to the increase of students' intake in rural SHS schools, reduced the rural-urban gap in the access to second cycle education, created equal opportunities for all students in spite of their geographical location (both rural and urban areas) and also allowed rural students to gain admission to top urban schools. However, the computerized selection system has seemingly generally narrowed the gap between the male and female enrollment into senior high schools. Notwithstanding, Ghana's efforts in bridging the gap between boys and girls enrollment into senior high schools is still far from success as they could not meet the Dakar framework for Action. The current gender equity gap experienced in SHS education falls short of the achievement of global interventions in improving and increasing access to education for girls that has seen dramatic reduction in gender disparities in school enrolment. The ratio of boys to girls' enrollment in the senior high schools however was more equitable in the urban schools

relative to the rural schools. The wider gender gap in student enrollment into rural schools is largely attributed to higher level of teenage pregnancy, distance, poverty and societal beliefs. There was also seemingly wider gap in gender equity among the private schools in the period before the introduction of the CSSPS relative to the public schools. The gender equity gap has however seemingly narrowed with the introduction of the CSSPS. The ratio of boys to girls in science and math education was wider in the period before the CSSPS relative to the CSSPS period.

Notwithstanding the hopes and prospects of the introduction of the CSSPS, there are still several challenges. The identified potential challenges of the CSSPS included the difficulty of getting the preferred schools, difficulty in getting preferred courses, encourages boarding system and possible cases of admission of girls into boys schools and possible cases of students staying at home because of the outcome of the system. The system however cannot be totally condemned as there are several prospects.

Contribution to Theory and Practice

The implementation of the computerized selection system sought to correct several anomalies in the period before. The research has revealed that practically there is still the presence of parents, guardian, school administrators, politician and old students influence in the selection of students into senior high schools. Thus, this implies that computerized systems do not necessarily eliminate or reduce intended challenges without much emphasizes to human adherence to the designed software system. The CSSPS required better monitoring and adherence to ensure higher level of efficiency and effectiveness. Practically, the ratio of the boys to girls has worsened. The boys to girls

ratio in urban and rural schools; and the gender equity in science and math education all also worsened in the implementation of the computerized selection system. The result of the study therefore provides theoretical support for the fact that computerized systems do not make policies but the human adherence to system.

Recommendation

On the basis of the findings of the study, several policy and managerial recommendations have been suggested to reduce the anomalies and defects of the computerized selection system and make the system more effective.

Policy recommendations

The government and other policy makers in the country could enhance the CSSPS through deliberate policies that engulfs the establishment of verification and monitoring body, ensuring stiffer punishment for offenders of corrupt practices, upgrading of the rural schools to match the standard of urban schools and girl's sensitization and involvement in science and math programme.

A) Establishment of verification and monitoring body for the CSSPS

A task force needs to be set up to verify and monitor the computerized selection process. There is the need for a matching system to ensure that only students placed in a particular school in addition to other quotas are enrolled in a particular school. The CSSPS system would be more effective in placing students on the basis of their raw scores with the presence of very effective verification and monitoring system.

B) Stiffer punishment for offenders of corrupt practices

Parents, teachers, headmasters and staff of the CSSPS secretariat caught engaging in malpractices in terms of 'cutting corners' to get students placed in schools on the basis of paid moneys and not on the basis of academic merits should be prosecuted. The punishment for guilty persons should be stiffer to deter others from engaging in such corrupt practices.

C) Upgrading of the rural schools to match the standard of urban schools

Policy must be put in place to upgrade the rural school through the provision of modern hostel facilities, learning infrastructure e and facilities and better roads linking to the urban centers. A deliberate policy that upgrades the rural schools to match up with the urban schools has the potency to reduce the level of gender equity between rural and urban schools.

Managerial recommendations

The wide gap in enrollment between the public and private schools can be narrowed through a deliberate effort by the managers and proprietors of the private schools to engage in promotional activities. The facilities and the academic achievements of the private schools need persistent advertisement through the various forms of media. The private schools should also deliberately engage in constant academic and sports programmes with the public schools to indicate that there is not much differences between the public and private schools in terms of sports and academic prospects of students.

Limitation and Suggested Areas for Further Studies

Notwithstanding the immense contribution of the current study to theory, practice and filling of the knowledge gap, there are also a number of limitations that hinders the relevance of the result. To begin with, the study focused on a selected number of senior high schools in the Ashanti region leaving the other secondary schools in the other nine regions unattended. The narrowed sample size therefore limits the generalization of the result to the entire target population nationwide. Thus, the study suggests that further studies in this academic area should include other senior high schools from the other regions to enhance reliability and validity of the result.

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APPENDIX A

UNIVERSITY OF EDUCATION

MA EDUCATIONAL LEADERSHIP

QUESTIONNAIRE FOR RESPONDENTS

STAKEHOLDERS PERCEPTION OF THE COMPUTERIZED SCHOOL SELECTION AND PLACEMENT SYSTEM (CSSPS). A CASE STUDY IN KWADASO - MUNICIPAL ASSEMBLY

I am a student of Philosophy in Education Leadership (M A) of University of Education, Kumasi. This instrument is to support me collect information on how stakeholders perceive the Computerized School Selection and Placement System (CSSPS). You are kindly requested to read through the items and respond to them as frankly and objectively as possible. Your response will be treated as confidential and will be used solely for academic purpose.

Thank you for taking the time to help with this research.

DIRECTION

Please tick (√) the box corresponding to your choice(s) or write the requested information concerning each statement below:

SECTION A: PERSONAL DATA

1. CATEGORY OF RESPONDENTS

PARENT	
HEADMASTER/MISTRESS	
TEACHER	
STUDENT	

2.School/Office……..……

3. Status: Teacher [ ] Student [ ] Parent [ ]

4. Sex Female [ ]

Male [ ]

5. Age Below 20 yrs [ ] 36 – 40 [ ]

21 – 25 [ ] 41 – 45 [ ]

26 – 30 [ ] 46 – 50 [ ]

31 – 35 [ ] Above 50 [ ]

SECTION B: PERCEPTION OF STAKEHOLDER TO CSSPS

DIRECTION:

Please, kindly express your view by ticking from the scale to show how much you agree or disagree with each statement and tick the response in the space to the right of the item.

Strongly Agree - SA

Agree - A

Not Sure - NS

Disagree - D

Strongly Disagree - SD

SN	STATEMENT	SA	A	NS	D	SD
1	Candidates can only select four choices from second cycle schools of different options.					
2	Candidates select a programme and an accommodation for each choice.					
3	Candidates have limited numbers of school(s) to select from each option.					
4	30% of seats in each Senior High School are reserved for students whose Junior High School is within 16km of the school.					
5	30% of seats reserved for candidates in the catchment area has helped to increase the chances of admissions for candidates who wants stay closer to their family and home.					
6	BECE placement is based on candidate's raw					

	BECE raw score and the four selected Senior High Schools choices.					
7	Candidate's raw BECE raw score combines students total percentage scores in the four core subjects and his/her next too best subjects for placement.					
8	Parents, Guardians and School administrators sometimes use money to influence officers and workers at computerized secretariat in selecting and placing their wards to their choice of schools.					
9	Politicians like MP's, Regional Ministers DCE's and Ministers used their political power to sometimes influence the admission process of the CSSPS.					
10	The 30% quota given to students from the community in which the school is located by CSSPS has created room for wards to be accepted through the pressure from some members of the old students association.					
11	The 30% quota given to communities of which schools are located by the computerized system has also created room for wards to be accepted through the pressure from the traditional council.					
12	Headmaster/mistresses were obliged to admit students from the community in which the school is located, despite the grade/raw score of the student.					
13	The computerized system allows students select schools from any of ten regions in Ghana.					
14	CSSPS has created room for late placement and admission (second term admission) of students to the SHS.					
15	There were instances where the computer placed girls into boy's schools or vice versa.					
16	CSSPS of admission has led to overcrowding in schools. That the headmasters continue to admit students even after they have absorbed their quota given to them.					
17	Government contributed less toward the development of less endowed schools since the well-endowed schools could admit more than their quota.					
18	The computerized system has been successful					

	in allocating students to their choice of school.					
19	The computerized system has reduced the pressure on the headmasters/mistresses from the old students, traditional council, DCE's etc in the admission of wards into the school.					
20	There is less active contributions from the old students towards the development of the school since the inception of the computerized system.					
21	The computerized system has reduced the burden of some parents to find schools for their wards.					
22	The computerized system has reduced parents' influence on heads of schools with money.					
23.	The computerized system has abolished corruption from the system.					

SECTION C: INFLUENCE OF CSSPS ON STUDENTS ADMISSION IN RURAL AND URBAN SENIOR HIGH SCHOOLS

SN	STATEMENT	SA	A	NS	D	SD
24	The computerized system allows a level playing field for both rural and the urban schools.					
25	The computerized system has led to the increase of students' intake in rural SHS schools.					
26	The computerized system places pupils with low score to the rural schools.					
27	The CSSPS has been able to reduce the rural-urban gap in the access to second cycle education.					
28	The computerized system has created equal opportunities for all students in spite of their geographical location (both rural and urban areas)					
29	The computerized system allows rural students to gain admission to top urban schools					
30.	CSSPS has increase infrastructural development in rural schools.					

SECTION D: EXAMINING THE PROSPECTS OF CSSPS

SN	STATEMENT	SA	A	NS	D	SD
31	The computerized system allows candidates to select schools for any of the sixteen (16) regions.					
32	The computerized system allows rural students to gain admission to top schools.					
33	The computerized system has increased the student population in senior high schools.					
34	The system has relegated anxiety, frustration and confusion among stakeholders.					
35	CSSPS has restore confidence in the selection and placement of candidates in SHS.					
36	CSSPS has reduced human errors as much as possible during registration and placement of candidates.					

SECTION E: WHAT ARE THE CHALLENGES THE CSSPS

SN	STATEMENT	SA	A	NS	D	SD
37	Some students do not get their choice of schools.					
38	Some students do not get their choice of course.					
39	The CSSPS encourages the boarding system.					
40	There are cases where girls were admitted into boys' schools or vice versa.					
41	There are cases where some students stay at home because they did not like the outcome of the system.					
42	Females students been placed in male schools and vice versa.					
43	CSSPS fails to look and students with other talents in sports.					

51. Are you satisfied with the outcome of the computerized school selection and placement system?

Yes [ ] No [ ]

If Yes, why……

…….....

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If No, why……

…….....

……

52. What do you think should be done to improve the CSSPS?

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APPENDIX B

INTERVIEW GUIDE FOR HEADMASTERS/MISTRESS

1. Should JHS students continue to select schools, programs and accommodation before seeing their results?
2. How do you see Fairness, Corruption and Transparency in the CSSPS since its implementation?
3. How do you perceive the use of students' raw scores better than the use of the grades? Should the selection process be reverted to the heads of schools?
4. It observed from the general comments from the interview that heads wants part of the work of the CSSPS revert to them especially the programme selection of students.
5. Has the CSSPS promoted equal level playing field for all students and schools in the country?
6. Does the governing authority of the CSSPS play a major role in terms of JHS graduate gaining an access to a rural or urban SHS in Ghana?
7. Does the CSSPS give equal opportunity to the males and females JHS graduates in terms of gaining access in SHS?
8. Have the CSSPS ensure gender equity in allocation of programmes to JHS graduates?
9. What are some of the prospects and challenges in CSSPS since its implementation?

APPENDIX C

TIMELINE FOR SCHOOL SELECTION AND PLACEMENT IN GHANA (2005-2018)

1. Students Submit Choices

   • October: West Africa Exam Council (WAEC) registers students for Basic Education Certification Exam (BECE)

   – Collects students' lists of program choices

   – Provides CSSPS Secretariat with data on student backgrounds and choices

2. Senior High Schools Declare Vacancies

   • January: Ministry of Education supplies CSSPS Secretariat with

   – register of all JHSs

   – register of all SHSs (with numbers of program vacancies)

3. Student Quality Revealed

   • June: Students take the BECE exams

4. Students Admitted to Schools

   • July/August: WAEC sends scores to CSSPS Secretariat which then

   – Assigns each student an aggregate score based on performance in 4 core and 2 best subjects

   – Places qualified students in schools according to ranked choices and deferred acceptance algorithm, with priority determined by aggregate BECE scores

   • A few weeks after CSSPS Secretariat receive BECE results:

   – Placement results released and displayed in junior and senior high schools or retrieved by text messaging candidate IDs to the CSSPS Secretariat

Box 2: History of School Choice Reforms in Ghana

• 2005: Computerization

– shift from a manual admission system

– students can apply to 3 choices anywhere in the country

– schools have limited input in admission process

• 2007: Increase in number of permitted choices, from 3 to 4

• 2008: Increase in number of permitted choices, from 4 to 6

• 2009: School categorization reform (guidelines quoted from MOES (2005))

1. All second cycle institutions have been grouped into categories as follow:

– Senior High Schools: four (4) categories namely A, B, C, and D depending on available facilities (e.g. single sex, boarding and day, geographical location).

– Technical Institutes (T).

– Private Schools (P).

2. Before making any selection of schools and programmes offered in these schools, parents are advised to note the following:

– All schools selected (1st to 4th) are considered in the placement of candidates

– Placement in schools is based on scores obtained by candidates (Merit)

3. Conditions for Selection of Schools

– Candidates must choose four schools (1st - 4th choice).

– Candidates must select a programme and accommodation for each choice.

– Candidates must not choose one school twice.

– Candidates cannot choose more than one (1) school in category A.

– Candidates cannot choose more than two (2) schools in category B.

– Candidates may choose a maximum of 5 schools from category C or D.

4. Note: Regardless of the categories, candidates must arrange their choices in order of preference.

GUIDELINES 2018/2019 ACADEMIC YEAR

- Second Cycle Schools grouped into OPTIONS :
  - Public SHS : Three (3) groups namely options 3, 2 & 1
  - Public Technical/Vocational Institutes. : option 4
  - Approved Private Schools (Both SHS & Tech/Voc): option 5

Conditions for selection of Candidates:

- Must Choose 4 schools (1st -4th choice) with corresponding programmes
- Must not choose one school twice
- May select all choices from option 1
- Should not select more than 2 schools from option 2 Cannot choose more than 1 school in option 3
- Candidates who desire to pursue purely Tech/Voc programmes may select all choices from option 4
- Candidates have the liberty to select all choices from a mix of options 1, 2, 3 ,4 & 5
- Choice of schools from a combination of regions allowed.

Placement is based on six subjects

A minimum of six (6) subjects are used for all candidates for the selection. This comprises four (4) core subjects and two (2) best subjects.

The Core Subjects are

i. For SHS/TI

English Language

Mathematics

Integrated Science

Social Studies/Building Technology

ii. Two other best subjects

The two (2) other best subjects are selected from the rest of the BECE subjects. Six (6) Subjects used for selection & placement

- Raw scores of candidates are used.
- Placement on Merit
- School and Programme options linked

APPENDIX D

$$n_1 = \frac{N}{1+N\left(e^2\right)};\ \ n_1 = \frac{10,949}{1+10,949\left(0.05^2\right)};\ n_1 = \frac{10,949}{28.3725};\ n_1 = 386 \text{ Students}$$

$$n_2 = \frac{N}{1+N\left(e^2\right)};\ \ n_2 = \frac{1,245}{1+1,245\left(0.05^2\right)};\ n_2 = \frac{1,245}{4.1125};\ n_2 = 302 \text{ Teachers}$$

where:

$n = Sample\ size$

$N = Population$

$e = M\,\text{arg}\,in\ of\ \ error$