PERCEIVED WASHBACK EFFECTS OF HIGH-STAKES TEST ON TEACHING AND LEARNING: A STUDY OF SENIOR HIGH SCHOOL ECONOMICS TEACHERS AND STUDENTS

FRANCIS ARTHUR

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ECONOMICS TEACHERS AND STUDENTS

BY
FRANCIS ARTHUR

Thesis submitted to the Department of Business and Social Sciences
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College of Education Studies, University of Cape Coast, in partial fulfilment
of the requirement for the award of Master of Philosophy degree in
Economics Education

JUNE 2021
DECLARATION

Candidate’s Declaration

I hereby declare that this thesis is the result of my own original research and that no part of it has been presented for another degree in this university or elsewhere.

Candidate’s Signature ……………………… Date …………………

Name: Francis Arthur

Supervisor’s Declaration

I hereby declare that the preparation and presentation of the thesis were supervised in accordance with the guidelines on supervision of thesis laid down by the University of Cape Coast.

Supervisor’s Signature ……………………… Date………………

Name: Alhaji Prof. Mumuni Baba Yidana
ABSTRACT

This study investigated the perceived washback effects of high-stakes test on the teaching and learning of Economics. The study was a quantitative research which adopted the descriptive cross-sectional survey design. In all, 600 and 100 SHS Economics students and teachers respectively, were sampled for the study. Data were collected through a 5-point Likert scale questionnaire ranging from strongly agree to strongly disagree. Both descriptive (mean and standard deviation) and inferential statistics (ANOVA and independent t-test) were used to analyse the data that were obtained. The study found out that WASSCE Economics examination had a negative washback effects on classroom instructional practices, implementation of the Economics syllabus and students’ learning practices. The findings showed that there is a statistically significant difference in washback effect of WASSCE on Economics students’ learning practices between SHS 1, SHS 2 and SHS 3 Economics students. Again, it was found that there is a statistically significant difference in washback effect of WASSCE on Economics teachers’ classroom instructional practices between private and public SHS Economics teachers. Lastly, it was revealed that there is no statistically significant difference in washback effects of WASSCE on Economics students’ learning practices between public and private SHS Economics students. It was recommended that Heads of SHS institutions and circuit supervisors should pay particular attention to their supervisory role and ensure that teachers implement broader syllabus or curriculum and not a narrowed syllabus.
KEY WORDS

Classroom instructional practices
Economics
High-stakes test
Learning practices
Perceived
Washback effect
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DEDICATION

To Hannah Tuffour, my mother and Charles Kwabena Boateng, my brother
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CHAPTER ONE

INTRODUCTION

Background to the Study

Tests are increasingly used throughout the educational system of most countries as a basis to make important score-based decisions about test takers. Testing has the tendency to induce consequences for the intended participants because it remains a way of differentiating between and among the individuals. However, tests have consequences for test takers because testing is not a neutral process (Safari, 2016; Stobart, 2003).

According to a sixteenth protestant German teacher, Philip Melancthon, “no academic exercise can be more useful than that of examination. It whets the desire for learning, it enhances the solicitude of study while it animates the attention to whatever is taught” (Madaus 1999 as cited in Agbeti, 2011, p. 10). This revelation shows what has been understood about the ability of test to affect student learning since that time. Nevertheless, this is only an incomplete look at the effects of assessment on education. Havens (2004) declares that assessment has an effect on not only learning but also teaching, textbooks and the entire educational system. It is evident from this assertion that assessment has been a part of education for centuries, and it is difficult now to imagine an educational system without it. Due to the nature of washback effect, it is essential to investigate it for every high-stakes test which will be used to evaluate teaching and learning at the various secondary and tertiary institutions. High-stakes test infuses all learning activities in schools today and it facilitates the teaching and learning in the classroom (Dunn & Mulvenon, 2009).
Advocates of the use of high-stakes test believe that it can be used to modify teaching in required ways if it is used to pressurise teachers to improve students’ learning (Popham, 2005; Resnick & Resnick, 2009). Opponents of this idea point to the harmful effects external assessment tends to have on learning which they claim outweigh any benefits. They claim the negative effects are not limited to the cognitive domain but extend to sociological issues relating to power, social class and race relations and equal opportunities subtly (Amrein & Berliner, 2002; Broadfoot & Pollard, 2000; Gipps, 2011). It is of this same claim that the Anamuah-Mensah Committee report (2002) asserted that “it is recognised that the type of assessment employed by the system dictate the type of pedagogy used by teachers” and as a result, the committee strongly advocated that this system of assessment should be scrapped off.

In Ghana, pre-university levels of education (i.e. Primary or Basic, Senior High School levels) take Basic Education and West African Senior School Certificate Examinations respectively as external high-stakes examination which are conducted and moderated by institutions outside the context of the classroom. Examinations of this nature have consequences for the students, their teachers or schools (Agbeti, 2014; Amoako, 2018; Anamuah-Mensah, 2002; Anane, 2010).

In Ghana, a high level of importance has been attached to high-stakes testing by teachers, students, parents and other stakeholders due to the diverse roles played by this examination (Anane, 2010). The role played by these examinations includes determining the effectiveness of teaching and learning in schools, as well as students’ future prospects (Heubert, 2000).
High-stakes testing has been described as standardised examination to which paramount importance is attached by schools and students because of its consequences (Smyth, Banks & Calvert, 2011). Heubert (2000) defines high-stake test as an assessment which is of importance in making decisions regarding students, teachers and the school as a whole. High-stakes examinations are used for ranking, grading, selection, certification and accountability (Heubert, 2000).

For schools of this 21st century, high-stakes testing appears to be a powerful force in shaping public opinion about the good standards and accountability of education (Amoako, 2019; Anane, 2015). In Ghana, WASSCE results determine candidates’ entry into tertiary institutions such as universities, technical universities and the colleges of education. The Examination body which is the West African Examination Council (WAEC), organises the high-stakes test on behalf of the government or Ministry of Education. This public examination is a standardised examination which candidates or students are expected to pass in at least six subjects including English Language, Mathematics, Science or Social Studies.

In Ghana, tests like the West African Senior School Certificate Examination (WASSCE) are becoming more and more high-stakes, because such examinations are used for determining the quality of Senior High Schools, for school selection and placement into tertiary institutions and remedial classes respectively (Anane, 2010). Gradually, national examinations are being openly or secretly related to plans that guide school systems, administrators, teachers and students (Anane, 2007). The scores of students on national tests, for instance, are published in the daily newspapers and other
news portals as a medium of ensuring accountability to the public. In some cases, stakeholders such as opinion leaders suggest that students’ performance be used as a basis for determining rewards and sanctions for schools and their staff. The results are also used in deciding which Senior High School (SHS) is better, usually through the league systems (Ghana Education Service, 2004).

The pressure and stress to perform on these tests in Ghana has become intense for students, teachers, head teachers and school systems (Anane, 2007). As a result of increased standards and demand for accountability, teachers and administrators began taking these tests and standards seriously (Grant, 2002). In the Ghanaian context, supervisory stakeholders of Senior High Schools assess the quality of the school system and teachers by the number of students who score six credits and above in the WASSCE. This further underscores the significance of WASSCE which is administered an external examination body, WAEC.

According to Linn (2001), high-stake test, sometimes known as standardised testing, now serves as the basis for holding schools, teachers, and students more accountable. Due to that, the degree of success of candidates in WASSCE is held in high esteem. Proprietors of private Senior High Schools attach promotions and increase in salary of teachers to the number of students who do well in the WASSCE because of the importance attached to students’ overall performance (Adesina, 2017).

The crucial nature of standardized tests is not unique to Ghana. In the United States for instance, the ‘No Child left Behind’ policy suggests the essential function standardized tests play in accessing funds by schools, and for teachers to retain their jobs (Dee & Jacob, 2011). Testing starts when the
child is seven years of age in England; these tests are referred to as Standard Attainment Tasks 2 and Tests (SATs) (Gregory & Clarke, 2003). Students’ ability to achieve the objective of the National curriculum is the main aim of the SATs. The financing of a specific school maybe influenced by the results of SATs. Many of these examinations are high-stakes examinations for schools and students.

Teachers frequently struggle to meet the demands of proprietors, the government and parents as a result of the critical nature of students’ success rate in the high-stakes examinations (Agbeti, 2014). In essence, teachers struggle to get their students perform well in the examinations, even going to the extent of helping students to engage in examination malpractices (Grant, 2002). On the other hand, students struggle to please their parents and guardians, and also struggle to meet the criteria for admission into tertiary institutions for fear of being mocked at as failures (Lin, 2010). Hence, this might influence teaching and learning as a whole. That is, shaping both what is taught and how it is taught and also altering the context in terms of what counts as valuable knowledge (Conway & Sloane, 2005). Washback or backwash, also known as measurement-driven instruction (Cheng, 2005), is a concept used in general education showing the consequence of a test on teaching and learning, which remains a dominant phenomenon in education.

The literature on assessment points out that both critics and supporters accept that high-stakes test has a controlling effect on teaching and learning and thus has the ability to alter the way teachers teach (Anamuah-Mensah Committee report, 2002; Chapman & Snyder, 2000; Firestone, 2004). The point of contention is the impact on teaching and learning of the unintended
effects of this type of assessment. The opponents emphasise the unforeseen and sometimes undesirable effects of external test on teaching and learning. For their part, the proponents argue that the critical issue to deal with is how to minimise the adverse impact of high-stakes tests on teaching and learning (Firestone, 2004). The proponents’ concern is how to align the divergent aims of the curriculum and actual teaching and learning that occur at school under the influence of external examination (Wright, 2002).

A substantial number of washback studies have centred on the investigation of teachers and learners’ views of high-stakes tests as well as the washback effects of the tests on teaching and learning processes (e.g., Anane, 2007; Ferman, 2004; Glover, 2006; Gosa, 2004; Stoneman, 2006). For instance, Anane (2007) examined the effect of high-stakes testing on curriculum implementation and instruction in secondary schools in Ghana. His findings revealed that high-stakes testing has not resulted in improved quality of teaching and learning as teachers spend 28% of class time preparing students for tests. In the same vein, BECE as a high-stakes test drives curriculum implementation in Ghana, and puts the “national curriculum” and “teaching practices” at stake (Amoako, 2018).

In other contexts, Cheng (1999) studied the workings of the washback phenomenon in Hong Kong secondary school teaching, and discovered that the high-stakes test had an impact on teaching in the examination class, as teachers realigned their teaching with the requirements of the examination. The activities they participated in during lessons were directly linked to what the students were expected to meet at examinations. Wright (2002) found an identical result in his study of the impact of a high-stakes test on teachers in an
elementary school in California. He discovered that the high-stakes examination was driving the instructional objectives of the teachers.

Generally, washback has been perceived as being either negative (harmful) or positive (beneficial). High-stake tests have been used as a catalyst for change (Pearson, 1988) in order to encourage beneficial washback and curricular innovation (Alderson & Wall, 1993; Cheng, 2005; Qi, 2004), although its ramifications on teaching and learning may be negative (Shohamy, 2004). As a result, contemporary studies of washback in education focus on the impact of high stakes tests on educational stakeholders, especially when the examinations undergo alterations, in aspects such as learning practices, teaching techniques, syllabus and behaviours towards tests (Qi, 2004; Saif, 2006; Tsagari, 2009).

High-stakes test can contribute to the process of educational innovation and influencing classroom procedures (Brindley, 2008; Shohamy, 2001). Empirical studies have revealed a variety of results with regard to the impact of tests on diverse facets of instructional practices: some tests may have greater effects on some domains of teaching and learning than others (Cheng, 2005). However, it has been argued that washback is a multifaceted phenomenon (Alderson & Wall, 1993; Choi, 2008), and should not be considered as a spontaneous consequence of examinations (Bailey 1999; Spratt, 2005). The literature seems to suggest that some intervening variables beyond the examination per se may contribute to the determination or exclusion of the amount and kind of washback effect. Some of these variables relate to the features of teachers and students, and the context (Spratt, 2005).
These varied results may suggest that each high-stake test needs suitable research to identify its own washback.

Similarly, other studies have confirmed that high-stakes examinations may, from the outset, affect some stakeholders’ views and behaviours, and thus, may be able to alter the practices of teachers in the classroom and the content of teaching (Cheng, 2005; Shohamy, 2007). Besides, this modification in the how (methodology) and the what (content) is often superficial rather than substantial, and may occur in the form of teaching and not in its substance (Cheng, 2005; Qi, 2004).

It is to be noted that, most of the studies (e.g., Aysela, 2012; Tsagari, 2009) on the effects of high-stakes examinations are in the area of language and mathematics. More importantly these studies were conducted mostly in the Western Europe such as United Kingdom, US (Saville & Hawkey, 2004) and Greece (Tsagari, 2009) and in Asia such as China (Chen & He, 2003; Qi, 2005). Aysela’s (2012) study on the effects of high-stakes examinations on the teaching and learning conducted in Ireland and Turkey was in the area of Mathematics. There is, however, dearth of empirical studies on washback effect of high-stakes examinations on teaching and learning in the area of Economics education in the Sub-Saharan Africa and especially in Ghana. Shohamy (2007) asserts that public examinations are powerful enough to influence teachers’ classroom behaviour. However, the scope and nature of this influence are still uncertain, and requires further investigation.

**Statement of the Problem**

The discovery of washback effect of high stakes test on teaching and learning in the 21st century can be traced to several researchers (Alderson &
Hamp-Lyons, 1996; Cheng, 1999; Ghorbani & Neissari, 2015; Green, 2007; Onaiba, 2013; Shih, 2007; Shohamy, Donitsa-Schmidt & Ferman, 1996). In Iran, Moradi (2019) studied the washback effects of final examinations at Payame Noor University (PNU) on teaching and learning. The study focused on University teachers and students. The results of the study showed that the English examination had washback effect on teaching and learning, and this washback effect was more positive than negative.

Also, Chou (2019) explored the effect of high-stakes examination on teaching and learning. The study collected data through the use of questionnaire and interview schedule from 311 Junior High School students and 12 teachers in Taiwan. In the study, a mixed method approach was used and the results revealed that the test influenced learning more than teaching. Contrary to the findings of Moradi (2019), the study was not specific in respect of whether the washback effect was completely positive or negative.

In the Ghanaian context, Anane (2010) investigated the influence of accountability pressures on Science, English and Mathematics teachers’ classroom practices in senior high schools in the Ashanti Region. The findings of the study revealed that the high-stakes test (SSSCE) gradually shapes the content from broad curriculum to test-focused teaching. Similarly, Amoako (2018) looked at the perceived effects of BECE on curriculum implementation on teaching and learning of English, Mathematics and Science in the Kwahu-South District. The results of the study showed that, in Ghana, the high-stakes test (BECE) drives curriculum implementation.

Owusu (2019) studied the washback effects of BECE/WASSCE on teaching and learning of English language among 4 JHS’s and 8 SHS’s with
374 students and 24 teachers in the Central Region of Ghana. A mixed method approach was used. It was found that teachers and their students did not give the required attention to language skills or areas that were not covered in the BECE/WASSCE. Owusu, therefore, concluded that BECE/WASSCE English language test exerted a negative washback effect on the students.

However, these studies did not look at the unintended consequences of high-stakes test on teachers’ classroom instructional practices and students’ learning practices. It is therefore imperative that researchers begin to learn more about the intended and unintended consequences of testing on teaching and learning in Ghanaian Schools. It appears most of these researchers failed to consider whether there is any significant difference in the washback effects of high-stakes test on teachers’ classroom instructional practices between private and public SHS teachers.

Again, it appears most of the studies on washback effects of high-stakes test have used small samples and mixed methods. Also, it looks as if studies on washback effect focused on the physical sciences and the Language related subjects. It seems little has been done in the area of the Social Sciences to find out the washback effects of high-stakes on teaching and learning at the senior high school level. This has therefore created a research gap part of which this study intends to fill by investigating the perceived washback effects of high-stakes test on teaching and learning of Economics.

It seems little work has been done in Ghana to find out the perceived washback effects of high stakes test on teaching and learning. Washback effects of high stakes tests on teaching and learning of Economics in Ghana
has received little attention. This study, therefore, seeks to augment the knowledge generated from similar studies other than Economics.

Assumptions of the Study

Every study is grounded on some assumptions. The assumptions in effect, form the criteria by which judgements about the study can be made. The current study is based on several assumptions that underpinned the washback effects of high-stakes test on the teaching and learning of Economics.

The assumptions are:

1. that the washback effect of high-stakes test is inevitable, it is a well-known phenomenon in educational research. This implies that the washback effects of WASSCE Economics examination would likely be positive or negative.

2. that a high-stakes test such as WASSCE Economics examination has important consequence hence it will have washback effect or influence on the teaching and learning of Economics.

3. that a high-stakes test (WASSCE) will influence what and how teachers teach. This suggests that WASSCE Economics examination will affect teachers’ classroom instructional practices and also the content of the syllabus.

4. that a high-stakes test (WASSCE) will influence what and how students learn. This means that WASSCE will have an impact on the learning practices of students.
Purpose of the Study

The overarching purpose of this study was to investigate the perceived washback effects of high-stakes test on teaching and learning of Economics in the senior high schools of the Kumasi Metropolis. However, in specific terms, the study sought to:

1. investigate the perceived washback effects of WASSCE on Economics teachers’ classroom instructional practices.
2. find out the perceived washback effects of WASSCE on the implementation of the Economics syllabus.
3. ascertain the perceived washback effects of WASSCE on Economics students’ learning practices.
4. determine whether there is any significant difference in the perceived washback effects of WASSCE on Economics students’ learning practices between SHS 1, SHS 2 and SHS 3 Economics students.
5. find out whether there is any significant difference in the perceived washback effects of WASSCE on Economics teachers’ classroom instructional practice between private and public SHS Economics teachers.
6. determine whether there is any statistically significant difference in the perceived washback effects of WASSCE on Economics students’ learning practices between public and private SHS Economics students.

Research Questions

In order to accomplish these objectives, the following research questions were formulated to guide the study:
1. What is the perceived washback effect of WASSCE on Economics teachers’ classroom instructional practices?

2. What is the perceived washback effect of WASSCE on the implementation of the Economics syllabus?

3. What is the perceived washback effect of WASSCE on Economics students’ learning practices?

**Research Hypotheses**

The study tested the following hypotheses:

1. \( H_0 \): There is no statistically significant difference in the perceived washback effect of WASSCE on Economics students’ learning practices between SHS 1, SHS 2 and SHS 3 Economics students.

   \( H_1 \): There is a statistically significant difference in the perceived washback effect of WASSCE on Economics students’ learning practices between SHS 1, SHS 2 and SHS 3 Economics students.

2. \( H_0 \): There is no statistically significant difference in the perceived washback effect of WASSCE on Economics teachers’ classroom instructional practices between private and public SHS Economics teachers.

   \( H_1 \): There is a statistically significant difference in the perceived washback effect of WASSCE on Economics teachers’ classroom instructional practices between private and public SHS Economics teachers.

3. \( H_0 \): There is no statistically significant difference in the perceived washback effects of WASSCE on Economics students’ learning practices between public and private SHS Economics students.
H₁: There is a statistically significant difference in the perceived washback effects of WASSCE on Economics students’ learning practices between public and private SHS Economics students.

Significance of the Study

The effect of high-stakes tests, such as WASSCE, on the teaching and learning process has long been recognised in the field of education. The findings of this study may add to the existing body of washback studies in general and to washback studies in Ghana in particular. The findings of this study might also be of pedagogical help and significance to policy makers, curriculum planners, heads of SHS institutions, textbook designers, test constructors, teachers and practitioners, as well as learners and their parents. The study on the influence of high-stakes test on teaching and learning of Economics is likely to provide educational administrators, teachers, students and other stakeholders with data for several purposes.

Again, the results of the study might provide valuable information to encourage testing institutions (such as WAEC) to improve the testing system, in order to better assess the goals and objectives of Economics as a subject and also promote the teaching and learning of Economics. Thus, the results of this study may have important implications for the testing system by providing information for test developers to evaluate the test in several aspects and explore ways of producing positive washback on students’ learning.

The findings of this study could also help identify the potential unintended consequences of WAEC testing on teachers’ decision-making which will assist stakeholders of education to formulate policies to promote teaching and learning of Economics. Most importantly, the findings of this
study may highlight the voices of teachers and students, the very people at the
centre of the teaching and learning process. Hence, the study will probably
offer stakeholders of second cycle education with important information to
help improve the policies and practices to shape classroom practices in the
senior high schools.

Lastly, the findings of this study will inform GES, test writers and
researchers about washback, providing on-site discoveries about the existence
of washback in the context of the research. So, this study is important because
it adds to the literature new insights about washback effects.

**Delimitations**

The study was delimited to only the washback effects of high-stakes
testing on teaching and learning of Economics because the area of testing is so
broad that it will not be feasible to cover all areas. The study was confined to
the Ashanti Region of Ghana and was also restricted to selected senior high
schools in the Kumasi Metropolis. Guided by Nguyen’s test washback model
effect on teachers and students as well as literature on washback effect of
high-stakes test on teaching and learning, the researcher adapted high-stakes
testing survey research instrument to collect data from the field. The study
adopted the descriptive cross-sectional survey design which will capture the
perceptions of SHS Economics students and teachers.

**Limitations**

Every study conducted is characterized by limiting factors, and this
study was no exception. The instrument used was a self-report measure, and
there is a possibility that some of the responses from the Economics students
might not reflect the actual situation on the ground and may have an effect on the validity of the data collected from them.

In addition, the research instrument did not offer any opportunity for the researcher to collect additional information through observation and clarifications from the research participants. Thus, observations and interviews would have given a clearer picture on washback effects. In spite of all these limitations, the findings are valid and reliable.

**Operational Definitions of Terms**

The following terms are defined as applicable to the study:

**High-stakes tests**: This term is used to describe tests that have major consequences for students, teachers and schools or are the basis of a major decision, such as for admission purposes into a university.

**Washback**: This term is used to refer to the influence of a high-stakes test (WASSCE) on teaching and learning generated by a test (usually a high-stakes test). The influence can be either positive or negative.

**WAEC high-stakes examinations**: This refers to standardized examinations conducted by the West African Examination Council for the five Anglophone (English-speaking) countries in West Africa. In this study, the high-stakes test is the West African Senior School Certificate Examinations (WASSCE).

**WAEC high-stakes Economics examinations**: These are those Economics examinations West African Senior School Certificate Examinations administered by WAEC at the end of senior high school education.

**Organisation of the Study**

The study was divided into five chapters which discussed all aspects of the study. Chapter One covered the background to the study, statement of the
problem, purpose of the study, research questions, research hypotheses, significance of the study, delimitation, limitations, definition of terms and the organisation of the study. Chapter Two discussed the literature review relating to the study as well as the theoretical framework that was adapted for the study. It pointed out opinions and assertions of various authorities in related areas of the study. The third chapter also dealt with the methodological approach of the study. It comprised research design, population, sample and sampling procedure, research instrument, test for validity and reliability, data collection procedures and data analysis procedure. Chapter Four focused on the results and discussion of the data collected and analysed. Chapter Five considered the summary, conclusions, and recommendations based on the findings of the study as well as suggestions for further studies.

CHAPTER TWO

LITERATURE REVIEW

Overview

This chapter reviews studies conducted by other researchers that were considered significant to the study. The chapter is divided into conceptual
review, theoretical review, empirical review and conceptual framework. The empirical review also reviewed related works conducted by other researchers in the area of washback effects of high-stakes test on teaching and learning.

Conceptual Review

High-stakes test: Definitions and Concepts

High-stakes tests are described as those that are used to make crucial educational, financial, or social decisions (Genesee & Upshur, 1996). High-stakes test is a test that uses its result to make decisions on entry, advancement, placement or graduation, while the low-stakes test does not require such critical decisions (Shohamy, Donitsa-Schmidt & Ferman, 1996). Heubert (2000) also asserts that high-stakes tests are used to make critical educational decisions about students, teachers, colleges, or school districts.

In the same vein, Qi (2004) defines high-stakes test more precisely as a test, the outcomes of which are used by students, teachers, administrators, parents or the general public as the basis on which important decisions are taken that immediately and directly impact students. Obviously, the effect of promotion and graduation decisions on students and their families is significant. Tests are also used not only to select high-level performers, but also to facilitate beneficial improvements in teaching and learning (Qi, 2005).

Again, high-stakes test is characterized as an examination that students need to pass in order to complete a school, enter an education program, attend a university, receive a scholarship, or receive an application (Cizek, 2001; Resnick, Rothman, Slattery & Vranek, 2004). In addition, this term is also used for examinations or tests, the results of which are very important for their
test-takers, and which place high concerns and anxieties on them (Casbarro, 2004).

Au (2007) claims that the exam is deemed to be high-profile because its findings are used to make critical decisions impacting pupils, teachers, administrators, families, schools and districts. Similarly, Johnson, Johnson, Farenga and Ness (2008) describe high-stakes tests as those that have implications for student achievement (e.g. grading, promotion or graduation), teacher accountability, school credibility or school funding. However, Belcastro and Boon (2012) suggest that a high-stakes test should be supplemented by instructional objectives and parameters for teaching and learning, so that teachers do not feel forced to 'teach to the test.'

With its intended purposes, high-stakes test has many benefits in terms of standardized test. It is claimed that high-stakes test is more accurate and trustworthy than teacher grading, which is known to be vulnerable to non-cognitive factors and results (Phelps, 2006). In this sense, it clearly states that high-stakes testing provides schools, parents, and students with unbiased information and results that can be used to judge, measure, and compare students' learning and performance. The rationale behind the comparison encourages and stimulates the student engagement and learning motivation. For instance, testing may provide students with more accurate information about their knowledge, skills, and potential, which may motivate them to work harder, while also acknowledging the possibility of frustration and discouragement.

Furthermore, testing could provide clearer and more explicit signals to schools about what is important about the curriculum. There are also some
empirical findings that curriculum alignment with high stakes testing would reduce the gap between learning and assessment, ensuring curriculum consistency within schools and at the national level, and improving teaching effectiveness (Jones, 2007).

The results of a high-stakes test could be employed to compare the performance of systems and schools for better policy decision making and improving practice. Researchers also believe that testing, in conjunction with explicit expectations of what should be taught, could benefit teachers (Jones, 2007; Polesel, Rice & Dulfer, 2014).

There are numerous high-stakes tests that are generally administered to students at different levels of the educational ladder in Ghana. For example, the “Basic Education Certificate Examination (BECE) is a high-stakes test at the basic level whereas the West African Senior Secondary Certificate Examination (WASSCE) is a high-stakes test at the second cycle level” (Anamuah-Mensah, 2002; Anane, 2010). In this context, it could be stated that high-stakes tests administered by WAEC such as WASSCE and BECE would have strong washback effect on teachers and students. This study focused on the WASSCE, specifically, the WASSCE Economics examination as the high-stakes test.

Washback Effect: Meaning and Scope

In the field of educational research, washback is a current but very multifaceted phenomenon. Meanings of washback are virtually many, just as the scholars who propounded it (Bailey, 1996). Tests, particularly high-stakes ones, have an impact on teaching and learning (Chan, 2018; Hung, 2012; Jilani, 2009; Spratt, 2005; Sultana, 2018). For instance, Chan (2018) asserts
that washback is an important effect in language testing as it alters how the teachers teach and eventually how the students learn.

Mostly, the educational phenomenon that describes the influence of tests on the classroom instructional process is referred to as “washback” (Alderson & Wall, 1993; Bailey, 1996; Messick, 1996) or “backwash” (Biggs, 1995; Hughes, 1989; Spolsky, 1995). The term “washback” has been widely used in educational research as compared to “backwash”. Backwash is the influence of a test on teaching and learning (Hughes, 2003). Washback is sometimes regarded as the unanticipated or unintended consequences of tests, rather than the intended consequences (Spolsky, 1995).

The influence of a high-stakes test is seen manifesting in backward direction, and because tests are frequently administered at the end of a course, it impacts the attitudes, actions and enthusiasm of teachers, learners and parents (Cheng & Curtis, 2004).

Educators appear to agree that washback is defined as any effect, positive or negative, intended or unintended, that is induced on teaching and learning as a result of administering examinations (Alderson & Wall, 1993; Bachman & Palmer, 1996; Bachman & Palmer, 2010; Cheng et al., 2004; Cheng, 2005; Hughes, 2003; Hung, 2012). Washback is an intentional or unintentional impact on certain facets of classroom instructional process by means of high-stakes test (Cheng, 2005). Kilickaya (2016) that any test would have an effect on both learners and teachers. As a result, for the purposes of this study, any impact or effect associated with the WASSCE examination, whether positive or negative, intended or unintended, will be considered washback.
Washback is defined as the impact of test administration on what happens in schools and society as a whole (Andrews, 2004). Nonetheless, it is argued that the term washback refers to the effects of tests on teaching and learning at the micro level, whereas impact refers to the effects at the macro level (Bachman & Palmer, 2010; Brown & Abeywickrama, 2010; Hamp-Lyons, 1997; Wall, 1997). As a result, washback is considered to be one dimension or subset of test impact. However, in this study, the term washback may be used interchangeably with other terms such as effect or washback effect, impact or washback impact, and influence or consequence: additionally, Wall's (1997) distinction between test impact and test washback is not used in this study.

In addition to the concept of washback, researchers have used other terms associated with the influences of tests on the field of education. These include: “test impact” (Andrews, 2004; Bachman & Palmer, 1996; Wall, 1997), where tests can have far-reaching effects in educational systems and societies. The assumption that “tests or examinations can or should drive teaching, and hence learning” (Cheng & Curtis, 2004, p. 4), is often referred to as “measurement-driven instruction” (Popham, 1987) or “washback effect”, as noted by Shohamy (1992).

Furthermore, washback can be defined based on the research, the researcher and the context in which it is studied. Cheng (2005), for example, used the term in her Hong Kong washback study of the Hong Kong Certificate of Education Examination (HKCEE) to mean an intentional direction and function of curriculum change on aspects of teaching and learning through a change in public examination. Similarly, as this work is a washback study in
the Ghanaian context, the term ‘washback’ is used to refer, specifically, to the extent to which WASSCE Economics examination generates changes in teachers’ classroom instructional behaviours, implementation of the syllabus and students’ learning practices.

In general, the concept of washback is rooted in the notion that the teaching and learning process is highly influenced by tests or examinations (Cheng & Curtis, 2004). From the various definitions, one of the definitions see the concept of washback as the influence of high-stakes test on teaching and learning. The current study aligned itself with this particular definition since the concept of washback is broad.

**Types of Washback (Directions of Washback)**

Washback effect of a high-stakes test could either be negative or positive. It can be examined based on two main types: positive and negative, depending on whether it has a beneficial or harmful effect on teaching and learning process. For instance, an examination may inspire learners to study more or may promote a connection between standards and instruction. Tests have debits as well as credits (Wiseman, 1961 as cited in Wall, 2005). Hence, there has been a consensus among researchers in language testing and education that washback is bi-directional (Alderson & Wall, 1993; Bailey, 1999; Cheng & Curtis, 2004), contingent upon whether this washback has beneficial or deleterious effects on the educational process (Hughes, 1989).

Pearson (1988) asserts that if a test fails to reflect the learning principles and the course objectives related to it, its washback effect would be negative. However, if the effects “encourage the whole range of desired changes”, the washback effects of the test will be positive. Therefore, as one
of the aims of this study is to explore what kind of washback (positive or negative) the targeted exam will induce, it is important to know, by reference to the literature, when washback is positive and when it is negative, and what promotes or inhibits beneficial washback; these are the aims of this section.

Green (2007) argues that washback is often evaluated as positive or negative according to how far it encourages or discourages forms of teaching or learning judged to be appropriate. This suggests that since the direction of washback is judged on the basis of appropriate teaching and learning activities, it is down to individual stakeholders (who might have different educational intentions) who determine what are considered to be appropriate teaching and learning activities (Green 2007). In the same vein, Hung (2012) states that washback from examinations can be referred to as the positive or negative effects tests have on teaching and learning.

Washback can also be categorised based on the context. It can be termed as the micro and macro levels of washback (Bachman & Palmer, 2000). Wall (1997) made a clear distinction between the micro-washback (the effects on learners and teachers inside the school) and the macro-washback (the impacts on individuals, practices, and policy makers). Additionally, the micro level washback looks at the effect of the test on individual students and teachers in a classroom context (Hakim, 2018); and the macro level also explains the impact the test may have on society and the educational system (Chan, 2018). The current study is based on the micro level washback effects.

Positive Washback Effect

Washback effect of a test can be beneficial if it encourages effective teaching and stimulates productive learning. Positive washback generally
means the beneficial influence of tests and examinations on teaching and learning (Alderson & Wall, 1993). Davies (1985) states that a test’s washback will be positive if it promotes teaching and learning. In positive washback, students are usually inspired to work harder, teachers and learners fulfill their teaching and learning goals and teachers pay more attention to students’ interests and needs. Positive washback is said to result when a testing procedure encourages ‘good’ classroom instructional practices, syllabus implementation and learning practices of students. Positive washback would result when the testing procedure reflects the skills and abilities that are taught in the subject, as, for instance, with the use of WASSCE for a final examination in a subject.

Consequently, when there is a match between the activities used in learning and teaching the subject and the activities involved in preparing for the test, we say that our test has positive washback. Positive washback can be used to influence the Economics syllabus and curriculum. It is noteworthy that, washback is unavoidable and it is irrational to pretend that washback does not happen (Davies, 1990).

A test providing beneficial washback positively influences what and how teachers teach, what and how learners learn, and offers learners a chance to prepare for the test (Brown & Abeywickrama, 2010). Also, for a high-stakes test to promote positive washback, it should be purposive, well-known to teachers and students, as well as reflecting the subject or instructional objectives upon which the test content is evidently based (Bailey, 1996; Brown & Abeywickrama, 2010; Cheng & Curtis, 2004; Hughes, 2003; Pearson, 1988; Shohamy, 2001).
Decision makers use tests to achieve the goals of teaching and learning such as introducing new textbooks and curriculum at the macro level; educational/societal settings (Cheng, 2005; Shohamy, 1992). High-stakes tests are made to encourage the idea of lifelong learning and inspire students to learn (Pan, 2009). Table 1 describes the different characteristics or features of positive washback effects of high-stakes test that Pan (2009) states.

**Table 1: Features of Positive Washback Effects**

<table>
<thead>
<tr>
<th>Level</th>
<th>Participants</th>
<th>Positive Washback</th>
</tr>
</thead>
<tbody>
<tr>
<td>Micro level</td>
<td>Students</td>
<td>Tests encourage students to do their best to have a sense of fulfilment and thus promote learning.</td>
</tr>
<tr>
<td>(Classroom settings)</td>
<td>Teachers</td>
<td>Tests influence teachers to cover the subject more thoroughly and finish the syllabus in the prescribed time limits.</td>
</tr>
<tr>
<td></td>
<td>Others</td>
<td>Good tests can be utilized and designed to be a model to enhance learning and encourage students to be positive toward high stakes examination.</td>
</tr>
<tr>
<td>Macro level</td>
<td>Educational or Societal System</td>
<td>Decision makers use the influence of high-stakes examination to reach the goals of teaching and learning. Such as the implementation of syllabus.</td>
</tr>
</tbody>
</table>

Source: Pan, 2009.

**A Summary of Positive Washback Effect**

Firstly, positive washback takes place when high-stakes tests induce teachers to cover their subjects more thoroughly, making them complete their syllabi within the prescribed time limits. Secondly, good high-stakes tests can be utilized and designed as beneficial teaching-learning activities so as to encourage a positive teaching-learning process (Pearson, 1988). Also, a creative and innovative high-stakes test can quite advantageously result in a syllabus alteration or a new syllabus (Davies, 1990). In addition, teachers and learners will be motivated to fulfill their teaching and learning goals.
(Anderson & Wall, 1993). Moreover, tests motivate students to work harder to have a sense of accomplishment and thus enhance learning. Furthermore, high-stakes test achieves the objectives of teaching and learning (Cheng, 2005). Lastly, decision makers use the power of high-stakes testing to achieve the objectives of teaching and learning.

**Negative Washback Effect**

The use of high-stakes test may have undesirable effects on an educational system at the micro level (classroom settings). Negative washback has been defined by a host of scholars. Alderson and Wall (1993) define it as the undesirable influence of a test on teaching and learning, meaning that “something that the teacher or learner does not wish to teach or learn”. According to Smith (1991b), the washback effect of a test would be negative if “testing programs substantially reduce the time available for instruction, narrow curricular offerings and modes of instruction, and potentially reduce the capacities of teachers to teach content and to use methods and materials that are incompatible with standardized testing formats” (p. 18). Vernon (1956) asserts that in negative washback those subjects and activities which are not directly related to the test are usually ignored by the teachers. He claims that under such circumstances the tests “distort the curriculum”.

Wiseman (as cited in Wall, 2005) believes that in coaching classes, where the students attended for test preparation, the time was not used properly because the students were mainly involved in mastering test techniques rather than genuine language learning. Davies (1990) states that testing devices had been extensively used as teaching devices, in the sense that teaching and learning was being directed to the test samples from previous
years, which in turn made the educational experience narrow and uninteresting. Shohamy (1992) asserts that in negative washback the test would lead to a narrowing of content in the curriculum, and what students learn is the test language instead of expected understanding. Similarly, Shohamy, Donista-Schmidt and Ferman (1996) point out that negative washback occurs when teachers experience a high level of anxiety, fear, and pressure to cover the material because they feel that their job performance is assessed by students’ test scores.

Washback becomes negative when there is mismatch between the content (e.g., the material or abilities being taught) and the high-stakes test (Brown, 2002). Washback of high-stakes test is harmful:

a. when training for a particular test comes to dominate classroom work;

b. when teachers teach one thing and the test then concentrates on another one;

c. when teachers end up “teaching to the test”;

d. when there is no connection between high-stakes test objectives and syllabus or curriculum objectives;

e. when teachers tend to ignore subjects and activities that are not directly related to passing the exam; and

f. when students may not be able to learn real-life knowledge, but instead learn discrete points of knowledge that are tested.

According to Taylor (2005), negative washback happens when a test’s content or format is based on a narrow definition of language ability, and so constrains the teaching or learning context. For instance, if the students are
allowed to memorise texts or scripts for their speaking test, then there is great pressure to practise memorising rather than to practise the skill of speaking itself.

At the micro level, as a result of inappropriate test-preparation practices, a test will also have negative effects on teaching and learning when students’ scores increase without a concomitant increase in learning (Andrews, Fullilove & Wong, 2002; Choi, 2008; Ferman, 2004; Haladyna, Nolen & Haas, 1991). The other side of negative washback related to test-preparation practices is teaching to the test. Studies have shown that most high-stakes test impose restrictions on syllabus or curricula, teachers and students. For instance, teachers tailor classroom instructional practices to meet WASSCE requirements. This impairs quality education by distorting the syllabus or curriculum and trivializes some important aspects of teaching and learning that is narrowing the syllabus or curriculum (Cheng & Curtis, 2004; Saif, 2006; Shohamy, 2001).

Moreover, some studies have indicated that classroom instructional time has been usurped by tests, that is, teachers spend a lot of time on test-oriented activities. Andrews, Fullilove and Wong (2002) assert that teachers spent two-thirds of classroom instructional time on working with exam-related materials. However, if the time allocations for test preparation were spent on more meaningful teaching and learning tasks, it should not be perceived as a negative washback effect (Andrews et al., 2002; Ferman, 2004; Shohamy, 2001).

Given the assumption underpinning this study that washback is unavoidable which is a common view in educational research (Wall, 2005), it
suggests that the washback effect of WASSCE Economics examination is inevitable. The inference is that the washback effect of the high-stakes test under (WASSCE Economics examination) is likely to be positive or negative, or both. Pan (2009) summarizes negative washback on both micro and macro level washback in Table 2.

**Table 2: Features of Negative Washback Effects**

<table>
<thead>
<tr>
<th>Level</th>
<th>Participants</th>
<th>Negative Washback</th>
</tr>
</thead>
<tbody>
<tr>
<td>Micro level</td>
<td>Students</td>
<td>Students learn only knowledge that is tested; have a negative attitude towards learning; learning motivation is lowered.</td>
</tr>
<tr>
<td></td>
<td>Teachers</td>
<td>Tests influence teachers to narrow the syllabus and only cover those tested topics.</td>
</tr>
<tr>
<td></td>
<td>Others</td>
<td>Anxiety is created for both teachers and students.</td>
</tr>
<tr>
<td>Macro level</td>
<td>Educational or Societal System</td>
<td>Decision makers use tests to promote political agendas and seizes control over the educational system.</td>
</tr>
</tbody>
</table>

Source: Pan, 2009

**Theoretical Models of Washback**

This section reviews mechanisms of washback, Alderson and Wall’s washback hypothesis and two theoretical models through which washback from high stakes test may operate. The two models discussed are: Hughes’s washback model (1993) and the model of Nguyen (2005). These models have been the foundation stones for the evolvement of other models (Burrows, 2004; Cheng, 2005; Green, 2007; Saif, 2006; Tsagari, 2009).

**Mechanisms of Washback**

Washback is not as straightforward as it was previously thought. Its mechanism is complicated. Mechanism of washback refers to how washback works on the macro and the micro level, positively and/or negatively. Tests have often been used at the end of the teaching and learning process to provide
a diagnosis of the effects of teaching and learning. However, testing may well be considered before the teaching and learning, in order to influence either or both processes. This view of testing is derived from the realisation of test power and its manifestations with regard to high-stakes decisions based on test results for individuals, educational systems and society as a whole. This section looks at the functions and mechanisms by which washback works in relation to other educational theories and practices.

Understanding of washback mechanism can be more deepened by observing the different models of washback. Unlike the Washback Hypothesis, which only proposes a linear relationship between tests and teaching or learning, Bailey’s (1996) model emphasises the importance of the interaction among the different components. Washback variables influencing various aspects of learning and teaching can be divided into “washback to the learner” and “washback to the programme” (Bailey, 1999): the former refers to the impact of the test on test takers, while the latter is concerned with the impact of the test on teachers, administrators, and curriculum developers. The washback effect, however, is not solely confined to teaching and learning. Variables such as materials, curriculum and research are encompassed, making the mechanisms of washback more intricate and comprehensive. The methodologies used in this area have mainly been surveys, interviews and observations. In this respect, Watanabe (2004) points out that, there are perhaps effects on teaching and learning that interviews and observations alone or combined may not be able to capture. Over the past two decades, several models have been proposed concerning washback. In the next section, some of the models are discussed.
Hypotheses and Models of Washback

Alderson and Wall’s Washback Hypothesis

Alderson and Wall (1993) proposed the Washback Hypothesis to clarify the concept of washback and to serve as a foundation for future research. The authors highlight that as an important step towards investigating washback, a researcher needs to consider a set of assumptions, which they call the Washback Hypothesis. They present 15 hypotheses as a result of reviewing studies conducted in various contexts and their own work on O-level examination in Sri Lanka, highlighting more specifically some of the ways in which a test may affect teaching and learning. Five of the hypotheses relate to washback effects on the learners, six relate to washback effects on the programme, and four relate to washback effects on the syllabus, curriculum, and teaching contents. The following are their hypotheses:
Table 3: Alderson and Wall’s (1993) Washback Hypothesis

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Relates to</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. A test will influence teaching.</td>
<td>Teachers</td>
</tr>
<tr>
<td>2. A test will influence learning.</td>
<td>Learners</td>
</tr>
<tr>
<td>3. A test will influence what teachers teach.</td>
<td>Teachers</td>
</tr>
<tr>
<td>4. A test will influence how teachers teach.</td>
<td>Teachers</td>
</tr>
<tr>
<td>5. A test will influence what learners learn.</td>
<td>Learners</td>
</tr>
<tr>
<td>6. A test will influence how learners learn.</td>
<td>Learners</td>
</tr>
<tr>
<td>7. A test will influence the rate and sequence of teaching.</td>
<td>Teachers</td>
</tr>
<tr>
<td>8. A test will influence the rate and sequence of learning.</td>
<td>Learners</td>
</tr>
<tr>
<td>9. A test will influence the degree and depth of teaching.</td>
<td>Teachers</td>
</tr>
<tr>
<td>10. A test will influence the degree and depth of learning.</td>
<td>Learners</td>
</tr>
<tr>
<td>11. A test will influence attitudes to the content, method, etc. of teaching and learning.</td>
<td>Teachers and Learners</td>
</tr>
<tr>
<td>12. Tests that have important consequences will have washback.</td>
<td>High stakes test</td>
</tr>
<tr>
<td>13. Tests that do not have important consequences will have no washback.</td>
<td>Low stakes test</td>
</tr>
<tr>
<td>14. Tests will have washback effects on all learners and teachers.</td>
<td>Teachers and Learners</td>
</tr>
<tr>
<td>15. Tests will have washback effects for some learners and some teachers, but not for others.</td>
<td>Teachers and Learners</td>
</tr>
</tbody>
</table>


Since this research concerns the perceived effect of high-stakes examination (WASSCE) on teaching and learning, this current study focused on and confirmed fifteen versions of the above-mentioned hypotheses.

**Washback Models**

There have been few attempts over the last two decades to describe a model of how a test can influence teaching and learning. There appear to have been some attempts in the field of Applied Linguistics to develop a model that could depict the mechanism of washback. The washback models discussed in...
this study have evolved as more research findings have become available and a clearer picture of the nature of washback has emerged.

In general, washback models have been adapted from models or frameworks proposed in the literature on language testing, English as a Foreign Language (EFL), and educational innovation. Hughes' trichotomy model (1993), Bailey's washback model (1996), Burrows' washback model (1998), Cheng’s explanatory washback model (1999), Chapman and Snyder's test impact model (2000), Cheng's washback model (2002), Green's washback model (2003), Manjarres’ washback model (2005), Nguyen's test washback model (2005), Saif’s washback model (2006), Shih’s washback model (2007), Pan’s holistic washback model, Shih’s washback model (2009), Tsagari’s washback model (2009), and Mizutani’s washback model (2009) are some washback models that have been proposed over the years.

In this study, the researcher focused on two models which are Hughes’s and Nguyen’s washback models. The traditional model of washback emerges in the early 1990s prior to the study by Alderson and Wall (1993). It is characterised by the trichotomy model proposed by Hughes (1993). These two models (Hughes’s and Nguyen’s washback models) were discussed because the models focused on the washback effect on teaching and learning not on the aspects of washback that impact society. For instance, Pan (2008) holistic washback model outlines the micro and macro washback effects. Pan (2008) believes that tests can affect administrators, material writers and the society as a whole. However, this study did not focus on the aspects of washback that could impact society.
Again, Tsagari’s washback model (2009) proposes a washback effect on parents and local educational system. Her model proposes a new way of viewing washback effect by looking at how a test influences parents and the local educational system. On the contrary, this study is not interested in how WASSCE affects or influences parents and the local educational system. Lastly, since the scope of washback is too broad, this study limits itself with the Hughes’s and Nguyen’s washback models.

**Hughes’s Washback Model**

Hughes’ (1993) washback model was a forerunner in Applied Linguistics. Hughes (1993) introduces the concept of trichotomy and argues for distinguishing between participants, processes, and products in both teaching and learning, recognising that all three may be affected by the nature of a test in discussing the complex mechanisms through which washback occurs in actual teaching and learning environments. Participants in Hughes’ model, as shown in Table 4, are students, teachers, administrators, materials developers, and publishers whose perceptions and attitudes toward their work may be influenced by a test. Hughes (1993) drew a distinction between participants, process, and products:

**Table 4: Hughes’s Trichotomy of Backwash/Washback Model**

| (a) | Participants – students, classroom teachers, administrators, materials developers and publishers, whose perceptions and attitudes toward their work may be affected by a test |
| (b) | Processes – any actions taken by the participants which contribute to the process of learning |
| (c) | Products – what is learned (e.g., facts, skills, etc.) and the quality of the learning (e.g., fluency) |

Source: Hughes, 1993.
From Table 4, Hughes uses the term ‘processes’ refer to any actions taken by participants that could contribute to the learning process, such as the development of materials, syllabus design, and teaching methods. Finally, ‘products' refer to what is learned (facts, skills, etc.) as well as the learning quality (fluency, etc.). He constructed a basic model of backwash by dividing the trichotomy into participants, process, and product. Hughes (1993) suggests that the nature of a test may first affect the perceptions and attitudes of the participants towards their teaching and learning tasks. These perceptions and attitudes, in turn, may affect what participants do in carrying out their work (process), including practicing the types of items that will be found in the test, which may affect the learning outcomes, or the work product. It attempts to clarify how test works to desired outcomes as a forerunner model. Nevertheless, the model does not adequately define the term ‘processes’.

**Nguyen’s Washback Models**

Nguyen (2005) proposes two models of washback on the teacher-level and student-level. The model in Figure 1 displays the circle of testing effects on teacher-level. The double directional arrow from one factor to the other in the model indicates the direction of influence from the determining factor to the dependent factor. The other directional arrow depicts the dependent factor becoming the determining factor as a result of an interaction. These interconnections form a circle of causal links:
Figure 1: Nguyen’s Test Washback Model - Effect on Teachers (2005)

From left to right, the model in Figure 1 shows that testing policy is the primary determining factor that can be used to enable either positive or negative washback on types of testing, teachers' perception of testing and its consequences, teachers' behavior, test results consequences, and curriculum and resources. Furthermore, the types of testing play an important role, which, in conjunction with testing policies, may influence teachers' perceptions of testing and test types. They promote changes in teachers' behaviour, which result in changes in attitudes and motivation, as well as changes in teaching content and method.

The model in Figure 1 reflects that curriculum, resources, and teachers’ behaviour interact with each other in two ways that is indicated by two arrows in opposite ways. The model suggests that the curriculum and resources also directly influence students' actual performance. The model explains that the
outcomes of changes and interactions lead to changes in students' actual performance, which then leads to consequences.

Nguyen (2005) also propounded another model for students. The double directional arrows from one factor to another factor in the model shown in Figure 2 indicate the direction of the influence from the determining factor to the dependent factor. The other directional arrow depicts how the dependent factor becomes the determining factor as a result of an interaction. These interconnections form a circle of causal links:

Figure 2: Nguyen’s Test Washback Model - Effect on Students (2005)

According to Nguyen (2005), the primary determining factor that influences students' perceptions of testing and its consequences, types of testing, and the consequences of test results is testing policy. The two models in Figures 1 and 2 suggest that test washback effects, or more specifically content and method washback, pressure washback, and educational innovations, are primarily promoted by testing policies and types of testing, as well as teachers' perceptions of testing policies and test types in use. As a
result, in order to maximize beneficial and minimize harmful washback effects, testing policies and assessment types should be the first to be addressed. The change in testing policies and teachers' behavior also promotes content and method washback and pressure washback at the student level.

Consequently, in order to promote beneficial washback and reduce harmful testing policies, the types of testing and teachers' behaviors should be prioritized. The models discussed in Figures 1 and 2 attempted to rationalize that testing policies, types of tests, curriculum, and resources all play coordinated roles in generating beneficial washback on teaching and learning. Nguyen, on the other hand, displays teacher-level washback and student-level washback separately. Though the models appear to be a potential framework for washback generation, they are overly ambitious in terms of teachers' actual classroom behavior.

**Empirical Review**

This section reviews studies conducted by other researchers which are related to the problems under investigation in this study. It critically considered various research works in the area of washback effects of high-stakes test on teachers’ classroom instructional practices, implementation of the syllabus and students’ learning practices, differences in the perceived washback effects of high-stakes test on students’ learning practices between groups of students, differences in the perceived washback effects of high-stakes test on teachers’ classroom instructional practice between groups of teachers and differences in the perceived washback effects of high-stakes test on students’ learning practices between public and private school students.
Washback Effects of High-stakes Test on Teachers’ Classroom Instructional Practices

Many studies have been conducted in the area of washback effects of high-stakes test on teachers’ classroom instructional practices. A number of these studies have revealed that high-stakes test has positive washback effects on teachers’ classroom instructional practices. Yet, others also suggested that high-stakes test has negative washback effect on teachers’ classroom instructional practices. This section reviews washback effects of high-stakes test from the stance of teachers’ classroom instructional practices and explains how teachers’ classroom instructional practices may change due to high-stakes test or examination. Classroom instructional practices, in this study, are referred to as the teaching methods, techniques and activities teachers use or adhere to in their instruction.

Hoque (2011) investigated the washback of the public examination on secondary school English teaching and learning in Bangladesh. A mixed methods approach was used in the study. The data was gathered through the use of a questionnaire, interviews, classroom observations, and document analysis. The researcher used a simple random sampling method to select 500 and 125 students and teachers from 20 secondary schools, respectively.

The study's findings revealed that the public examination had a negative impact on teaching and learning. According to Hoque (2011), the areas most influenced by washback were those related to the immediate classroom contexts. He goes on to say that the washback of the examination had an impact on teachers' materials, teaching methods, classroom tasks and activities, teachers' and learners' perceptions of the examination, teaching
strategies, and learning outcomes. Hoque's (2011) findings are consistent with those of Lam (1993), Shohamy (1993), Alderson and Hamp-Lyons (1996), and Watanabe (1996), who believe that tests influence how teachers teach and compel them to use 'test-like' teaching methods.

Furthermore, Salehi, Mustapha, and Yunus (2012) investigated the nature and existence of washback effects of the Entrance Examination of Universities (EEOU) and its role in promoting beneficial washback in their qualitative study. The analysis of group interviews confirmed the existence of the washback phenomenon in general and the negative effects of washback on language teaching in particular. Furthermore, Salehi and Yunus (2012) argue in their study on the washback effect of Iranian undergraduate program entrance examination on high school instructors' classroom behaviors that the UEE has a negative and implicit influence on English teachers' ability to teach the content and format of the examination. The findings of Salehi and Yunus (2012) are consistent with those of Pan (2013), who claims that the examination has an impact on teaching and learning because teachers focus more on tested items.

Similarly, Aftab, Qureshi, and William (2014) looked into the washback effects of the Pakistani intermediate English exam. The study looked into the nature and scope of the washback effect of the intermediate English exam on teachers and students at a public college in Pakistan. The qualitative approach was used in the research, with data collected from six teachers and six students through interviews. Open-coding was used to analyze the data. The study's findings revealed that the examinations had a significant negative washback effect on teaching methodology, content, and
learning. Their findings are consistent with those of Read and Hayes (2003). However, in Hayes and Read's (2004) study, the washback effect differs between teachers in their respective schools.

Bunti (2014) also investigated the washback effects of the Ethiopian General Secondary Education Certificate English Examination (EGSECEE) on the pedagogical practices of English teachers. The study's findings revealed that EGSECEE had a negative impact on teachers' teaching methods, teaching content, reference material selection, classroom test contents, and testing techniques. Likewise, Ramezaney (2014) investigated the Iranian UEE impacts on high school EFL teachers' curricular planning and instruction techniques and found a washback effect of UEE on teachers' curricular planning and instruction.

Onaiba (2013) studied the effects of BECE washback on teachers' instructional practices, materials, and curriculum. A multi-method approach was used. To analyze quantitative data collected from a survey of 100 teachers, descriptive and inferential statistics were used. The qualitative data elicited from documents, observations of two teachers, and interviews with eleven teachers and seven inspectors were then analyzed using content analysis.

The findings of the study showed that the introduced examination exerted washback effects on teachers’ instructional practices but the washback effects was also noticed in issues related to classroom testing practices rather than in teaching practices. However, the study was conducted with participants from Junior High Schools and focused on the B.E.C.E., thus further research with different participants in several senior high schools might give more
enlightening and generalizable results for a different context like Ghana. Furthermore, the findings were inconclusive in that they did not specify whether the washback effect was positive or negative.

In Pakistan, Soomro and Shah (2016) examined the effects of the Secondary School Certificate Examination (SSCE) on English teachers. The quantitative approach was used in the study, with a questionnaire used to collect data from 50 teachers from ten Government High Schools. The study's findings revealed that the SSCE had an impact on teachers' instructional methods. It was determined that English teachers teach only those topics in their classes that will be tested in examination.

Hatipoglu (2016) investigated how pre-service English language teachers perceive and assess the impact of the English Section of the University Entrance Examination (ESUEE) on foreign language teaching and learning in Turkey. As data collection instruments, the study used a survey questionnaire, and a semi-structured interview schedule. The study involved 50 Middle East Technical University pre-service English language teachers (METU). According to the study's findings, almost all of the participants believe that the examination influenced, if not directed, how English was learned and taught in Turkey. The washback effect of EUEE was discovered to be negative in this context because ESUEE appeared to be the prevalent curriculum in English teaching and learning in Turkey.

Also, the results revealed that high school teachers did not teach English, but helped the students master the format of ESUEE. Moreover, it was found out that the teachers trained the students on how to answer more questions correctly in the examination. However, the study was limited to
METU; more participants from other Turkish universities could have taken part in the study. Furthermore, the lecturers' perspectives on ESUEE could have been obtained to determine whether the lecturers' perspectives were parallel to or contradictory to the students' perspectives.

Saglam (2018) investigated the washback effects of a locally produced, theme-based, high-stakes English language proficiency test in Turkish tertiary education. Classroom observations and focus group interviews with 14 instructors from the preparatory English Language Program were used to collect data. According to the findings, both positive and negative test effects were exerted on teaching. Despite the fact that Saglam reported that the test had both positive and negative effects on teaching, the findings were inconclusive and may not be generalizable to other contexts due to the small number of respondents. The study could have included more teachers from various schools.

Cranley (2018) investigated the impact of high-stakes testing on the teaching and learning of mathematics in the Australian context through the National Assessment Program – Literacy and Numeracy (NAPLAN). The study discovered that the NAPLAN had a significant impact on mathematics teaching and learning. Furthermore, the findings indicated that teachers' pedagogies had changed as a result of the test requirements. However, the study's findings did not indicate whether the NAPLAN had a negative or positive impact on mathematics teaching and learning.
Washback Effects of High-stakes Test on the Implementation of the Syllabus

Numerous researchers (Amoako, 2018; Anane, 2010; Onaiba 2013) of high-stakes tests confirm that tests are responsible for narrowing the school curriculum by directing teachers to focus only on those subjects, topics and skills that are included in the examinations. Vernon (2004) asserted that such tests are said to dominate and distort the whole curriculum. A high-stakes test was considered to have beneficial washback, when preparation for it did not dominate teaching and learning activities narrowing the curriculum or syllabus.

A syllabus or curriculum is a vital part of the classroom instructional and learning practices, and washback has deep relation with the syllabus and curriculum. High-stakes test content can have a direct washback effect upon the implementation of the syllabus. The syllabus provides a focus for the class and sets objectives or goals for the students throughout the teaching and learning process. It also gives the student a guide and idea to what they will learn, and how they have progressed when the instructional period is over. High-stakes test can affect syllabus or curriculum and learning (Alderson & Wall, 1993). The syllabus or curriculum is modified according to high-stakes test results; hence, it leads to the narrowing of contents in the syllabus (Chun & Barron, 2004; Crocco & Costigan, 2007; Read & Hayes, 2003; Shohamy et al., 1996; Stecher, 2005). In this current study, syllabus refers to the content used to deliver instruction.

In Spain, Amengual-Pizarro (2010) explored the washback effect of a high-stakes English test on teaching of English in Spanish upper secondary
schools. A questionnaire was employed to collect the data. The questionnaire was administered and completed by 51 secondary teachers and consisted of four main sections which comprised 24 items, mostly closed ended questions. The results revealed that the content and activities are to a large part adapted and geared in the direction of the test. This is in line with the results of a previous study by Amengual-Pizarro, (2009) on the washback effects of the English test (ET) in the Spanish Upper English examination (SUEE). She found that teachers seemed to spend most of their class time practising the skills featured in the ET and neglecting untested skills and material. Additionally, Ghorbani (2008) investigated the washback effect of the University Entrance Examination on language teachers’ curriculum planning and instruction. The findings of his study showed that UEE strongly affects the “what of teaching” but not the “how of teaching” in Iranian EFL teachers.

However, it is not always the case that high-stakes tests have deleterious effects on the curriculum. Yeh’s (2006) study found that the high-stakes testing programme in Texas was having a positive effect on the curriculum. This was attributed to the effect of a programme of rapid testing in that state. There was no narrowing of the state curriculum as the rapid testing programme, even though external, provided formative information to teachers which they fed back into their lessons. This finding suggests that the theoretical position of a negative effect on curriculum may not be applicable in all high-stakes situations as mediating factors account for the effect high-stakes assessments have on teaching and learning (Firestone & Mayrowetz, 2000).
Anane (2010) also investigated the use of Senior Secondary School Certificate Examination (SSSCE) results on teachers’ instructional method and the curriculum being implemented in Ghanaian schools. A descriptive survey design was used. Twenty (20) senior secondary schools were selected from eighty-two (82) senior secondary schools in the Ashanti Region using the simple random technique. The study found that the overemphasis on the SSSCE gradually shapes the content from broad curriculum to test-focused teaching (narrowed curriculum). Teachers tend to marginalize topics on their teaching agenda because they were not included in the examination (Agrawal, 2004).

Boit, Chang’ach and Njoki (2012) examined the influence of public examination on the stated curriculum goals. The findings of the study revealed that the examination had a negative effect on curriculum implementation. Also, examinations made teachers to be selective in the content to be taught. Wall (2012) points out that washback impact on curriculum and teaching materials can materialize when teachers and students pay more attention to certain parts of the teaching syllabus at the expense of other parts because they believe these will be emphasised in the test. Wall’s statement was based on findings from previous washback studies, which have explicitly shown that teachers, for instance, design their teaching materials and content around tests, called curriculum alignment (Abu-Alhija, 2007; Alderson & Wall, 1993; Cheng, 2005; Choi, 2008; Smith, 1991b; Stecher, 2002).

In Australia, Polesel, Rice and Dulfer (2014) investigated the impact of high-stakes testing on curriculum and pedagogy from teacher’s perspective. Their findings revealed that teachers adjusted their pedagogical practice and
curriculum content to mirror the test. This confirms findings of researchers in other countries on the capacity of high-stakes tests to distort teaching practices and constrain the curriculum. Nevertheless, the study could have also elicited the responses of students on the impact of the test on learning.

Mutereko (2017) examined the washback effect of the national senior certificate examinations on teaching in South Africa. The purpose of the study was to find out the perceptions of teachers regarding the washback effect of the national senior certificate examinations on teaching. The findings of the study indicated that there was manipulation of test records by teachers; a narrow emphasis on teaching subject matter that would be covered in examinations; and an emphasis on addressing past examination papers in order to finish the syllabus.

A similar study was conducted by Saglam (2018) on washback effect from a locally-produced, theme-based, high-stakes English language proficiency test in tertiary education in Turkey. The findings of this study showed that negative washback in the form of narrowing of the curriculum. In the same vein, BECE as a high-stakes test drives curriculum implementation in Ghana, places our “national curriculum” and “teaching practices” at stake (Amoako, 2018).

In summary, it is obvious that, in many cases, high-stakes tests have a considerable effect on teaching content. These results are consistent with those of Alderson and Wall’s 15 versions of the Washback Hypothesis: “a test will influence what teachers teach”. Thus, one of the objectives of this study was to test this claim, to explore the perceived washback effects of WASSCE on the implementation of the Economics syllabus. The current study assessed the
extent to which the findings of this study would be consistent or inconsistent with the findings of previous washback studies reported.

**Washback Effects of High-stakes Test on Students’ Learning Practices**

The washback effects of high-stakes test on students’ learning practices has not been left unsupported by empirical studies. Several studies have highlighted the washback effects of high-stakes test on students’ learning practices.

In his study, Yildirim (2010) investigated students’ and teachers’ teaching and learning practices in the preparation process for the English Component of the Foreign Language University Entrance Exam (ECFLUEE). The aim of the study was to find out how English as a foreign language (EFL) students and instructors viewed ECFLUEE with regard to learning a foreign language. A structured questionnaire and semi-structured interview schedules were utilized in this mixed-method study. The participants of the study were 6 EFL instructors at a state university and 70 EFL students who had studied the prep class. The results of the study indicated that ECFLUEE had negative washback on both teachers and students.

Also, high school students preparing for ECFLUEE seemed to be studying only reading, grammar, and vocabulary. Thus, they learned according to the test since their listening, speaking and writing skills were not assessed in the examination. These students had much difficulty in speaking and writing in English in their courses during their first year at the university, which indicated negative washback effect on ECFUEE. However, the study was conducted with the participants from the same university. Further research
with different participants in several universities might give more enlightening and generalizable results for similar contexts in Turkey.

Sukyadi and Mardiani (2011) studied the washback effects of the English National Examination (ENE) in Indonesian secondary education context, involving three secondary schools categorized based on their NE achievement. The findings of the study revealed that the ENE affects the students’ learning in the classroom in which teachers mainly teach to test, practice the test and develop test-taking strategies. The dimensions of the washback effect of the ENE on both English teachers and students were negative and positive. Nevertheless, the study was limited to three secondary schools in Indonesia; it could have been conducted with more secondary schools. Also, the findings of the study in terms of the type of washback was not definite.

Pan and Newfields (2011) found that the learners in their study allocated more time to studying English because of the test and adopted more test-related practices with more variation in the methods used. The washback literature suggests that learners are most likely to resort to traditional methods rather than more communicatively oriented methods when preparing for a test (Pan, 2014; Zhan & Andrews, 2014).

Moreover, this negative washback effect was also discovered by Hoque (2011) where he noticed students did not care about the curriculum as they were preparing for the (EFL) examination because of their over reliance on test-related materials. This may suggest that they practised what they considered important for the examination. In the same vein, Agbeti (2014) and Hoque (2011) stated in their washback studies that students were skipping
contents and topics they felt will not appear in the test because they were being influenced by test-related materials.

A study by Gashaye (2012) focused on the washback effects of the University Entrance English Examination (UEEE) on teachers’ and students’ practices. The main purpose of this study was to examine the influence of the UEEE on teachers’ and students’ practices. The study employed concurrent mixed methods research design. The participants of the study were all the 62 Grades 11 and 12 English language teachers and 1,579 randomly selected students from nine preparatory schools in Amhara National Regional State. Questionnaire, interview and classroom observations were conducted to look into what teachers’ and students’ practices looked like. It was revealed that the examination yielded overt, strong, and harmful washback effects on teachers’ and students’ practices that in turn led to the implementation of the syllabi to be less successful. Examination system exerts negative influence on students’ learning practices (Ahmad & Rao, 2012; Yavuzer & Gover, 2012).

Akpinar and Cakildere (2013) investigated two high-stakes language tests in Turkey and found that most learners focused more on passing the exam than improving skills not included in the test. These two tests only brought about positive washback for reading, which was the only skill tested. The learners in their study reportedly neglected the other three language skills (speaking, listening and writing) as they were not tested. However, Akpınar and Cakildere did not clearly identify the objective(s) of the two tests, making it difficult to determine if the washback effect on the skills that were not tested was as negative as they claimed. In China, Ren’s (2011) findings were similar to that of Akpınar and Cakildere. Ren asserted that the students had little
incentive to learn anything that was not tested and put very little effort into doing so as their primary motive was to pass the test.

Similarly, Kilickaya (2016) explored the washback effect of the foreign language section of Transition Examination from Primary to Secondary Education (TEOG). He employed a qualitative research design by using semi-structured interview schedules to gather data from 30 teachers. It was revealed that the test had a negative washback effect on not only students but also teachers, parents, and administrators as a whole. The findings of Kilickaya agree with that of Toksoz and Kilickaya (2017) that examinations have a negative washback effect on both teachers and students. However, the study was conducted with only the teachers teaching in public schools; teachers teaching in the private schools could have been involved to enrich the findings.

Adegoke (2017) examined the effects of high-stakes examinations on the teaching and learning of Physics in secondary schools in Nigeria. The purpose of the study was to examine the effects of WASSCE on the teaching and learning of Physics. The findings of the study revealed that when studying Physics, students try to understand the basic concepts, master the fundamental principles of Physics, memorize formulae and procedures, and practice old or past examination questions. Most of the students are anxious about WASSCE and about half of the students were afraid of failure in WASSCE. However, the study could have been conducted with students in SHS 1 and 2. This could have assisted in finding out whether washback effects of WASSCE students’ learning practices existed between SHS 1, SHS 2 and SHS 3 students.
In a different study, Mahmud (2018) examined the washback effect of the Malaysian University English Test (MUET) as a University Entry Test on students in Malaysia. Using a mixed method approach, a student questionnaire, student interviews and classroom observation were employed to elicit data. The findings suggest that the students’ perceptions play a major role in mediating the washback effect of the MUET, especially with regard to perceived test importance and self-efficacy. It was found that the students’ perceptions of the test shaped their goals and consequently stimulated their use of language learning strategies when preparing for the test. However, the study did not investigate the washback effect of the test on students’ learning practices; hence, there is the need for more research to be conducted to augment literature in this field.

In Korea, Park (2018) explored the washback effects of English examination on learning. One-hundred Korean students were surveyed and Park reported that all of the students experienced a negative washback effect in their learning process. Students were directly impacted by the examination on their choices of activities inside as well as outside the classroom. The results also showed that students choose to focus on the tested features rather than the non-tested features even if they are more interested in learning the latter ones. Park’s result is in line with Allen’s (2016) and Tsang’s (2017) that examination brings washback to students’ preferences on learning strategies and it can be considered as a negative washback.

In the Ghanaian context, Owusu (2019) investigated the washback effect of high-stakes tests on teaching and learning of English language among 4 JHS’s and 8 SHS’s with 374 students and 24 teachers in the Central Region.
The study employed the mixed method approach. The study’s finding indicated that BECE/WASSCE English language test exerted a negative washback effect on students’ learning practices. The number of the students was significant but the number of schools and teachers could have been increased.

Again, Moradi (2019) conducted a study on the washback effect of final examination on teaching and learning. A mixed methods approach was used. The data collection was done by using two questionnaires and an observation scheme. The data were analysed through descriptive statistics, chi-square test, independent t-test, one-way ANOVA, and pearson correlation. The results showed that the examination have washback effect on learning and this washback effect is more positive than negative. Similarly, Zheng (2019) studied the washback effects of the Chinese National Matriculation English Test (NMET) on students learning. The findings of the study revealed that the English test had negative washback effects on what and how students learn.

Chou (2019) examined the impact of the English listening test in the high-stakes national entrance examination on junior high school students and teachers. The drive of the study was to explore the impact of English listening test on the teaching and learning of listening in junior high school. In the study, 311 junior high school students and 12 teachers participated; questionnaires and semi-structured interviews were employed. The findings showed that test impacted learning more than teaching and teachers adopted more of a test-oriented or ‘testing’ approach in teaching. Although Chou reported that the test impacted learning, the findings did not indicate whether the impact was positive or negative.
Difference in the Perceived Washback Effect of High-Stakes Test on Students’ Learning Practices Between Groups of Students

With regard to differences in the perceived washback effect of high-stakes test between groups of students, few studies of washback effect of high-stakes test on learning practices have been conducted in recent years.

In Ghana, Anim (2019) investigated the difference between SHS 1, SHS 2 and SHS 3 students in terms of washback effect of WASSCE on learning practices. The study’s result showed that there was no statistically significant difference in washback effects of WASSCE among SHS 1 SHS 2 and SHS 3 students.

On the other hand, Cho (2010) surveyed 391 high school students across three different school years. It was found that, overall, most of the time spent preparing for the Korean College Scholastic Abilities Test (KCSAT) was focused on practice tests and memorising vocabulary. Reading related skills also dominated the content of learning. Much less time was spent on listening and learning grammar, and almost no time was devoted to speaking and writing. Cho found a number of key differences between students across the three school years. For instance, where first and second year students focused on textbooks highlighting reading and listening, including content outside of the KCSAT while third year students concentrated on KCSAT learning materials.

There is a contradiction between the findings of Cho (2010) and those of Anim (2019). For instance, Anim opined that there was no difference of washback effects between SHS 1, 2 and 3 students but Cho found that there was a difference in washback effects between students across the three school
years, hence it is imperative to further investigate whether there is difference of washback effects between SHS 1, 2 and 3 students. The difference in washback effect between the two studies could be due to the context of the study and also the kind of high-stakes test that was investigated.

**Difference in the Perceived Washback Effects of High-Stakes Test on Teachers’ Classroom Instructional Practice Between Groups of Teachers**

With respect to washback effects of high-stakes test on teachers’ classroom instructional practices between groups of teachers, researchers have conducted a number of studies to find out if there are differences in washback effects of high-stakes test on teachers’ classroom instructional practices between groups of teachers.

Ghorbani (2008), for instance, investigated the washback effect of the Iranian University Entrance Examination (UEE) on curriculum planning and instruction of high school language instructors. The findings of the study revealed that UEE had a significant influence on “what to teach” but not the “how to teach” of Iranian high school teachers. In addition, his findings further showed that almost all the teachers, irrespective of their gender, teaching experience, educational background, the type of school, and the school location, perceived the negative effects of the UEE. By implication, the result showed that there was no statistically significant difference between the teachers about the effect of the UEE with regard to the school type in which they were studying.

Nkoma, Zivanai and Zirima (2017) conducted a study to ascertain whether there was a difference in teachers’ views on examination preparation between urban and peri-urban schools in Zimbabwe. The findings of the study
revealed that both school locations did not consider the learning approaches of students in teachers’ teaching. Also, the results showed that urban school teachers focused on past examination questions after they had completed teaching the contents in the syllabuses. This was not the same case with the peri-urban teachers who hadly found ample time to concentrate on past examination questions as it was difficult to even complete their syllabuses on time.

Conversely, in Taiwan, Chou (2017) examined the effect of English tests on teachers and teaching. The study used twenty (20) English teachers from ten (10) senior high schools in Taiwan. Out of the twenty teachers, ten teachers were selected from each of the private and public SHS respectively. The results of the study revealed that the test had both positive and negative impacts on the teachers from both public and private Senior High Schools.

**Difference in the Perceived Washback Effects of High-Stakes Test on Students’ Learning Practices Between Public and Private School Students**

There is a dearth of literature on differences in washback effects of high-stakes test on students’ learning practices between public and private school students. Washback effects of high-stakes tests are mediated by a variety of variables that may be slightly different from context to context. The climate of a school is one of the mediating factors (Watanabe, 2000). According to Read and Hayes (2003), school type and location can affect the allocation of time to various activities. This suggests that one of the reasons for the degree of washback effect may be attributed to a number of school context variables. In this study, school type (public or private) which is presumed to be closely related to the WASSCE washback effect was studied.
In addition, the context of learning may affect the washback effect of a test (Cho, 2010).

In the quest to find out how different contexts may be affected by washback, Cho (2010) investigated the washback effect of the College Scholastic Abilities Test (CSAT) on high school students’ language learning. The findings of the study showed that different contexts of learning may be affected by the washback of the KCSAT (i.e. the public school and the private school). Further findings revealed that students in their first and second years of study reported a wider variety of English content outside of the test in their public school classes; they reported that the content at private schools across all years concentrated specifically on the KCSAT.

However, there was no conclusion on the difference in washback effects of the test on students’ learning practices between public and private school students. Consequently, there is the need for further research to find out the differences in the washback effect of high-stakes test on students’ learning practices between public and private school students.

In another insightful study in Iran, Ghorbani and Neissari (2015) undertook a descriptive survey study on the washback effects of University Entrance Examination (UEE) on learning activities. The study’s finding revealed that the students perceived the negative effect of the UEE on their learning practices. Additionally, the study’s result showed that there was no statistically significant difference in the perceived effect of the UEE between the public-school students (M = 4.61, SD = 0.70) and the private school students (M = 4.85, SD = 0.93; t (111) = -1.28, p > .05). The findings of the study imply that virtually all students equally experience the effect of the
examination on their learning practices irrespective of the type of school they attended.

Conceptual Framework of the Study

The following framework illustrates the washback effect of the WASSCE Economics examination on Economics teachers and students in the Ghanaian context. It has been conceptualised based on extant literature related to washback studies (for example, Cheng, Watanabe & Curtis, 2004; Nguyen, 2005). The framework suggests that, on the part of teachers, two (2) factors are affected by the test (WASSCE), namely classroom instructional practices and implementation of the Economics syllabus, while on the part of the students, the learning practices of learners are affected by the test (WASSCE).

Figure 3: Perceived Washback Effect of WASSCE Economics Examination on Teaching and Learning
Source: Author’s construct (2019)
From the framework, a high stakes test (WASSCE Economics examination) is likely to have washback effects on both Economics teachers and students. Washback effect of the high stakes test (WASSCE) would have either positive or negative effect on teachers; this will in turn influence the classroom instructional practices of teachers and lastly, the implementation of the Economics syllabus. On the part of students, the washback effect of the test might affect students which could eventually affect their learning practices. The washback effect on the implementation of Economics syllabus will also affect the learning practices of students. The teacher and the student interact.

In addition, the framework starts with the high-stakes test (WASSCE) and that leads to the washback effect. Further, the washback effect has to deal with two variables, the teacher and the student. The teacher and the student interact during instructional sessions which leads a perpetual interaction between the teacher and the student. The teacher is the one who leads the classroom instruction and implements the curriculum or syllabus (i.e., the content of what the teacher teaches). How the teacher implements the curriculum or syllabus influences how he goes about his instruction in the classroom. What and how teachers teach could have an influence on the learning practices of students. There is an interaction between the classroom instruction and the student. The classroom instructional practices of teachers may affect the learning practices of students.

The classroom instructional practices that might be affected by the high-stakes test are teaching methods and techniques of teachers, classroom task and activities, and teachers formative assessment practices. For instance,
an Economics teacher may teach to the test and sometimes skip certain contents or topics that are not assessed in the WASSCE Economics examination. Additionally, they may teach test-taking strategies in order to prepare students for WASSCE. When these things tend to dominate the classroom instructional sessions then we have negative washback effect.

Again, the conceptual framework shows that the high-stakes test would influence the learning practices of students such as the students’ learning in relation to content of the syllabus, students’ learning strategies and techniques, and learning materials used by students. With regard to learning strategies of students, the negative washback effect of high-stakes test might influence students to memorise most of the things taught in class. Also, they may skip contents and topics that are not likely to be tested in WASSCE when learning.

Chapter Summary

The emphasis of washback effect of high-stakes test has been that a test will influence teaching and learning. The concept of Washback is supported by the Alderson and Wall’s washback hypothesis, Hughes’ washback model and Nguyen washback model. Even though some of the empirical findings were inconclusive when it comes to the washback effect being positive or negative, most of the empirical findings revealed that high-stakes test has washback effects on teachers’ classroom instructional practices, implementation of the curriculum and students’ learning practices. Researchers have found that high-stakes test can have both positive and negative washback effects on students and teachers.

Under the empirical review, the findings of certain studies revealed that tests have negative effects on students learning practices whilst other
studies showed that tests have positive effects on students’ learning practices. Also, the findings of other studies have indicated that high-stakes tests have both negative and positive washback effects on teachers’ classroom instructional practices whilst others revealed that it has negative effect on teachers. The stakes associated with high-stakes tests are so high for so many teachers and students hence researchers should begin to investigate and learn more about the consequences of testing. Therefore, this study investigated the perceived washback effect of high-stakes test on the teaching and learning of Economics.
CHAPTER THREE
RESEARCH METHODS

Overview

The study sought to investigate the perceived washback effects of high-stakes test on the teaching and learning of Economics in the Senior High Schools of the Kumasi Metropolis. This chapter presents an account of how the study was conducted. It covers the research design, population, sample and sampling procedure, the research instrument that was used, test for reliability and validity of the instrument, data collection, pilot testing, data analysis and ethical consideration.

Research Design

The choice of research design for a specific study is determined by the study’s purpose (Cohen, Manion & Morrison, 2018). The study used the cross-sectional survey design which was employed to investigate the perceived washback effect of high-stakes test on the teaching and learning of Economics. The choice of this method was informed by the opinion of Creswell (2014) that cross-sectional survey design offers a quantitative or numerical overview of the trends, perceptions or views of a population by examining a sample of that population. In addition, Osuala (2001) asserts that cross-sectional survey is suitable in circumstances where the researcher is not interested in manipulating the variables involved in the study but rather wants to study the situation as it exists on the ground.

Also, Chalmers (2004) and Ponterotto (2005) are of the view that cross-sectional survey design offers researchers the capability to find explanations on certain facets of social phenomena, such as the viewpoints and
behaviours of the respondents. Cross-sectional survey design is suitable for gathering factual information, data on attitudes and desires, views and guesses, perceptions, habits, and experiences – both past and present (Aldridge & Levine, 2001; Dillman, Smyth & Christian, 2014; Weisberg, Krosnick & Bowen, 1996).

Population

The population for this study consisted of all Senior High School (SHS) Economics teachers and Economics students at the public and private Senior High Schools in the Kumasi Metropolis. In all, there are 67 senior high schools in the Kumasi Metropolis (GES, 2019) of which 26 are public schools while the remaining 41 are private schools. The total number of Economics teachers in the Metropolis is 335, with the public school teachers numbering 130 and private teachers 205. The total number of Economics students in the Metropolis is 9045, out of which 3510 are from the public and 5535 from the private schools. In all, a total of 9380 participants formed the target population for the study.

Sample and Sampling Procedures

The multi-stage sampling technique was used in selecting the sample size. The sampling was conducted at three levels. Firstly, the stratified sampling technique was used to place the Senior High Schools in the Kumasi Metropolis into two strata: Public and Private SHS’s. The stratification variables that was used is the school type within the Metropolis. Secondly, the simple random sampling technique was used in selecting 20 (10 public and 10 private) senior high schools randomly selected from the sixty-seven (67) Senior High Schools in the Metropolis to constitute the sample. A list of the
schools in the Metropolis was collected from the Kumasi Metropolitan Education Office. The names of the schools were coded so as to avoid sampling process bias. The codes were written on pieces of paper and put in a container. The slips of paper were picked one after the other without the selector looking into the pool. Once a name was selected, it was recorded and put back before a new one was picked; the container was vigorously shaken to reshuffle the folded pieces of paper. Another name was picked, recorded and put back. This was done continually until the required number of 20 schools from the list of schools was selected.

The simple random sampling technique was used to select 600 Economics students. This sampling was based on Krejcie and Morgan (1970) table of sample size determination. This sampling technique was used to address the difficulty the researcher encountered with stratified samples of equal size. In each school, 10 of the number of students from each form was sampled. Thus, 10 of the number of students each from SHS 1, SHS 2 and SHS 3 was selected.

Also, the simple random technique, specifically, the lottery method was used to select the sample unit in each form. This was done by obtaining the class list in each form from the form teachers in the selected schools. The names of the students in form 1 were written on a piece of paper and placed in a basket. Afterwards, they were picked and put back into the basket. A name that was picked for the second time was not recorded. The process continued till the sample size for the students in form 1 was reached. The same process was carried out for the students in form 2 and 3.
The researcher also employed census method to select 100 teachers from the twenty schools. This technique was used due to the small number of Economics teachers in each school so, there was no need to sample. The census method was appropriate for the study because as in the view of Farooq (2013), there would be higher degree of precision in data since no other method is accurate like census method when the population is small. Again, the census method was employed because large sample gives better judgment over smaller ones provided such large samples are available and accessible (Gall, Gall & Borg, 2007). The technique helped the researcher to involve every Economics teacher he identified in the twenty schools.

Figure 4: Summary of Sample and Sampling Procedure
Table 5 shows the sample size distribution of the respondents in Public Senior High Schools.

Table 5: Distribution of Respondents from Selected Public SHS in the Kumasi Metropolis

<table>
<thead>
<tr>
<th>SN</th>
<th>Name of School</th>
<th>No. of Students</th>
<th>No. of Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>School A</td>
<td>30</td>
<td>8</td>
</tr>
<tr>
<td>2</td>
<td>School B</td>
<td>30</td>
<td>8</td>
</tr>
<tr>
<td>3</td>
<td>School C</td>
<td>30</td>
<td>8</td>
</tr>
<tr>
<td>4</td>
<td>School D</td>
<td>30</td>
<td>9</td>
</tr>
<tr>
<td>5</td>
<td>School E</td>
<td>30</td>
<td>8</td>
</tr>
<tr>
<td>6</td>
<td>School F</td>
<td>30</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>School G</td>
<td>30</td>
<td>8</td>
</tr>
<tr>
<td>8</td>
<td>School H</td>
<td>30</td>
<td>7</td>
</tr>
<tr>
<td>9</td>
<td>School I</td>
<td>30</td>
<td>9</td>
</tr>
<tr>
<td>10</td>
<td>School J</td>
<td>30</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>300</strong></td>
<td><strong>79</strong></td>
</tr>
</tbody>
</table>

Source: Field survey, 2020

Table 6 shows the distribution of respondents from Private Senior High Schools (SHS) used for the study.

Table 6: Distribution of Respondents from Selected Private SHS’s in the Kumasi Metropolis

<table>
<thead>
<tr>
<th>SN</th>
<th>Name of School</th>
<th>No. of Students</th>
<th>No. of Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>School K</td>
<td>30</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>School L</td>
<td>30</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>School M</td>
<td>30</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>School N</td>
<td>30</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>School O</td>
<td>30</td>
<td>2</td>
</tr>
<tr>
<td>6</td>
<td>School P</td>
<td>30</td>
<td>2</td>
</tr>
<tr>
<td>7</td>
<td>School Q</td>
<td>30</td>
<td>2</td>
</tr>
<tr>
<td>8</td>
<td>School R</td>
<td>30</td>
<td>3</td>
</tr>
<tr>
<td>9</td>
<td>School S</td>
<td>30</td>
<td>2</td>
</tr>
<tr>
<td>10</td>
<td>School T</td>
<td>30</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>300</strong></td>
<td><strong>21</strong></td>
</tr>
</tbody>
</table>

Source: Field survey, 2020
Data Collection Instrument

The questionnaire was the main instrument used to elicit responses from the students and teachers that participated in the study. In other words, a high-stakes testing survey questionnaire developed by Hope, Brockmeier, Lutfi and Sermon (2006) was adapted as the instrument for data collection. Cohen et al (2018) opined that, questionnaires are widely used and are useful instruments for collecting survey information, providing structured numerical data and can be administered without the researcher’s presence. Additionally, the questionnaire was used for the study because it is appropriate for survey work and also affords the respondents adequate time to provide thoughtful responses (Kothari, 2004).

Two sets of questionnaires were used; one set was responded to by Economics teachers and the other set by Economics students. The questionnaire was made up of a five-point Likert scale item of strongly agree to strongly disagree. Respondents were required to respond by ticking the appropriate level of agreement regarding statements on the questionnaire.

The teachers’ questionnaire was made up of three sections: Section A; Section B and Section C. Section A elicited responses on the demographical characteristics of the respondents and consisted of 6 items. Section B also elicited responses on the perceived washback effects of high-stakes test on teachers’ classroom instructional practices and consisted of 24 items. The last section of the questionnaire, Section C, also elicited responses on the perceived washback effect of high-stakes test on the implementation of the Economics syllabus which also had 16 items. In all, the questionnaire had 46 items.
The students’ questionnaire was made up of two sections: Section A and B. Section A elicited responses on the demographical characteristics of respondents and consisted of 5 items. The last section, Section B, also elicited data on the perceived washback effect of high-stakes test on students’ learning practices which also had 18 items. In total, the questionnaire had 23 items.

**Pilot Testing**

To test the instrument so as to identify possible lapses and the potential need for refinement, the researcher conducted a pilot study in the Cape Coast Metropolis which has almost the same educational characteristics as that of the Kumasi Metropolis. The questionnaire was tested in four schools selected from the Cape Coast Metropolis. These schools were selected because they take part in the WASSCE, and also because of the proximity and accessibility of the schools to the researcher. Also, teachers and students of the four (4) schools have similar characteristics as those of the selected schools for the actual study.

**Reliability and Validity of Instruments**

In order to ascertain the face validity of the items on the questionnaire, the researcher strictly made modifications on the items to conform to the literature. To also ensure content validity, the questionnaires were handed to the researcher’s supervisor and other colleagues who went through them and offered their suggestions.

During the pilot test, the researcher used Cronbach's Alpha to determine the instrument’s reliability. According to Pavot, Diener, Colvin, and Sandvik (1991), the most important value in terms of reliability is the Alpha value, which is Cronbach's Alpha co-efficient. According to Pavot et al., any
scale with a Cronbach's Alpha of more than 0.7 can be considered reliable. Based on DeVellis' (2012) recommendation, a decision rule of 0.7 was established to evaluate reliability. The Alpha value for the teachers' questionnaire was .824 (number of items = 40), and the Alpha value for the students' questionnaire was .756 (number of items = 18); thus, the instruments were deemed reliable and acceptable for gathering useful data for the study.

On the questionnaire, no items were deleted or changed. Cronbach's Alpha was computed for each of the main sub-scales on the teachers' questionnaire in order to determine their reliability. The main sub-scales were perceived washback effects of WASSCE on Economics teachers' classroom instructional practices and perceived washback effects of WASSCE on the implementation of the Economics syllabus. The reliability coefficients for these subscales of the teachers' questionnaire are shown in Table 7.

Table 7: Reliability for Each of the Sub-Scales on the Teachers’ Questionnaire

<table>
<thead>
<tr>
<th>Sub-Scale</th>
<th>Reliability Coefficient (α)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Washback effects of WASSCE on Economics teachers’ classroom instructional practices</td>
<td>.829 (No. of items = 24)</td>
</tr>
<tr>
<td>Washback effects of WASSCE on the implementation of the Economics Syllabus</td>
<td>.790 (No. of items = 16)</td>
</tr>
</tbody>
</table>


The supervisor of the researcher determined both the face validity and the content validity. In terms of face and content validity, the questionnaire was deemed valid. Cronbach's Alpha was calculated again after the actual data was collected to determine the instrument's reliability for the actual data collected. The teachers' questionnaire had a reliability coefficient of .861 (N of
items = 40) and the students’ questionnaire had a reliability coefficient of .756 (N of items = 18).

**Ethical Considerations**

Keyton (2001) observed that researchers have an obligation to conduct their study and report their findings without hurting research participants. Therefore, the study sought ethical clearance from the Institutional Review Board of the University of Cape Coast which enabled the researcher to obtain permission from the various schools where the study was carried out. In the research, informed consent was given to all the research participants. Participants were given the choice to be part of the research after some clarifications concerning the study and were not forced to take part in the research. Therefore, all participants were informed about the purpose of the study.

The study was conducted in a manner that protected the identity of the respondents. In order to protect their identity, respondents were not identified by their names. In addition, the cover letter to the research instrument stated that their responses would be kept confidential and the demographic information will not be revealed. Furthermore, the questionnaire will be submitted and collected in a plain envelop without any indication to the school name. All participants were supplied with the researchers’ contact information in order to allow them ask questions about the survey or to inquire about the research findings. The researcher addressed all ethical concerns which included: informed consent; anonymity; and confidentiality. All information that were taken from different sources were acknowledged through in-text citations and references.
Data Collection Procedure

Before the researcher administered the instrument, the researcher obtained a letter of introduction from the Department of Business and Social Sciences Education (DoBSSE) which enabled the teachers and Heads of the various Senior High Schools to be informed about the purpose and significance of the exercise. A letter of approval from the Heads of the sampled schools was used as evidence of permission to administer the questionnaires in their schools. The questionnaire was administered by the researcher after the purpose of the study had been explained.

In each of the schools, the researcher explained the purpose of the study, assured respondents of their anonymity and encouraged full participation. This aided the researcher to establish the needed rapport with respondents and as well gain their co-operation. After that, the questionnaires were distributed to both students and teachers and the instructions to the questionnaire and the items were explained to them for them to respond to the items in the questionnaire. Students were given about twenty (20) to thirty (30) minutes to respond to the items in the questionnaire. Teachers on the other hand, were given a week to fill in their responses. After collecting the filled questionnaire, each completed instrument was quickly reviewed for absolute completeness. Where missing data were found, the students were contacted and asked to provide them. Providing the questionnaires directly to the students, collecting them directly, and quickly following up missing responses helped to ensure a high response rate.
Data Processing and Analysis

In order to address the research questions that guided the study, the data that were obtained from the respondents was filtered to remove all forms of irrelevant responses. Afterwards, they were analysed using Statistical Product for Service Solution (SPSS) version 23. A combination of descriptive and inferential statistics was used to analyse the data to provide the needed results. The demographic characteristics of the respondents were analysed using percentages and frequencies. In addressing the research questions, descriptive statistics including means and standard deviations were computed and inferential statistics such as independent sample T-test and One-Way Analysis of Variance (ANOVA) were computed.
Table 8: Summary of Data Analysis

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Instrument</th>
<th>Participants</th>
<th>Statistical Tool</th>
</tr>
</thead>
<tbody>
<tr>
<td>RQ 1: What is the perceived washback effect of WASSCE on Economics teachers’ classroom instructional practices?</td>
<td>Questionnaire</td>
<td>Teachers</td>
<td>Mean and Standard Deviation</td>
</tr>
<tr>
<td>RQ 2: What is the perceived washback effect of WASSCE on the implementation of the Economics syllabus?</td>
<td>Questionnaire</td>
<td>Teachers</td>
<td>Mean and Standard Deviation</td>
</tr>
<tr>
<td>RQ 3: What is the perceived washback effect of WASSCE on Economics students’ learning practices?</td>
<td>Questionnaire</td>
<td>Students</td>
<td>Mean and Standard Deviation</td>
</tr>
</tbody>
</table>

Research Hypotheses

Hypothesis 1: There is no statistically significant difference of washback effect of WASSCE on Economics students’ learning practices between SHS 1, SHS 2 and SHS 3 Economics students. One-way ANOVA.

Hypothesis 2: There is no statistically significant difference of washback effect of WASSCE on Economics teachers’ classroom instructional practice between private and public SHS Economics teachers. Independent Sample T-test

Hypothesis 3: There is no statistically significant difference of washback effects of WASSCE on Economics students’ learning practices between public and private SHS Economics students. Independent Sample T-test

Source: Author’s Construct
Chapter Summary

The descriptive cross-sectional survey design was used in this study to investigate the perceived washback effect of high-stakes test on the teaching and learning of Economics. The sample size for the Economics students involved in the study was determined using a multi-stage sampling technique that included the stratified sampling technique, the simple random sampling technique, and the simple random sampling technique. To include all Economics teachers in the study, the census method was used. In total, 60 and 600 students were used in the pilot and actual studies, respectively. The questionnaire, which was designed on a five-point Likert scale, aided in the collection of relevant data required to answer the research questions that guided the study. The instrument was extremely dependable, with a total reliability coefficient of.861 for the teacher's questionnaire and.756 for the student's questionnaire.

The main limitation of the instrument was that only closed-ended questions were used, which prevented respondents from freely providing responses that could have enriched the study. The obtained data was analyzed using both descriptive and inferential statistics. Data on demographic variables were analyzed using frequency and percentage; mean and standard deviation for research question one to three; one-way ANOVA for research hypothesis one; and independent sample t-test for research hypothesis two and three.
CHAPTER FOUR
RESULTS AND DISCUSSION

Overview

This chapter presents the results of the fieldwork and the discussion to determine the implication of the data on the perceived washback effect of high-stakes test (WASSCE) on the teaching and learning of Economics in selected senior high schools in the Kumasi Metropolis. The results from the data gathered are presented and discussed in relation to the three research questions and three research hypotheses that were formulated for the study. Background characteristics of the respondents are presented, and frequency and percentage were used to analyse the demographic data of respondents. All the research questions were analysed using mean and standard deviation. One-way Analysis of Variance (ANOVA) was used to analyse research hypothesis one and an independent sample t-test was used to analyse research hypothesis two and three.

Analysis of Demographic Characteristics of Respondents

This part presents and discusses the preliminary data which consists of the background data of the respondents for the study.

Gender Distribution of Economics Teachers

Table 9 represents the distribution of Economics teachers based on gender.

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency (No)</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>85</td>
<td>85.0</td>
</tr>
<tr>
<td>Female</td>
<td>15</td>
<td>15.0</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 9 indicates that 85 (85%) Economics teachers forming the majority of the respondents are males and 15 (15%) Economics teachers are females. The result, therefore, shows that the majority of the Economics teachers who participated in the study are males. The dominance of the male Economics teachers in second cycle institutions is not a different phenomenon in the Ghanaian context.

**Academic Qualifications of Respondents**

Table 10 represents the distribution of Economics teachers based on their highest academic qualifications.

**Table 10: Academic Qualifications of Respondents**

<table>
<thead>
<tr>
<th>Academic Qualification</th>
<th>Frequency (No)</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diploma in Education</td>
<td>10</td>
<td>10.0</td>
</tr>
<tr>
<td>Bachelor of Education</td>
<td>50</td>
<td>50.0</td>
</tr>
<tr>
<td>Bachelor of Art/Social Science</td>
<td>9</td>
<td>9.0</td>
</tr>
<tr>
<td>BA/B.Sc with PGDE</td>
<td>7</td>
<td>7.0</td>
</tr>
<tr>
<td>Master of Education</td>
<td>3</td>
<td>3.0</td>
</tr>
<tr>
<td>MPhil in Education</td>
<td>18</td>
<td>18.0</td>
</tr>
<tr>
<td>MA/M.Sc</td>
<td>3</td>
<td>3.0</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100.0</td>
</tr>
</tbody>
</table>


Table 10 reveals that 50 (50%) forming the majority of the respondents had a Bachelor of Education degree while 18 (18%) had a Master of Philosophy degree in Education, 10 (10%) of the respondents had Diploma in Education, and 9 (9%) had Bachelor of Arts/Social Science degree, 7 (7%) of the respondents had BA/B.Sc with PGDE, 3 (3%) of the respondents had
Master’s degree in Education and 3 (3%) had MA/M.Sc. This indicates that the majority of the Economics teachers hold a degree in Bachelor of Education.

**Distribution of Teachers by School Proprietorship**

Table 11 represents the distribution of Economics teachers based on school proprietorship.

**Table 11: Distribution of Economics Teachers by School Proprietorship**

<table>
<thead>
<tr>
<th>School Proprietorship</th>
<th>Frequency (No)</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public</td>
<td>79</td>
<td>79.0</td>
</tr>
<tr>
<td>Private</td>
<td>21</td>
<td>21.0</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100.0</td>
</tr>
</tbody>
</table>


Table 11 shows that the majority of the teachers 79 (79%) that participated in the study were from public schools, while only 21 (21%) teachers were private schools. By implication, the majority of Economics teachers were from public schools.

**Gender Distribution of Students**

Table 12 represents the distribution of Economics students based on gender.

**Table 12: Distribution of Economics Students Based on Gender**

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency (No)</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males</td>
<td>338</td>
<td>56.3</td>
</tr>
<tr>
<td>Females</td>
<td>262</td>
<td>43.7</td>
</tr>
<tr>
<td>Total</td>
<td>600</td>
<td>100.0</td>
</tr>
</tbody>
</table>


Table 12 shows that, in all, 338 (56.3%) male students as against 262 (43.7%) female students responded to the questionnaire making the total
number of respondents 600. The majority of the Economics students who participated in the study were males.

**Distribution of Forms of Students**

Table 13 represents the distribution of Economics students based on forms.

**Table 13: Distribution of Students Based on Forms**

<table>
<thead>
<tr>
<th>Form of Students</th>
<th>Frequency (No)</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form One</td>
<td>200</td>
<td>33.3</td>
</tr>
<tr>
<td>Form Two</td>
<td>200</td>
<td>33.3</td>
</tr>
<tr>
<td>Form Three</td>
<td>200</td>
<td>33.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>600</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>


As shown in Table 13, 200 (33.3%) of the students are in Form one, 200 (33.3%) of the students are in Form two and 200 (33.3%) of the respondents are in Form three. This reveals that respondents were fairly distributed among the three Forms of students under study.

**Presentation of Main Results**

This section discusses the main results concerning the research questions and hypotheses that were posed to guide the study. Data on the research question one, two and three were collected on a five-point Likert scale (strongly agree, agree, neither agree nor disagree, disagree and strongly disagree). Thereafter, the three research questions were analysed using mean and standard deviation. The Likert scale was coded as: Strongly Agree = 1, Agree = 2, Neither Agree nor Disagree = 3, Disagree = 4 and Strongly Disagree = 5. Research hypothesis one was analysed using ANOVA and, two
and three were analysed using the independent sample t-test at a 0.05 level of significance.

**Key to Interpreting Results**

To gather evidence for the study, the Economics teachers and students were made to rate their responses using Strongly Agree, Agree, Neither Agree nor Disagree, Disagree and Strongly Disagree. The mean ranges for the statements were scored as (Strongly Agree = 1, Agree = 2, Neither Agree nor Disagree = 3, Disagree = 4 and Strongly Disagree = 5). A criterion value of 3.00 was established for the scale. The scores were added together and divided by the number in the scale (1+2+3+4+5= 15/5=3.00) to obtain the criterion value (CV=3.00). Also, all negatively worded items were recoded before the analysis was done. To understand the mean scores, items or statements on each subscale (the perceived washback effect of WASSCE on classroom instructional practices, implementation of the syllabus and students’ learning practices) that scored means of less than 3.00 were regarded as a negative washback effect. Those items/statements that scored means above 3.00 were regarded as a positive washback effect. Standard deviations measured the dispersion of the responses as they were gathered from the respondents. A standard deviation of 1.00 and below denoted homogeneity in responses, whereas a standard deviation more than 1.00 denoted diversity in responses of respondents. These interpretations are applicable to all the three research questions formulated.
Research Question One: What is the perceived washback effect of WASSCE on economics teachers’ classroom instructional practices?

The essence of this research question was to determine whether WASSCE has a positive or negative washback effect on teachers’ classroom instructional practices. In order to address this research question, SHS economics teachers in the Kumasi Metropolis were asked to respond to a number of statements by indicating their level of agreement or disagreement with the statements. Table 14 shows the results from the analysis of data provided by the respondents on the perceived washback effects of WASSCE on economics teachers’ classroom instructional practices.
Table 14: Perceived Washback Effects of WASSCE on Economics Teachers’ Classroom Instructional Practices

<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>I don’t teach in a way that my students understand because of WASSCE.</td>
<td>1.52</td>
<td>.56</td>
</tr>
<tr>
<td>WASSCE discourages me to adopt innovative methods and techniques of teaching.</td>
<td>1.70</td>
<td>.82</td>
</tr>
<tr>
<td>I sometimes change my methods of teaching to reflect WASSCE requirements.</td>
<td>1.59</td>
<td>.59</td>
</tr>
<tr>
<td>Methods and techniques, I employ in teaching become more ‘test-like’ in the third year than second and first years.</td>
<td>1.82</td>
<td>1.00</td>
</tr>
<tr>
<td>I sometime skip some topics and contents because they are unlikely to be tested in WASSCE.</td>
<td>2.82</td>
<td>1.28</td>
</tr>
<tr>
<td>I give more attention to contents which are likely to be assessed on WASSCE.</td>
<td>2.05</td>
<td>1.15</td>
</tr>
<tr>
<td>I do ignore tasks and activities that are not directly related to the purpose of WASSCE when teaching.</td>
<td>3.31</td>
<td>1.09</td>
</tr>
<tr>
<td>I teach test-taking strategies at all the levels in order to prepare students for WASSCE.</td>
<td>1.92</td>
<td>.81</td>
</tr>
<tr>
<td>I practice and solve WASSCE past questions with students during instructional periods.</td>
<td>1.80</td>
<td>.83</td>
</tr>
<tr>
<td>I give model tests in the format of WASSCE to help prepare them.</td>
<td>1.46</td>
<td>.61</td>
</tr>
<tr>
<td>I emphasize and sometimes re-teach topics which are likely to be assessed in WASSCE.</td>
<td>1.53</td>
<td>.67</td>
</tr>
<tr>
<td>WASSCE does not make me to improve classroom instruction and practices.</td>
<td>1.95</td>
<td>1.02</td>
</tr>
<tr>
<td>WASSCE does not permit teachers to use the full range of their teaching skills.</td>
<td>2.39</td>
<td>1.10</td>
</tr>
<tr>
<td>WASSCE does not lead better teaching.</td>
<td>2.72</td>
<td>1.11</td>
</tr>
<tr>
<td>The quality of my teaching is directly related to student performance in WASSCE.</td>
<td>2.39</td>
<td>1.06</td>
</tr>
<tr>
<td>WASSCE reduces the teaching and learning process to a student’s test score.</td>
<td>2.54</td>
<td>1.00</td>
</tr>
</tbody>
</table>
Table 14 continued

| WASSCE discourage teachers to improve the teaching and learning process. | 2.05 | .86 |
| WASSCE discourages me to engage in student-centred mode of instruction. | 3.55 | 1.16 |
| WASSCE had made me to encourage my students to memorize factual concepts. | 2.31 | 1.10 |
| WASSCE does not make me prepare more teaching and learning materials. | 2.50 | 1.24 |
| I do make selection of teaching and learning materials which are relevant for the purpose of WASSCE. | 2.31 | 1.12 |
| WASSCE discourages me to gather information from reliable and authentic sources to prepare my own teaching materials. | 2.12 | 1.04 |
| WASSCE discourages me to make use of different Economics textbooks or Economics related materials. | 1.73 | .90 |
| I recommend well-prepared Economics textbooks with a lot of exercises following the format of WASSCE to students. | 1.76 | .84 |
| Mean of Means/Average Standard Deviation | 2.16 | .96 |


From Table 14, the overall average mean of 2.16 which is below 3.00 indicates that respondents share the opinion that WASSCE Economics examination have a negative effect on the classroom instructional practices. The average standard deviation score (SD = .96) also suggests that, the responses of the respondents were in a uniform fashion.

The highest mean value recorded was (M = 3.55, SD = 1.16), and is in relation to the statement that WASSCE discourages them to engage in student-centred mode of instruction. This suggests that teachers disagreed that WASSCE discourages them to engage in student-centred mode of instruction. In furtherance of teachers’ motivation, teachers affirmed (M = 2.05, SD = .86)
that WASSCE discourages them to improve the teaching and learning process. In telling details of their engagement with students, teachers agreed (M = 2.31, SD = 1.10) that WASSCE had made them to encourage their students to memorize factual concepts (rote learning).

As clearly shown in Table 14, the lowest mean value recorded was (M = 1.46, SD = .61), and it is in relation to the statement that teachers give model tests in the format of WASSCE to help prepare the students. This implies that the respondents agreed that WASSCE influences teachers to give model tests to Economics students. Giving more account on this, teachers agreed (M = 1.92, SD = .81) that they teach test-taking strategies at all the levels in order to prepare students for WASSCE. This suggests that teachers teach form 1, 2 and 3 students how to answer tests or questions by employing certain strategies.

**Research Question Two: What is the perceived washback effect of WASSCE on the implementation of the Economics syllabus?**

In order to address this research question, Economics teachers were asked to respond to several statements relating to the perceived washback effect of WASSCE on the implementation of the Economics syllabus by indicating their level of agreement or disagreement to the statements. Results in respect of this research question are shown in Table 15.
Table 15: Perceived Washback Effects of WASSCE on the Implementation of the Economics Syllabus

<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>I do not care about the Economics syllabus while teaching.</td>
<td>4.13</td>
<td>1.00</td>
</tr>
<tr>
<td>I am not aware of the objectives of the Economics syllabus in which I teach.</td>
<td>4.21</td>
<td>1.04</td>
</tr>
<tr>
<td>I feel pressurised to cover the Economics syllabus before the final examination.</td>
<td>2.52</td>
<td>1.20</td>
</tr>
<tr>
<td>If there is no WASSCE, the content of my teaching will be better from what I teach now.</td>
<td>2.70</td>
<td>1.25</td>
</tr>
<tr>
<td>WASSCE hardly permit me to give attention to the requirements of each topic in the Economics syllabus.</td>
<td>1.10</td>
<td>0.48</td>
</tr>
<tr>
<td>WASSCE sometimes makes me adopt “finish the syllabus” syndrome.</td>
<td>2.01</td>
<td>1.03</td>
</tr>
<tr>
<td>I design Economics lessons and content around WASSCE requirement.</td>
<td>2.13</td>
<td>1.07</td>
</tr>
<tr>
<td>WASSCE makes me do less lesson preparation.</td>
<td>2.85</td>
<td>1.53</td>
</tr>
<tr>
<td>I do not teach every section in the syllabus because some sections are unlikely to be tested in WASSCE.</td>
<td>2.53</td>
<td>1.40</td>
</tr>
<tr>
<td>WASSCE has led me to reassess my beliefs about subject matter that is important to teach.</td>
<td>2.49</td>
<td>1.03</td>
</tr>
<tr>
<td>WASSCE hardly permit me to give equal attention to all topics.</td>
<td>2.42</td>
<td>1.21</td>
</tr>
<tr>
<td>For students to get higher scores in the WASSCE means that I should solve more past questions with my students.</td>
<td>2.08</td>
<td>1.00</td>
</tr>
<tr>
<td>WASSCE test questions do not accurately reflect the content students learn in the Economics syllabus implemented by schools.</td>
<td>2.28</td>
<td>1.00</td>
</tr>
<tr>
<td>WASSCE Economics questions do not cover all the economics syllabus objectives.</td>
<td>2.48</td>
<td>1.25</td>
</tr>
<tr>
<td>WASSCE content is not aligned with the Economics syllabus.</td>
<td>2.88</td>
<td>1.33</td>
</tr>
<tr>
<td>WASSCE requires teachers to teach to the test.</td>
<td>1.94</td>
<td>.90</td>
</tr>
<tr>
<td>Mean of Means/Average Standard deviation</td>
<td>2.55</td>
<td>1.11</td>
</tr>
</tbody>
</table>


Table 15 shows results on the perceived washback effect of WASSCE on the implementation of the Economics syllabus. From Table 15, the overall average mean of 2.55 compared to the cut-off point of 3 mean score for positive washback effect, indicates that the Economics teachers affirmed that...
WASSCE has a negative washback effect on the implementation of the Economics syllabus. The average standard deviation score (SD = 1.11) also suggest that teachers’ responses to the items on this particular subscale were heterogeneous.

The respondents disagreed that, “they are not aware of the objectives of the Economics syllabus in which they teach” and this recorded the highest mean value (M = 4.21, SD = 1.04). In addition, the teachers reported in disagreement (M = 4.13, SD = 1.00) that, they do not care about the Economics syllabus while teaching. This suggests that the majority of the Economics teachers pay attention to the Economics syllabus while teaching. However, teachers agreed (M = 2.52, SD = 1.20) that they feel pressurised to cover the Economics syllabus before the final examination.

From Table 15, the lowest mean value recorded was (M = 1.10, SD = 0.48) and is about the statement that “WASSCE hardly permit me to give attention to the requirements of each topic in the Economics syllabus”. This implies that teachers agreed that WASSCE hardly permits them to give attention to the requirements of each topic in the Economics syllabus. Giving details to the implementation of the syllabus, the majority of the teachers agreed (M = 2.01, SD = 1.02) that WASSCE sometimes make them adopt “finish the syllabus” syndrome.

In respect to the statement “WASSCE content is not aligned with the Economics syllabus” respondents agreed (M = 2.88, SD = 1.33). Teachers affirmed (M = 1.94, SD = .90) that WASSCE requires them to teach to the test. This suggests that WASSCE may aid teachers to narrow the scope of the syllabus, which they do by teaching to the test.
Research Question Three: What is the perceived washback effect of WASSCE on economics students’ learning practices?

This research question sought to find out the perceived washback effect of WASSCE on Economics students’ learning practices. Table 16 presents results that relate to the perceived washback effects of WASSCE on Economics students’ learning practices in relation to learning strategies and techniques, learning materials used by students and content of the syllabus. The summary of the results is presented in Table 16.
Table 16: Perceived Washback Effect of WASSCE on Economics Students’ Learning Practices

<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>I use the rote learning approach to memorize most of the things taught in class.</td>
<td>2.44</td>
<td>1.12</td>
</tr>
<tr>
<td>I give attention to topics and contents which are likely to be tested in WASSCE.</td>
<td>1.67</td>
<td>.88</td>
</tr>
<tr>
<td>I skip classes to have personal studies.</td>
<td>4.01</td>
<td>1.21</td>
</tr>
<tr>
<td>I practice and solve more of WASSCE Economics past questions.</td>
<td>2.10</td>
<td>1.15</td>
</tr>
<tr>
<td>I ask for test-taking strategies from teachers in order to prepare us for the final examinations.</td>
<td>2.22</td>
<td>1.09</td>
</tr>
<tr>
<td>I spend more time learning topics and past Economics questions that are likely to be tested in WASSCE.</td>
<td>2.03</td>
<td>1.03</td>
</tr>
<tr>
<td>I attend extra classes both on campus and at home to help me prepare for WASSCE.</td>
<td>2.39</td>
<td>1.30</td>
</tr>
<tr>
<td>I combine different text books of Economics to have varied ideas when learning.</td>
<td>2.09</td>
<td>1.14</td>
</tr>
<tr>
<td>I do not care about the Economics syllabus while learning.</td>
<td>3.66</td>
<td>1.25</td>
</tr>
<tr>
<td>Learning comes with a lot of stress in school as I prepare to take WASSCE.</td>
<td>2.07</td>
<td>1.10</td>
</tr>
<tr>
<td>I feel pressurised to cover the syllabus before the final examination (WASSCE).</td>
<td>1.94</td>
<td>.89</td>
</tr>
<tr>
<td>I skip contents and topics that are not likely to be tested in WASSCE when learning.</td>
<td>2.82</td>
<td>1.38</td>
</tr>
<tr>
<td>WASSCE makes me to memorise most of the things taught in class without getting deeper understanding.</td>
<td>2.37</td>
<td>1.32</td>
</tr>
<tr>
<td>WASSCE does not provide enough room (e.g. in terms of time) for me to learn.</td>
<td>2.61</td>
<td>1.23</td>
</tr>
<tr>
<td>I rely on textbooks and WASSCE Economics past questions when learning.</td>
<td>1.96</td>
<td>.97</td>
</tr>
<tr>
<td>WASSCE discourages me to make use of different textbooks of Economics.</td>
<td>3.86</td>
<td>1.05</td>
</tr>
<tr>
<td>WASSCE discourages me to search for reliable and authentic information to support the Economics textbooks.</td>
<td>3.99</td>
<td>1.00</td>
</tr>
<tr>
<td>I do not find interest studying the Economics textbook materials because of WASSCE.</td>
<td>4.09</td>
<td>.92</td>
</tr>
</tbody>
</table>

Mean of Means/Average Standard Deviation: 2.68 / 1.11


From Table 16, the overall average mean of 2.68 compared to the cut-off point of below 3 for negative washback effect, shows that WASSCE influences students’ learning practices negatively. This suggests that the learning strategies and techniques, learning materials and content of the Economics syllabus that students use to study are being influenced by
WASSCE. The average standard deviation score (SD = 1.11) also indicated that, students’ responses to the items on this specific subscale were heterogeneous.

With regard to learning materials used by students, from Table 16, it can be observed that the highest mean value recorded was on the statement that students do not find interest studying the Economics textbook materials and WASSCE past questions (M = 4.09, SD = .92). This implies that students disagreed that they do not find interest studying the Economics textbook materials and WASSCE past questions. This was further supported by students that they combine different text books of Economics to have varied ideas when learning (M = 2.09, SD = 1.14). Additionally, students affirmed (M = 1.96, SD = .97) that, they rely on textbooks and WASSCE Economics past questions when learning.

The lowest mean value was recorded on the statement that teachers give attention to topics and content which are likely to be tested in WASSCE (M = 1.67, SD = .88). This suggests that students confirmed that one of the strategies they employed in their learning is; they give attention to topics and contents which are likely to be tested in WASSCE. In addition, students responded in the affirmative (M = 2.44, SD = 1.12) that, they use rote learning approach to memorize most of the things taught in class. In addition, students agreed (M = 2.10, SD = 1.15) to the fact that they practice and solve more of WASSCE Economics past questions. Again, students confirmed (M = 2.22, SD = 1.09) that, they asked for test-taking strategies from teachers in order to prepare them for the final examinations.
With regard to rote learning, students agreed (M = 2.37, SD = 1.32) that, WASSCE makes them memorise most of the things taught in class without getting deeper understanding. This suggests that, the pressure from WASSCE, will compel students to adopt the rote learning approach.

**Research Hypothesis 1:** There is no statistically significant difference in the perceived washback effect of WASSCE on Economics students’ learning practices between SHS 1, SHS 2 and SHS 3 Economics students.

This hypothesis sought to ascertain whether there was any statistically significant difference in the perceived washback effect of WASSCE on Economics students’ learning practices between SHS 1, SHS 2 and SHS 3 Economics students. The independent variable is the ‘Forms of Students’ (SHS 1, SHS 2 and SHS 3) Economics students, and the dependent variable is the perceived washback effect of WASSCE on Economics students’ learning practices.

Table 17 presents a summary of the results in terms of the hypothesis that, there is no statistically significant difference in the perceived washback effect of WASSCE on Economics students’ learning practices between SHS 1, SHS 2 and SHS 3 Economics students.

<table>
<thead>
<tr>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>2.180</td>
<td>2</td>
<td>1.090</td>
<td>9.964</td>
</tr>
<tr>
<td>Within Groups</td>
<td>65.323</td>
<td>597</td>
<td>.109</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>93.343</td>
<td>599</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Significance level .05

Source: Field survey, 2020
The results from Table 17 indicate that there is a statistically significant difference in the perceived washback effect of WASSCE on Economics students’ learning practices between SHS 1, SHS 2 and SHS 3 Economics students (F = 9.964; df = 2, 597; sig < .05). This implies that the ‘Forms of Economics students’ affect their perceived washback effects of WASSCE on learning practices. The results suggest that students from SHS 1, 2 and 3 perceive the effect of WASSCE on their learning practices differently.

A post-hoc analysis was carried out to find out where the differences in the perceived washback effects are. Table 18 presents a summary of the post-hoc analysis in terms of the difference in the perceived washback effect of WASSCE on learning practices based on forms of students.

### Table 18: Multiple Comparison

<table>
<thead>
<tr>
<th>(I) Form</th>
<th>J (Form)</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tukey</td>
<td>Form one</td>
<td>Form two</td>
<td>-.07972*</td>
<td>.03308</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Form three</td>
<td>.06778</td>
<td>.03308</td>
</tr>
<tr>
<td>HSD</td>
<td>Form two</td>
<td>Form one</td>
<td>.07972*</td>
<td>.03308</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Form three</td>
<td>.14750*</td>
<td>.03308</td>
</tr>
<tr>
<td></td>
<td>Form three</td>
<td>Form one</td>
<td>-.06778</td>
<td>.03308</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Form two</td>
<td>-.14750*</td>
<td>.03308</td>
</tr>
</tbody>
</table>

*Significance level .05

From Table 18, the post hoc test of Turkey’s HSD indicates that there is a significant difference between students in form one and form two. Also, those students in form three have a different perception of the washback effect as compared to those in form two. The difference is significant. However, the difference between those in form one and form three is not significant.
Research Hypothesis 2: There is no statistically significant difference in the perceived washback effect of WASSCE on Economics teachers’ classroom instructional practices between private and public SHS Economics teachers.

Research hypothesis two was meant to determine whether there is any statistically significant difference in the perceived washback effect of WASSCE on Economics teachers’ classroom instructional practices between private and public SHS Economics teachers. The public and private SHS teachers were the independent variables and the average mean perceived washback effect of WASSCE on Economics teachers’ classroom instructional practices was the dependent variable. In order to address the research hypothesis, the data obtained were analysed using the independent t-test at a significance level of 0.05. Table 19 presents a summary of the results in terms of the hypothesis that, there is no statistically significant difference in the perceived washback effect of WASSCE on Economics teachers’ classroom instructional practices between private and public SHS Economics teachers.

Table 19: Differences in the Perceived Washback Effects of WASSCE on Economics Teachers’ Classroom Instructional Practices Between Private and Public SHS Economics Teachers

<table>
<thead>
<tr>
<th>School Proprietorship</th>
<th>M</th>
<th>SD</th>
<th>t</th>
<th>df</th>
<th>ρ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>1.95</td>
<td>.23</td>
<td>-2.390</td>
<td>98</td>
<td>.021</td>
</tr>
<tr>
<td>Public</td>
<td>2.20</td>
<td>.40</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Significance level .05


From Table 19, it can be observed that there is a difference in terms of the mean values for the private and public teachers with the mean of the public
teachers exceeding that of the private teachers by 0.25. However, to test whether the difference in the mean values was statistically significant, an independent t-test was used. First, the Levene’s test for equality of variances indicated that the variances for the two groups were equal \( F = 5.495, .021 < .05 \), and therefore a test for equal variances was used. The mean value of public teachers perception of washback effect \( (M = 2.20, SD = .40) \) is significantly higher \( (t = -2.390, df = 98, .021 < .05) \) than that of the private schools Economics teachers \( (M = 1.95, SD = .23) \). This suggests that public and private school Economics teachers held different perceptions about the effect of WASSCE on their classroom instructional practices.

**Research Hypothesis 3:** There is no statistically significant difference in the perceived washback effects of WASSCE on Economics students’ learning practices between public and private SHS Economics students.

The third research hypothesis was meant to find out whether there is any statistically significant difference in the perceived washback effects of WASSCE on Economics students’ learning practices between public and private SHS Economics students. The independent variables were public and private SHS Economics students and the dependent variable was the average mean perceived washback effect of students’ responses on the perceived washback effects of WASSCE on Economics students’ learning practices. In order to address the research hypothesis, the data obtained were analysed using the independent t-test at a significance level of 0.05.

Table 20 presents a summary of the results in terms of the hypothesis that, there is no statistically significant difference in the perceived washback effects
of WASSCE on Economics students’ learning practices between public and private SHS Economics students.

**Table 20: Differences in the Perceived Washback Effects of WASSCE on Economics Students’ Learning Practices Between Public and Private SHS Economics Students**

<table>
<thead>
<tr>
<th>School Proprietorship</th>
<th>M</th>
<th>SD</th>
<th>t</th>
<th>df</th>
<th>ρ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public</td>
<td>2.72</td>
<td>.31</td>
<td>1.570</td>
<td>598</td>
<td>.930</td>
</tr>
<tr>
<td>Private</td>
<td>2.73</td>
<td>.36</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Significance level .05

From Table 20, the results show that there is a difference in terms of the mean values for the public and private school students with the mean of the private students exceeding that of the public students by 0.01. However, to test whether the difference in the mean values was statistically significant, an independent t-test was used. First, the Levene’s test for equality of variances indicated that the variances for the two groups were equal (F = 5.378, .930 > .05), and therefore a test for equal variances was used. The mean score of private school Economics students perception of washback effect (M = 2.73, SD = .36) is not significantly higher (t = .088, df = 598, .930 > .05) than that of the public school Economics students (M = 2.72, SD = .31). Therefore, the null hypothesis is sustained. It can, therefore, be concluded that both public and private school students have the same perception about the washback effect of WASSCE on students learning practices.

**Discussion of Results**

This section discusses the findings of the study in relation to:

2. Perceived washback effects of WASSCE on the implementation of the Economics syllabus.


4. The difference in the perceived washback effect of WASSCE on Economics students’ learning practices between SHS 1, SHS 2 and SHS 3 Economics students.

5. The differences in the perceived washback effect of WASSCE on Economics teachers’ classroom instructional practices between private and public SHS Economics teachers.

6. The difference in the perceived washback effects of WASSCE on Economics students’ learning practices between public and private SHS Economics students.

Perceived washback effects of WASSCE on Economics teachers’ classroom instructional practices

The first research question sought to find out the perceived washback effect of WASSCE on Economics teachers’ classroom instructional practices. The results from the study indicated that Economics teachers held the opinion that the WASSCE economics examination has a negative washback effect on teachers’ classroom instructional practices. This finding supports the assertion of Hoque (2011) that public examination has a negative washback effect on teaching. This finding further validates the views of several researchers (Alderson & Hamp-Lyons, 1996; Lam, 1993; Shohamy, 1993; Watanabe,
1996). The finding also lends credence to the opinions of Salehi, Mustapha, and Yunus (2012) that English high-stakes examination has a negative washback effect on language teaching.

This finding implies that, in instances where teachers have to prepare students for WASSCE Economics examination, they employ instructional practices that will enable them cover the content of the syllabus. Instructional practices such as teaching students test-taking strategies, teaching to the test, skipping topics, and content which are unlikely to be tested on WASSCE and ignoring tasks or activities that are not directly related to the purpose of WASSCE are adopted. This is normally because students’ performance is in most cases associated with teacher output, hence the focus of the teacher is mostly to ensure that his or her students pass with distinction.

Perceived washback effects of WASSCE on the implementation of the Economics syllabus

In relation to the perceived washback effects of WASSCE on the implementation of the Economics syllabus, it was evident that WASSCE Economics examination had a negative washback effects on the implementation of the economics syllabus. This finding validates the hypothesis of Alderson and Wall (1993) that a test will influence what teachers teach. Again, the results of the study are in tandem with that of Onaiba (2013) who discovered that the BECE had negative washback on the content of the curriculum and as a result some teachers narrowed the syllabus to meet the content of the examination. Additionally, this finding is in harmony with that of Anane (2010), Amoako (2018) and Saglam (2018) who
also found and concluded that high-stakes test tends to have a negative washback on the curriculum.

Curriculum experts have argued that the fidelity of the implementation of any syllabus might be linked to the period available for the full implementation of the syllabus. In Ghana, SHS students spend a maximum of two and half years for their secondary education and Economics teachers are supposed to implement the whole content of the Economics syllabus within this period. With challenges such as time constraint, inadequate textbooks, and other teaching and learning resources, the Economics teacher is left with no choice than to resort to the “curriculum-in-use” instead of the formal (written) curriculum.

**Perceived washback effects of WASSCE on Economics students’ learning practices**

The third research question was meant to find out the perceived washback effects of WASSCE on Economics students’ learning practices. The finding of the study shows that WASSCE has a negative washback effect on students’ learning practices. The finding of this current study is consistent with the assertion of Park (2018) that students experience a negative washback effect in their learning process, in preparation for an English examination. Again, this finding gives credence to the claims of Owusu (2019) that the BECE/WASSCE English test exerts a negative washback effect on students’ learning practices. In addition, this finding seems to support the opinion of Zheng (2019) that Chinese national matriculation tests influence what and how students learn negatively. However, this result does not seem to support the
view of Moradi (2019) who claims that final examination has a positive washback effect on learning.

This finding suggests that students are forced to abandon learning practices that will broaden their understanding of concepts and issues in Economics by going in for WASSCE Economics past question and solution books instead of standard Economics textbooks. This finding also implies that rote learning is preferred by Economics students. The main objective for this is that, the progress of the students’ formal education in the future is tied to his or her performance in WASSCE and as such the Economics students will resort to quick learning practices that will give them a pass in WASSCE Economics examination.

**Differences in the perceived washback effects of WASSCE on Economics students’ learning practices between SHS 1, SHS 2 and SHS 3 Economics students**

By inference, the result gave a reason to believe that there is a statistically significant difference in the perceived washback effects of WASSCE on Economics students’ learning practices between SHS 1, SHS 2 and SHS 3. This implies that ‘the forms or class in which the Economics students find themselves’ affect their perceived washback effect of WASSCE on learning practices. In specific terms, the finding reveals a mismatch in opinions of respondents on the perceived washback effect of WASSCE on students’ learning practices.

The finding does not seem to support the claims of Anim (2019) that there is no statistically significant difference in washback effects of WASSCE among SHS 1, SHS 2 and SHS 3 students. However, the finding of this current
study corroborates that of Cho (2010) who opines that there are several key differences between students across the three school years. He asserts that first and second year classes focus on textbooks, highlighting, reading and listening, including content outside of the KCSAT and third year students mostly use KCSAT specific materials. The difference in the perceived washback effect of WASSCE on Economics students’ learning practices between SHS 1, SHS 2 and SHS 3 could be due to the fact that SHS 3 students are preparing to write the WASSCE and also SHS 1 students are yet to write any economics examination that is related to WASSCE.

The implication of this result is that as students’ progress, they get closer to writing their final examination and they have to alter their learning practices in order for them to absorb more content and prepare fully for the examination. For instance, an SHS 1 student in the first semester has more than two years to prepare for the WASSCE and might not have covered enough content which would demand a quick-fix learning practice as compared to an SHS 3 Economics student who has gotten few months to write his or her examination and might have covered enough content.

Differences in the perceived washback effects of WASSCE on Economics teachers’ classroom instructional practices between private and public SHS Economics teachers

In relation to research hypothesis 2, the findings revealed that there is a statistically significant difference in the perceived washback effect of WASSCE on Economics teachers’ classroom instructional practices between private and public SHS Economics teachers. This result suggests that Economics teachers based on the school proprietorship perceived the negative
washback effect of WASSCE on their classroom instructional practices differently.

This finding provides support for the assertions of Nkoma, Zivanai and Zirima (2017) that there are differences in the way in which teachers are influenced by tests based on the school type. The finding further confirms the opinion of Watanabe (2000) who emphasized that the school atmosphere is one of the mediating factors of washback effect. However, the finding is at variance with that of Chou (2017) who found that the test had an impact on the teachers from both public and private schools. Also, the results of the study contradict that of Ghorbani (2008) who indicated that teachers regardless of the type of school, perceive the negative effects of the examination (UEE).

The difference in the perceived washback effect of WASSCE on Economics teachers’ classroom instructional practices between private and public SHS Economics teachers might be attributed to differences in the teaching contexts. Also, the difference can be linked to the fact that supervision and monitoring in private schools are different from that of public schools. In addition, increase in enrolment in private schools is associated with the performance of students in WASSCE especially in the era of free SHS where the public schools employ little or no effort in attracting students for their schools whereas private schools need to convince parents that their students will perform well at the end of the academic year therefore they need to enrol them in their schools.
Difference in the perceived washback effects of WASSCE on Economics students’ learning practices between public and private SHS Economics students

Results from the last hypothesis indicate that there is no statistically significant difference in the perceived washback effects of WASSCE on Economics students’ learning practices between public and private SHS Economics students. Results of this study suggest that almost all students, regardless of the school type in which they had studied, perceived the washback effect of WASSCE on their learning practices similarly.

The finding of this current study validates that of Ghorbani and Neissari (2015) who discovered that there was no statistically significant difference between students’ perceptions of the impact of the UEE in view of the school type they were studying. Conversely, the finding of the study is inconsistent with Read and Hayes’s (2003), and Cho (2010) suggestion that one of the explanations for the level of washback effect may be attributed to different contexts of leaning or various school background variables (such as school type). This finding seems to suggest that WASSCE exerts its influence on students learning practices regardless of the school type. The reason is that students’ progress is related to their performance in WASSCE hence irrespective of their school, they would want to pass the WASSCE Economics examination.

Chapter Summary

The study revealed that the WASSCE Economics examination had negative washback effects on Economics teachers’ classroom instructional practices. It was found that teachers held the opinion that the washback effect
of WASSCE on the implementation of the Economics syllabus is negative. Economics students perceived that WASSCE Economics examination had negative washback effect on their learning practices. It was also discovered that there was a statistically significant difference in the perceived washback effects of WASSCE on Economics students’ learning practices between SHS 1, SHS 2 and SHS 3. Again, the study found that there was a statistically significant difference in the perceived washback effects of WASSCE on Economics teachers’ classroom instructional practices between private and public SHS Economics teachers. Lastly, it was also revealed that there was no statistically significant difference in the perceived washback effects of WASSCE on Economics students’ learning practices between public and private SHS Economics students.
CHAPTER FIVE
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Overview

This is the final chapter of the study. It presents a summary of the research process and the main findings on the perceived washback effects of high-stakes test (WASSCE) on the teaching and learning of Economics. Based on the main findings, conclusions are drawn to enable appropriate recommendations to be made as well as suggestions for further research. The summary is divided into two sections. The first section summarizes the research process and the second section summarizes the key findings of the study.

Summary of Research Process

The descriptive cross-sectional survey design was used to investigate the perceived washback effect of high-stakes test (WASSCE) on the teaching and learning of Economics in the Kumasi Metropolis. The following research questions and hypotheses guided the study:

1. What is the perceived washback effect of WASSCE on Economics teachers’ classroom instructional practices?
2. What is the perceived washback effect of WASSCE on the implementation of the Economics syllabus?
3. What is the perceived washback effect of WASSCE on Economics students’ learning practices?
4. H0: There is no statistically significant difference in the perceived washback effect of WASSCE on Economics students’ learning practices between SHS 1, SHS 2 and SHS 3 Economics students.
5. $H_0$: There is no statistically significant difference in the perceived washback effect of WASSCE on Economics teachers’ classroom instructional practices between private and public SHS Economics teachers.

6. $H_0$: There is no statistically significant difference in the perceived washback effects of WASSCE on Economics students’ learning practices between public and private SHS Economics students.

The study employed the descriptive cross-sectional survey design using questionnaire as the only instrument to collect the relevant data in addressing the research questions formulated. The multi-stage sampling technique was used to sample the respondents at three levels. At level one, stratified sampling technique was used to group the schools into two strata. At level two, the simple random sampling technique was used to select a proportion of schools from each strata (private and public schools). At level three, the simple random sampling technique was used to select the respondents for the study. Census method was used to involve all Economics teachers.

A 46-item questionnaire was the instrument used for data collection from teachers and a 23-item questionnaire was used to collect data from students. The respondents comprised of 100 Economics teachers and 600 Economics students. Both descriptive and inferential statistics were used to analyse the data. Specifically, for the descriptive statistics, frequencies and percentages were used to analyse the demographic characteristics of the respondents, the mean and standard deviation for research question one to three and for the inferential statistics, the One-Way ANOVA was used to
analyse research hypothesis one and the independent sample t-test was used to analyse research hypothesis two and three.

Summary of Key Findings

The main findings that were obtained from the study are as follows:

1. The study indicated that the WASSCE Economics test exerted a negative washback effect on classroom instructional practices.
2. The study discovered that the perceived washback effect of WASSCE Economics test on the implementation of the syllabus was negative.
3. The study found that WASSCE Economics examination had a negative washback effect on students’ learning practices.
4. The study revealed that there was a statistically significant difference in the perceived washback effect of WASSCE on Economics students’ learning practices between SHS 1, SHS 2 and SHS 3 Economics students.
5. For the second hypothesis, there was a statistically significant difference in the perceived washback effect of WASSCE on Economics teachers’ classroom instructional practices between private and public SHS Economics teachers.
6. The study found that there was no statistically significant difference in the perceived washback effects of WASSCE on Economics students’ learning practices between public and private SHS Economics students.

Conclusions

The findings of the study have implications for quality teaching and learning of Economics and a number of conclusions can be drawn. Firstly,
teachers adopted teaching methods that made them teach to test and high-stakes tests forced the teachers to teach what they find suitable for students. This might lead to shallow teaching on the part of teachers. Secondly, classroom instructional practices of teachers drive the scope of the syllabus that is being implemented hence a negative washback on the instructional practices leads to teachers narrowing the content of the syllabus. It can be concluded that the use of WASSCE Economics examination as a high-stakes test that drives syllabus implementation, places the Economics curriculum at stake. Additionally, students adopted learning strategies and techniques that leads to rote learning. In Ghanaian senior high schools, high-stakes test have a certain level of effect on classroom instructional practices, implementation of the Economics syllabus and students’ learning practices.

Recommendations

The findings suggest some important actions which should be undertaken if any mark will be made in promoting positive washback of high-stakes test. Therefore, in light of these findings, the following recommendations are made.

1. GES and heads of institutions should provide appropriate in-service training to SHS teachers on testing practices and their effects to avoid the situation of teachers spending their instructional periods preparing students for tests. Teachers should be given in-service training on the relevance of providing quality instructional delivery to students. This will help teachers to teach the broad syllabus/curriculum to achieve real students’ growth and learning, not just “teaching to the test” skill acquisition.
2. Heads of SHS institutions and circuit supervisors should pay particular attention to their supervisory role and ensure that teachers implement broader syllabus or curriculum and not a narrowed syllabus as shown by the current study.

3. WAEC should consider other forms of testing to promote positive or beneficial washback on students’ learning practices. GES should educate students on the fact that standardized tests in the educational system do not actually mean how much they know and can do.

4. In the field of educational assessment and evaluation, measurement experts and researchers must play an active role in engaging stakeholders on testing issues. For instance, WAEC should be made aware that the influence of a high-stakes test does not only affect form 3 students but also form 1 and 2 students hence there should be an alternative way of testing in order to promote positive washback effect.

Suggestions for Further Research

The following recommendations for further studies have been made based on the study’s results and conclusions.

1. The study involved only Economics teachers and students. In other subject areas, a similar study should be conducted at the senior high school level.

2. The study employed quantitative method. It is suggested that future studies on the same topic should use mixed methods.
3. Further studies should concentrate on investigating the influence of university semester’s examination on the learning practices of students.

4. A related study should be carried out to explore the impact of BECE on teaching and learning.
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APPENDICES

APPENDIX A

UNIVERSITY OF CAPE COAST

FACULTY OF HUMANITIES AND SOCIAL SCIENCES EDUCATION

DEPARTMENT OF BUSINESS AND SOCIAL SCIENCES

EDUCATION

QUESTIONNAIRE FOR ECONOMICS STUDENTS

Dear Respondent,

This questionnaire is developed to investigate the perceived washback effects (influence) of high-stakes test (WASSCE) on the teaching and learning of Economics in the senior high schools of the Kumasi Metropolis. The study is solely for academic purposes. Please, kindly provide sincere and objective responses to the questions. I assure you that any information provided will be treated as strictly confidential.

SECTION A: Demography of Respondents

Please put a check mark (✓) where appropriate in the box corresponding to your choice concerning each statement.

1. Name of School:………………………….

2. School Proprietorship:……………Private [   ]          Public [   ]

3. Sex:                         Male  [   ]           Female   [   ]

4. Age:                 under 15yrs [   ]  15 – 18yrs [   ]  19 – 24yrs [   ]  25 and above [   ]

5. Form    One [   ]          Two [   ]      Three [   ]
**Instruction:** Please tick [✓] the appropriate box to indicate your level of agreement or disagreement with each statement on the Likert Scale items of section B.

**Key:** Strongly Agree (SA); Agree (A); Neither Agree nor Disagree (NA); Disagree (D); Strongly Disagree (SD)

### SECTION B

**PERCEIVED WASHBACK EFFECTS OF HIGH-STAKEES TEST (WASSCE) ON ECONOMICS STUDENTS’ LEARNING PRACTICES**

**INSTRUCTION:** To respond in this section, please put a check mark (✓) in the appropriate box to indicate your level of agreement or disagreement with each statement on the Likert Scale items.

**Key:** Strongly Agree (SA); Agree (A); Neither Agree nor Disagree (NA); Disagree (D); Strongly Disagree (SD)

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<thead>
<tr>
<th>S/N</th>
<th>Economics Students’ Learning Practices</th>
<th>SA</th>
<th>A</th>
<th>NA</th>
<th>D</th>
<th>SD</th>
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<tbody>
<tr>
<td>6</td>
<td>I use rote learning approach to memorize most of the things taught in class.</td>
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<td>7</td>
<td>I give attention to topics and contents which are likely to be tested in WASSCE</td>
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<td>8</td>
<td>I skip classes to have personal studies</td>
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<td>9</td>
<td>I practice and solve more of WASSCE Economics past questions</td>
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<td>10</td>
<td>I ask for test-taking strategies from teachers in order to prepare us for the final examinations.</td>
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<td>11</td>
<td>I spend more time learning topics and past Economics questions that are likely</td>
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<td>12</td>
<td>I attend extra classes both on campus and at home to help me prepare for WASSCE.</td>
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<td>13</td>
<td>I combined different text books of Economics to have varied ideas when learning</td>
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<td>14</td>
<td>I do not care about the Economics syllabus while learning</td>
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<td>15</td>
<td>Learning comes with a lot of stress in school as I prepare to take WASSCE.</td>
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<td>16</td>
<td>I feel pressurised to cover the syllabus before the final examination (WASSCE).</td>
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<td>17</td>
<td>I skip contents and topics that are not likely to be tested in WASSCE when learning.</td>
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<td>18</td>
<td>WASSCE makes me to memorise most of the things taught in class without getting deeper understanding.</td>
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<td>19</td>
<td>WASSCE do not provide enough room (e.g. in terms of time) for me to learn.</td>
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<td>20</td>
<td>I rely on textbooks and WASSCE Economics past questions when learning.</td>
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<td>21</td>
<td>WASSCE discourages me to make use of different textbooks of Economics.</td>
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<td>22</td>
<td>WASSCE discourages me to search for reliable and authentic information to support the Economics textbooks.</td>
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<td>23</td>
<td>I don’t find interest studying the Economics textbook materials because of WASSCE.</td>
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APPENDIX B

UNIVERSITY OF CAPE COAST

FACULTY OF HUMANITIES AND SOCIAL SCIENCES EDUCATION

DEPARTMENT OF BUSINESS AND SOCIAL SCIENCES

EDUCATION

QUESTIONNAIRE FOR ECONOMICS TEACHERS

Dear Respondent,

This questionnaire is developed to investigate the perceived washback effects (influence) of high-stakes test (WASSCE) on the teaching and learning of Economics in the senior high schools of the Kumasi Metropolis. The study is solely for academic purposes. Please, kindly provide sincere and objective responses to the questions. I assure you that any information provided will be treated as strictly confidential.

SECTION A: Demography of Respondents

Please put a check mark (√) where appropriate in the box corresponding to your choice concerning each statement.

1. Name of School:…………………………..

2. School Proprietorship:…………………
   [ ] Private  [ ] Public

3. Sex:                             Male [ ]           Female [ ]

4. Age:    25-30yrs [ ]   31-36yrs [ ]    37-42yrs [ ]    43-48yrs [ ]

5. Academic Qualification:
   [ ] Diploma in education (Dip. Ed)
   [ ] Bachelor of education (B. Ed)
   [ ] Bachelor of Art/Bachelor of Social science
   [ ] BA/B.Sc with PGDE

135
Master of Education (M. ED) [ ]  
MPhil in Education (M. Phil) [ ]  
MA/M.Sc [ ]  
Other (specify) ……………………………………………………

6. Teaching Experience (Economics): 0-5yrs [ ] 6-10yrs [ ] 11-15yrs [ ] 16-20yrs [ ] 21-25yrs [ ] 26yrs and above [ ]

Instruction: Please tick [√] the appropriate box to indicate your level of agreement or disagreement with each statement on the Likert Scale items of sections B & C.

Key: Strongly Agree (SA); Agree (A); Neither Agree nor Disagree (NA); Disagree (D); Strongly Disagree (SD)

SECTION B

PERCEIVED WASHBACK EFFECTS OF WASSCE ON ECONOMICS

TEACHERS’ CLASSROOM INSTRUCTIONAL PRACTICES

<table>
<thead>
<tr>
<th>S/N</th>
<th>Statements</th>
<th>SA</th>
<th>A</th>
<th>NA</th>
<th>D</th>
<th>SD</th>
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<tbody>
<tr>
<td>7</td>
<td>I don’t teach in a way that my students understand because of WASSCE.</td>
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<td>8</td>
<td>WASSCE discourages me to adopt innovative methods and techniques of teaching.</td>
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<td>9</td>
<td>I sometime change my methods of teaching to reflect WASSCE requirements</td>
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<td>10</td>
<td>Methods and techniques, I employ in teaching become more ‘test-like’ in the third year than second and first years.</td>
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<td>11</td>
<td>I sometime skip some topics and contents because they are unlikely to be tested in WASSCE</td>
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<td>12</td>
<td>I give more attention to contents which are likely to be assessed on WASSCE</td>
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<td>13</td>
<td>I do ignore tasks and activities that are not directly related to the purpose of WASSCE when teaching.</td>
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<td>14</td>
<td>I teach test-taking strategies at all the levels in order to prepare students for WASSCE.</td>
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<td>15</td>
<td>I practice and solve WASSCE past questions with students during instructional periods</td>
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<td>16</td>
<td>I give model tests in the format of WASSCE to help prepare them.</td>
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<td>17</td>
<td>I emphasize and sometimes re-teach topics which are likely to be assessed in WASSCE.</td>
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<tr>
<td>18</td>
<td>WASSCE does not make me to improve classroom instruction and practices.</td>
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<td>19</td>
<td>WASSCE does not permit teachers to use the full range of their teaching skills.</td>
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<td>20</td>
<td>WASSCE leads to better teaching.</td>
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<td>21</td>
<td>The quality of my teaching is directly related to student performance in the WASSCE.</td>
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<td>22</td>
<td>WASSCE reduces the teaching and learning process to a student’s test score.</td>
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<td>23</td>
<td>WASSCE discourages teachers to improve the teaching and learning process.</td>
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<td>24</td>
<td>WASSCE discourages me to engage in student-centred mode of instruction.</td>
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<td>25</td>
<td>WASSCE had made me to encourage my students to memorize factual concept.</td>
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<td>26</td>
<td>WASSCE does not make me prepare more teaching and learning materials.</td>
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<td>27</td>
<td>I do make selection of teaching and learning materials which are relevant for the purpose of WASSCE.</td>
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<td>28</td>
<td>WASSCE discourages me to gather information from reliable and authentic sources to prepare my own teaching materials.</td>
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<td>29</td>
<td>WASSCE discourages me to make use of different Economics textbooks from teaching related materials.</td>
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<td>30</td>
<td>I recommend well-prepared Economics textbooks with a lot of exercises following the format of WASSCE to students.</td>
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SECTION C

PERCEIVED WASHBACK EFFECTS OF WASSCE ON THE IMPLEMENTATION OF THE ECONOMICS SYLLABUS

*Key:* Strongly Agree (SA); Agree (A); Neither Agree nor Disagree (NA); Disagree (D); and Strongly Disagree (SD)

<table>
<thead>
<tr>
<th>S/N</th>
<th>Statement</th>
<th>SA</th>
<th>A</th>
<th>NA</th>
<th>D</th>
<th>SD</th>
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<tbody>
<tr>
<td>31</td>
<td>I do not care about the Economics syllabus while teaching.</td>
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<td>32</td>
<td>I am not aware of the objectives of the Economics syllabus in which I teach</td>
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<td>33</td>
<td>I feel pressurised to cover the economics syllabus before the final examination.</td>
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<td>34</td>
<td>If there is no WASSCE, the content of my teaching will be better from what I teach now.</td>
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<td>35</td>
<td>WASSCE hardly permit me to give attention to the requirements of each topic in the Economics syllabus.</td>
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<td>36</td>
<td>WASSCE sometimes makes me adopt “finish the syllabus” syndrome</td>
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<td>37</td>
<td>I design Economics lessons and content around WASSCE requirement.</td>
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<td>38</td>
<td>WASSCE makes me do less lesson preparation.</td>
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<td>39</td>
<td>I do not teach every section in the syllabus because some sections are unlikely to be tested</td>
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in WASSCE.

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<tr>
<td>40</td>
<td>WASSCE has led me to reassess my beliefs about subject matter that is important to teach.</td>
</tr>
<tr>
<td>41</td>
<td>WASSCE hardly permit me to give equal attention to all topics.</td>
</tr>
<tr>
<td>42</td>
<td>For students to get higher scores in the WASSCE means that I should solve more past questions with my students.</td>
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<tr>
<td>43</td>
<td>WASSCE test questions do not accurately reflect the content students learn in the Economics syllabus implemented by schools.</td>
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<tr>
<td>44</td>
<td>WASSCE Economics questions don’t cover all the economics syllabus objectives.</td>
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<tr>
<td>45</td>
<td>WASSCE content is not aligned with the Economics syllabus.</td>
</tr>
<tr>
<td>46</td>
<td>WASSCE requires teachers to teach to the test.</td>
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</tbody>
</table>
APPENDIX C

ETHICAL CLEARANCE LETTER

UNIVERSITY OF CAPE COAST

INSTITUTIONAL REVIEW BOARD SECRETARIAT

TEL: 0558923410/11 F: 0558763999/0344000714
E-MAIL: irb@ucc.edu.gh

URG #: 0076/2016/06/08

12TH JUNE, 2020

Mr. Francis Arthur

Department of Business and Social Sciences Education
University of Cape Coast

Dear Mr. Arthur,

ETHICAL CLEARANCE – ID (UCCIRB/CES/2020/19)

The University of Cape Coast Institutional Review Board (UCCIRB) has granted Provisional Approval for the implementation of your research protocol Perceived Washback Effects of High-Stakes Test on Teaching and Learning: A Study of Senior High School Economics Teachers and Students. This approval is valid from 12th June, 2020 to 11th June, 2021. You may apply for a renewal subject to submission of all the required documents that will be prescribed by the UCCIRB.

Please note that any modification to the project must be submitted to the UCCIRB for review and approval before its implementation. You are required to submit periodic review of the protocol to the Board and a final full review to the UCCIRB on completion of the research. The UCCIRB may observe or cause to be observed procedures and records of the research during and after implementation.

You are also required to report all serious adverse events related to this study to the UCCIRB within seven days verbally and fourteen days in writing.

Always quote the protocol identification number in all future correspondence with us in relation to this protocol.

Yours faithfully,

[Signature]

Samuel Asiedu Owusu, PhD

UCCIRB Administrator
APPENDIX D

INTRODUCTORY LETTER

UNIVERSITY OF CAPE COAST
COLLEGE OF EDUCATION STUDIES
FACULTY OF HUMANITIES & SOCIAL SCIENCES EDUCATION
DEPARTMENT OF BUSINESS & SOCIAL SCIENCES EDUCATION

TO WHOM IT MAY CONCERN

Dear Sir/Madam,

INTRODUCTORY LETTER

Mr. Francis Arthur is an M.Phil. Economics Education student of this Department. As part of his education, he is supposed to design and execute research of acceptable standard. With this, he is working on the research topic: “Perceived Washback Effects of High-Stakes Test on Teaching and Learning: A Study of Senior High School Economics Teachers and Students”.

His study seeks to investigate the perceived washback effect of WASSCE on the teaching and learning of Economics. Again, the study seeks to ascertain the influence of WASSCE Economics exams on the classroom instructional behaviours of Economics teachers and the implementation of the Economics syllabus. The study further sought to find out the influence of WASSCE Economics exams on students’ learning practices.

He would need primary data from teachers and students from selected senior high schools in the Kumasi Metropolis.

In case he flouts any ethical requirements as the study may necessitate, kindly get in touch with his supervisor, Alhaji Dr. M. B. Yidana on the telephone number 0542638860 or through e-mail myidana@ucc.edu.gh. You may also get in touch with the Department on the telephone number 0209408788 or through e-mail dbsse@ucc.edu.gh.

We would be grateful if you could give him the necessary assistance to enable him complete the research.

Thank you.

Yours faithfully,

DR. JOSEPH TUFUOR KWARTENG
HEAD

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APPENDIX E

Teacher Consent Form

Dear Respondent,

I am conducting a research study and would like to enlist your assistance. It should take about 10-30 minutes of your time if you are willing to participate. I would be grateful if you could complete the attached instrument, which seeks to investigate the perceived washback effects of high-stakes tests (WASSCE) on the teaching and learning of Economics.

You can be confident that the responses you provide will remain anonymous, and that no personal information about you will be used in any way.

Please sign the space provided below.

Thank you.

I……………………………………………………….. agree to participate.
APPENDIX F

Student Consent Form

Dear Respondent,

I am conducting a research study and would like to enlist your assistance. It should take about 10-30 minutes of your time if you are willing to participate. I would be grateful if you could complete the attached instrument, which seeks to investigate the perceived washback effects of high-stakes tests (WASSCE) on the teaching and learning of Economics.

You can be confident that the responses you provide will remain anonymous, and that no personal information about you will be used in any way.

Please sign the space provided below.

Thank you.

I……………………………………………………….. agree to participate.