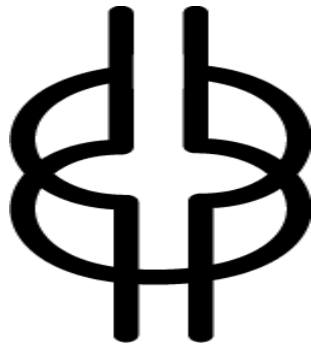# Ghana Journal of Education: Issues and Practice (*GJE*)

NYANSAPO – "Wisdom Knot"

Symbol of wisdom, ingenuity, intelligence and patience

Ghana Journal of Education: Issues and Practice (*GJE*)

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Editorial Comment

The Ghana Journal of Education: Issues and Practice (GJE) is a peer-reviewed journal focusing on classroom practice and policy issues that affect teaching and learning. In this volume, researchers and authors have contributed a wealth of high-quality and informative material. This volume contains five articles that have gone through the peer review process at three levels by independent reviewers.

Fr Raymond Chegedua Tangonyire, SJ uses education policy documents to argue for a co-owned contextual interpretation of the concept of quality education to create communal familiarity, co-agency and coherent communication necessary for its institutionalisation in Ghana. The author identifies that quality education has failed to receive context-based conceptualisation, perhaps because of the complex nature of the phrase. The author recommends that the Ministry of Education organises workshops for stakeholders to provide a co-owned interpretation of quality education, draws an action plan and educates the Ghanaian citizenry to understand and align their efforts towards its achievement.

Sophia Ohene-Darko and Kwaku A. Boakye explore the views and familiarity of food service operators on the regulation of their operations in the Cape Coast Metropolis of Ghana. The findings showed that food service operators had functional knowledge of the rules and regulations, just enough to guide their daily operations. In addition, regulators were generally perceived to be friendly and accommodating but inadequate and irregular in their supervisory roles. The study recommended that regulators have regular encounters with food service operators to enhance compliance and achieve the food safety goal.

Charles Adabo Oppong and Adjei Adjepong examine the missing link in history education in the Basic School curriculum of Ghana. The authors argue that while introducing history as a core subject at the Primary School level is widely accepted, the neglect of same at the Junior High School (JHS.) level presents a missing link in history education in Ghana. They maintain that teaching history at the JHS level provides a crucial link between Primary School history and Senior High School history, which is a leveraging platform for studying history at the tertiary level. The study recommends that incorporating history into the JHS curriculum would ensure continuity in the study of history from the Primary School level to the tertiary level and give more

meaning to the rationale behind introducing history at the Basic School level.

Yidana Baba Mumuni and Francis Arthur investigate students' level of academic cognitive engagement in the learning of Economics using quantitative research. The study revealed that Economics students' level of academic cognitive engagement was high. Also, there were statistically significant differences in Economics students' level of academic cognitive engagement based on their school location. In addition, there were statistically significant differences in Economics students' academic cognitive engagement based on school category. The study recommended that rural school teachers employ teaching strategies to help students use deep learning strategies in Economics.

Gabriel Kumah, Stephen Doh-Fia, Eugene Kwarteng-Nantwi and Joshua A. Omotosho explore the influence of a programme of study on the adjustment challenges colleges of education students face in the Eastern Region of Ghana. Data were collected from 320 students through an online questionnaire using the descriptive research survey design. The findings showed, among others, that the programme of study significantly influenced the adjustment challenges faced by colleges of education students. The authors recommend that college counsellors/administrators assess the frequency and intensity of student adjustment problems to assist relevant bodies at colleges of education in the Eastern Region in designing appropriate orientation and peer mentoring programmes.

The editorial team is grateful to all reviewers for the useful feedback they offered on the papers they reviewed and the professionalism they exhibited through the review process. To the Provost of the College of Education Studies, University of Cape Coast, the team would like to say a big thank you for the continual financial and logistical support which has made the publication of GJE possible.

Implementing Quality Education: The Inevitability of a Co-owned and Context-based Conceptualisation as the Best Starting Point

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Abstract
This conceptual article argues for a co-owned contextual interpretation of the concept of quality education to create communal familiarity, co-agency and coherent communication necessary for its institutionalisation. The article analysed education policy documents including the current 2018-2030 education strategic plan which provides a blueprint for the development of education. The analysis revealed that quality education is an important policy concept that enjoys rhetoric. The 2018-2030 education strategic plan canonises quality education for its potential to equip Ghanaians adequately to meet the needs of the twenty-first century. However, quality education has failed to receive context-based conceptualisation perhaps because of the complex nature of the phrase. Drawing from Wittgenstein's (1953) warning against imprecise use of language, the article argues for a co-owned contextual interpretation of quality education to facilitate its successful implementation in Ghana. The article then shares how the Leadership for learning and the Singapore triad models of interpreting and applying policy concepts can benefit communal familiarity and application of policy concepts. The Ministry of Education should organise workshops for stakeholders to provide a co-owned interpretation of quality education, draw an action plan and educate the Ghanaian citizenry to understand and align their efforts towards its achievement.

Keywords: Quality   education;   co-owned   contextual   conceptualisation;
                  implementation; education stakeholders; Ghana

Introduction
        The quest for quality education has gained momentum globally in the past decade or two. Goal four of the current United Nations

Agenda 2030 Sustainable Development Goals – SDGs emphasises the provision of equitable quality education to all learners. Earlier, as Chinapah, H'ddigui, Kanjee, Falayajo, Fomba, Hamissou, Rafalimanana and Byomugisha stated, the United Nations Educational, Scientific and Cultural Organisation (UNESCO) and United Nations International Children's Fund (UNICEF) had jointly sponsored the "With Africa for Africa: Towards Quality Education for All" report. In this document, these organisations argued that quality education is a fundamental human right that needs which needs to be known and shared by all (Chinapah et al., 2000). Few years later, UNESCO published an anthology, "Cross-national Studies of the Quality of Education" (Pigozzi, 2006). The very title of this anthology bears testimony to the fact that the quest for quality education transcends national boundaries. As chapter two of the anthology emphasises, quality education is a salient global issue because Non-Governmental Organisations (NGOs), businesses, the public and various Ministries next to the Ministry of Education have come to appreciate the strong link quality education has with human and national development (Pigozzi, 2006). Thus, governments and education policymakers are under pressure to rethink quality education and how it can be achieved. It is no surprise that African Heads of State and Government in their 22nd Ordinary Session of the Assembly of the African Union in Addis Ababa (African Union, 2014) declared quality education as imperative for achieving excellence in human resources capacity and development in Africa.

In Ghana, the term quality education has been part of the vocabulary of education stakeholders for many decades. I am one of the products of the 1987 new educational reform programme that replaced the ordinary and advanced level systems with junior and senior secondary school systems respectively. I still recall vividly how on numerous occasions, educators, in comparing their school days with ours reminded us that they enjoyed a better quality of education than we were experiencing. At the same time, I remember the proponents that brought about the junior-senior high school reform insisting that the reform was equipping learners with the quality education that would build their cognitive and psychomotor skills to make them creative and employable. Years later, especially since the implementation of the Free Compulsory Universal Basic Education (FCUBE) in 2005 and recently, the 2017 free senior high education policies, quality education

became the catch phrase of the times. Polemics about how these policies ensure both access to and quality of education are achieved continue unabated. Education stakeholders, including politicians or policymakers, practitioners, researchers and learners continue to talk about quality education from their standpoint in both formal and informal conversations and documentation.

It is worthwhile to listen to any discourse on education today, be it on the airwaves, television, social and print media, or among people including the common men and women selling their wares in the market. What is common is a strong quest for quality education implying that quality education has become part of the national consciousness of Ghanaians. This is a reality which Marx and Engels had already emphasised in the 19th century when they stated that: "Language is practical; real consciousness that arises from necessity, and [is] from the very beginning a social product", as cited in Lock and Strong (2010, p. 85). In the current 2018-2030 Education Strategic Plan (ESP), which specifies Ghana's ambition to deliver quality education at all sub-sectors of education, quality education is strategically positioned and stressed a good twenty-eight times. In the "Foreword" to the ESP, the former Minister of Education, Dr Mathew Opoku Prempeh describes quality education as crucial for equipping Ghanaians with relevant education and skills for socioeconomic development and national orientation (Ministry of Education, 2018). Thus, achieving quality education is Ghana's education priority from kindergarten to tertiary level. This aligns with the United Nations' Agenda 2030 Sustainable Development Goals on which the current global development agenda are anchored (Ministry of Education, 2018).

The current emphasis on quality education in Ghana is dynamic akin to what James (1971, p. 129) shared of his native USA about fifty years ago:

We now hear demands for 'quality education' from every side. This chorus of popular rhetoric, rising from the rich and the poor, from politicians and laymen, from bureaucrats and academics, from parents and from students, from the wise and from the silly, is stirring a mindless response all too acceptable in the ensuing din.

Decades later, and continents apart, Ghana has fallen prey to a similar challenge – a crescendo of responses which fail to articulate

collaboratively what quality education means in a Ghanaian context and how we can coherently align efforts towards its institutionalisation.

It is important to acknowledge that some scholars of the Ghanaian academic community have contributed to the discourse on quality education in project reports and academic journals. Some of these include: Ankomah, Koomson, Bosu, and Oduro's (2005) technical report titled, "A Review on the Concept of Quality in Education: Perspectives from Ghana", Adu-Agyem and Osei-Poku's (2012) "Quality of Education in Ghana: The Way Forward", and Boakye-Amponsah, Enninful, Anin, and Vanderpuye's (2015) "Achieving Quality Education in Ghana: Spotlight on Primary Education" articles. Worthy as their contributions among others may be to the discourse on quality education, there have been some major shortfalls relating to the question of what quality education means for Ghana. Firstly, as far as available current and relevant literature is concerned, there is no context-based co-owned conceptualisation of quality education for Ghana around which policymakers, practitioners, educators and learners can clearly focus and align their educational efforts.

Secondly, the available definitions of quality education presented by the above authors are for the specific contexts of their research, and turned to re-echo the general interpretations of quality education provided in UNESCO's (2004) "Education for all quality imperative" report. Yet, contextualised timing of meanings of concepts or what Lock and Strong (2010, p. 91) refer to as "chronotopes" is important. Otherwise, there is the propensity for language, the product of people's social interaction to become so formalised that it estranges its very creators (Marx as cited in Lock & Strong, 2010). This implies that clear context-based conceptual and operational definitions are crucial for appropriation and implementation of policy concepts that seek national development.

As acknowledged later in this article, quality education is a very complex phrase and for that reason, if Ghana fails to conceptualise it according to its existential needs but rather leaves it to freelance interpretation, the national outcome may be that of a treadmill. In other words, a co-created context-based conceptualisation of quality education by education policymakers and other stakeholders has the propensity to engender co-ownership, co-communication and coherence or alignment of efforts towards its achievement. Relying on

Wittgenstein's (1953) theory of language games, this conceptual article has a two-pronged objective: firstly, it argues for a clear definition of the concept of quality education in Ghana. Secondly, it justifies the need for a national co-owned conceptualisation of quality education. To demonstrate how collaborative familiarity or co-owning of policy concepts can inspire their application, I provide research and practice-informed case scenarios. I should clarify that it is beyond the aim and scope of this article to propose a definition of quality education since the central argument is a call for a collaborative definition that is informed by Ghana's existential needs rather than isolated atomistic interpretations.

The article is structured into four sections to enable a systematic engagement with the issue under consideration. The first section reflects the rise in demand for quality education by considering the dynamics that inspire a paradigm shift from an emphasis on access to education to a focus on quality of education. The second section focuses on the challenge of defining quality education. The third section relies on Wittgenstein's idea of language games to argue that notwithstanding the challenge of conceptualising quality education, it is imperative for a co-owned stakeholder clarification of the concept of quality education if Ghana is to achieve it. Related to the third section is section four which provides research and practice-based evidences to demonstrate how contextually interpreting or conceptualising quality education can lead to coherence, effective communication and application. The proposal of the case scenarios is also to offer insights into how co-owned conceptualisation of policy concepts can be done. The final section concludes the article.

The Rise in Demand for Quality Education
It is now common knowledge that scholars, policymakers, governments and their development partners, and practitioners increasingly converge in their appreciation of the crucial role quality education plays in achieving sustainable human and national development. Reimers and Chung (2016) of the Global Education Initiative at the Harvard Graduate School of Education corroborated this convergence. They stated that in a global survey of attitudes administered in forty-four developed and developing countries to identify the most important factor that gets people ahead in life, quality education ranked only on a par with hard work. In further comparison

of the perceptions of populations in developing and emerging economies and developed countries, quality education is considered even more important to the populations of the developing and emerging economies in getting them ahead in life. This perhaps, is based on the conviction that the enviable economic, scientific and technological heights which developed economies attained are traceable to the provision of quality relevant education to their citizenry. This view resonates with Eduardo Porter who in his May 2015 article in the New York Times, "More in School, but not Learning", asserts that "an educated population is a critical precondition for broadly shared prosperity – an essential tool for nations seeking a role in the global production chains driving economic growth around the world" (Porter, 2015, p. 1).

But who constitutes or should constitute the "educated population" that Porter is referring to? The privileged few? Obviously, the answer is a "No", because as international institutions including UNESCO, the World Bank, governments of both the developed and the developing world amply echoed, everyone should enjoy equitable quality education. The 1990 Jomtien World Conference on Education for All and the 2000 Dakar World Forum on Education for All (EFA) reflected the deliberate desire of governments, international organisations and all advocates of education for every school-going child to enjoy formal education. This may have been the impetus for "universal primary education" as one of the core Millennium Development Goals of the United Nations. By 2012, as Porter (2015) states, 75 per cent of children of primary school age in Sub-Saharan Africa were in school and an impressive 94 percent of South Asian children were enrolled in schools. However, does this phenomenal progress in access to education come with the needed quality where school graduates are educated sufficiently and holistically to exhibit competence, conscience, compassion and commitment that propel their nations to development? This is a difficult question to answer given that the degree of success in integral education differs from continent to continent, country to country and even within countries.

Notwithstanding these differences, scholars including the Stanford University's expert on the economics of education, Eric Hanushek is quoted by Porter (2015, p. 1) in his New York Times article as saying that, "we've made substantial progress around the globe in sending people to school but a large number of people who

have gone to school haven't learned anything". Hanushek seems to suggest that learning is a key determinant of whether or not education is of "quality". The caption of Porter's article, "More in School, but not Learning" resonates with Hanushek's view. In this article, Porter asserts that, "if the challenge was to provide a minimum standard of education for all, what looks like an enormous improvement too often amounted to a stunning failure" (p. 1) because quality is lacking. Earlier, UNESCO (2004) had acknowledged, based on research and experiential evidence, that a mere expansion in enrolment of children in school does not lead to a higher level of education unless it is accompanied by quality education. This realisation, among other evidences, may have inspired national governments, international organisations and lovers of education to intensify the quest for quality education. In the Dakar World Forum on Education For All, the need for quality education was stressed as evidenced in goals two, five and six of the forum (King, 2007) and recently, in goal 4 of the Sustainable Development Goals. It is argued that quality education for all, is not just one of the seventeen sustainable development goals but is central to the achievement of all of them (Reimers et al., 2016). I have stated earlier in this article that the explicit freewheeling desire for quality education is ubiquitous in mass media as well as printed documents in Ghana.

Quality Education in Ghana: What is There in the Plans?
   Successive Ghanaian governments and their development partners have over the years shown interests in providing a holistic education for their citizenry. This, inter alia, is evidenced in a few documents some of which are analysed in this article. Analysing the main educational reforms in Ghana – the 1951 and 1961 Accelerated Development Plans (ADP) for education, the New Structure and Content of Education (NSCE) reform of 1974, and the 1987 New Educational Reform Programme (NERP), there is historical evidence that these reforms express efforts to provide equitable access to quality education. Even though, none of the documents explicitly mentions or emphasizes the concept of quality education nor defines it, they do express the desire of Ghana to provide holistic education which can be considered as coterminous with quality education. For example, the NSCE and NERP reforms emphasised the nation's drive to adequately educate the "heads", "hearts" and "hands" of the citizenry; that is to

educate cognitive, socio-affective and psychomotor faculties of learners.

At the beginning of the millennium, the Anamuah-Mensah's (2002) Committee that reviewed Ghana's education in the 21st century, and later, the 2008 Education Act 778 show that quality education was important for Ghana to achieve its developmental needs. Ghana's current 2018-2030 ESP has further expressed the nation's desire for quality education. As the Ministry of Education (2018, p. 13) states, "the overall goal of the education sector is to deliver quality education at all levels to equip Ghanaians with skills and competencies to meet the needs of the labour market, human development, poverty reduction, national integration, and international recognition". Therefore, it can be said that government education policy documents have embedded the desire to provide quality education.

However, the question remains: What is it that underline (s) quality education that equips Ghanaians at all levels? Is it a "learning nation" into which as the Ministry of Education claims, the ESP 2018-2030 ambitions to transform Ghana? If it is, what does learning denote for the policymakers and to what extent are other stakeholders of education including directors of education, headteachers, teachers, learners, parents, education researchers, and the media, part of this understanding? Do these stakeholders share in this understanding and own it? I raise these questions because some of the more successful efforts to promote, implement and enforce good policies are those that have been built upon the broad involvement of education stakeholders including teachers and students (Pigozzi, 2006; Reimers & Chung, 2016). I also wonder whether quality education at all levels implies that the concept carries the same meaning across the different tiers of the Ghanaian educational system – basic, senior high and tertiary levels, or whether it means different things at the different levels. If quality education has the same meaning or different meaning across the different sub-sectors of education, it is crucial to clarify it to enable stakeholders to cohere appropriate efforts for its achievement.

Recently, Huebner (2022) analyses the social theory of symbolic interactionism of the American pragmatist, Herbert Mead. The author emphasises the crucial importance of social process of cooperative social acts which can [engender] "the development of the social self, self-reflection and role taking" (p. 2). Huebner who talks about significant symbols – gestures or languages, advocates a

"universe of discourse" (p. 34) that enables people to share and develop co-owned familiarity or meanings of language. This is because the human ability to act rationally emanates from the already-ongoing social process. Thus, "the more we understand the shared meaning that symbols have for a broader group of communicators, the more we can craft wider plans of action, and stimulate our actions more effectively in the expansive social process" (Huebner, 2022, p. 68).

Scholars have provided varied and contested interpretations of access and quality as they relate to education. As explained in this article, the views of Hanushek, Porter, and UNESCO insinuate that access to education and quality of education carry different meanings, with access dealing with getting students enrolled in school and quality being linked to the effective learning of students arguing that learners can have access to education without learning. In his expanded vision of access to education, Lewin (2015) presents a different view of access arguing that access to education transcends mere enrolments in schools to include judgements of educational quality. Ideally, access and quality should go in tandem. However, in the Ghanaian context, challenges including inadequate government funding, poverty (Ghana Statistical Service, 2014; Ministry of Education, 2018) and inadequate school leadership (Zame et al., 2008), among others, have made the project of improving access side by side quality, difficult to achieve in Ghana. Whatever be the case, the current reality is that quality education is the phrase that occupies policy, media and intellectual spaces. Thus, it is important to ask what the notion of quality means. What makes an education quality? Is quality something that can be measured? If yes, how? These are vexing questions and make the definition and communication of quality education challenging as the next section demonstrates.

Quality Education: The Challenge of Definition and Communication

The phrase, "quality education" is a dynamic concept that is difficult to unpack. As a product of a "marriage" between two already contested and complex words, "quality" and "education", quality education is an intricate and politically contentious (Porter, 2015) terrain to navigate with regard to its interpretations. "Its meaning becomes inseparable from the vantage points and the particular interests of the party or parties using the phrase" (Shedd, 1971, p. 138). Scanning

through available sources, I realise that the word "quality" features extensively throughout published literature in almost every discipline including education, research, leadership and development. For example, a search for the word in search engines including ERIC, BRI, JSTOR, Cambridge Core, and Google Scholar, revealed scores of usages or applications captured in phrases such as teacher quality, quality school, quality teaching, quality engineering, quality assurance, quality assessment, just to cite a few. An attempt to find its exact meaning in these different contexts of application shows that quality is a complex and convoluted concept that is extremely difficult to give an all-embracing meaning. In their technical report, "A Review on Quality in Education: Perspectives from Ghana", Ankomah et al. (2005) describe the concept of quality as very evasive and perplexing to define. Quality is a concept that people know when they experience it, but describing and explaining it is a more difficult task (Sallis, 1996). This notwithstanding, for the purposes of this article, quality education represents a dynamic human reality that is both a means and an end. As a means, quality education enables learners to cultivate and nurture their multiple intelligences and capacities to contribute to the common good of humanity. In other words, it is a process of sustainable growth that assures and sustains competence, conscience, compassion and commitment of learners through learning, teaching, leadership and assessment. The word "growth" in this context connotes a process of continual progress or development in knowledge, values and opportunities. Quality education becomes an end when its beneficiaries radiate the above qualities in daily professional and relational spaces.

Similarly, the word "education" presents a complexity in its interpretation by scholars. In most cases, scholars anchor themselves on values like human development and well-being as entry points to interpreting this concept. Thus, advocates of education ¬– individuals, governments, and organisations approach the interpretation of education through the lenses of concrete realities including economics, rights, sociology, leadership, psychology, health, and morality. From an economic point of view, for instance, scholars interpret education through its relationship to jobs and economic well-being (Hanushek & Woßmann, 2010) and inequality and socio-economic gaps (Machin & Vignoles, 2004). A common reality these authors acknowledge about education is its role in increasing human capital, labour productivity, innovative capacities of economies, knowledge of new technologies

and their transmission for economic growth. However, they also acknowledge that education can breed inequality and widen socio-economic gaps. This double propensity of education to empower and deprive is what led to the conceptualisation of education through other lenses such as rights, citizenship and equity. Writers like Howe and Covell (2005) and Reimers et al. (2016) are examples of scholars who consider education through the lenses of rights and citizenship functionally linking education to the creation of a world with sustainable peace, equal opportunities for women and men, and ecological sensitivity. What all these dynamics about the concepts of quality and education show is that even as atomic units, they are broad and complex. They encompass literally every aspect of human reality and must be attached to a specific discipline or human endeavour to make some level of sense.

If as atomic units, defining quality and education is like an exercise of getting a live cat to lie on its back, the job of unpacking these words in their conjoined form as "quality education", can only be more challenging. It may mean one thing to a politician or policymaker, researcher, headteacher, literate parent, an illiterate parent from an urban slum and one from a rural area, and quite another to a teachers' union official, a gender activist or an unemployed graduate. Thus, the meaning of quality education is inseparable from the vantage points and the particular interests of the party or parties using the phrase (Shedd, 1971). It means one thing if people believe education should be about the creation of a new social order, jobs, security, justice; and another if they feel it should simply transmit received values. The complexity of the phrase may have accounted for the preferential option for silence over and above endeavouring to give quality education a co-owned context-driven conceptual and operational construal in Ghana. Interpreting complex concepts like quality education contextually requires a degree of audacity to embrace what Reimers and Chung (2016) refer to as an adaptive challenge – the task required in ensuring and reconciling multiple perspectives to make education relevant and practical in response to different perceptions of what problems and opportunities merit the attention of education stakeholders.

Why Quality Education Needs Co-Owned Stakeholder Interpretation

The very fact that language in general and the concept of quality education for that matter is complex and difficult to define is a very good premise on which to argue for the phrase to be given a co-owned contextual character, calibration or interpretation. Human social life – experience, behaviour and practice, as Wittgenstein (1953) explains, are intricately linked to language and are inescapably expressed through language. This implies that the way Ghanaians interpret quality education can impress or depress, construct or deconstruct, and build or destroy the very blessings quality education seeks to achieve. Thus, an imprecise interpretation of language can be a recipe for confusions and distortions that depress social practice (Ribes-Iñesta, 2006) including efforts towards achieving quality education.

Many years ago, the Cambridge University's philosopher of language, Wittgenstein (1953) had sensed the danger of incoherence and imprecise use of language and warned that since language is already vague, imprecision in its usage can prove to be a disincentive to the very purposes it seeks to achieve. Like a toolkit with different kinds of implements, the functions of words can be as diverse as these implements. Thus, "what can be said at all can be said clearly" (Wittgenstein, 1922, p. 27). I can add that what is said clearly is premised on what is clearly contextually and collaboratively understood so that what is understood clearly and expressed clearly leaves no ambiguity in its application within the given context. This implies that creating meaning of concepts is a social construct that needs to be situated and clarified according to the changing times, places and purposes (Bakhtin, 1981).

If policymakers and other key stakeholders of education fail to give quality education a co-owned interpretation, there is the likelihood of freelance and incoherent interpretation and application, and the danger of losing out on achieving quality education in Ghana. This is because words have what Lock and Strong (2010, p. 91) refer to as "heteroglossia" that is plurality of possible meanings associated with their use – conventional and formalised meanings which people have about the words prior to their usage (conventional meaning) and the intended recipient sense making of these words in a specific context (intended meaning). A collaborative contextual sense making and use of policy concepts can avert confusion of interpretation.

Evidence from an eight-month empirical research involving two basic schools in the Central Region of Ghana by the author (2019) of this article can help to clarify better the danger of freelance, incoherent and lack of co-owned contextual definition of policy concepts. The qualitative case study focused on the processes of educational innovation and change implementation in Ghana using the Leadership for learning (LfL) Ghana programme as an example. Sixty-one (61) participants, purposely sampled for the research were headteachers, teachers, learners, parents, parent association chairs, school management committee chairs, and circuit supervisors (now school improvement support officers). One-on-one semi-structured interviews, focus group discussions, observations and documentary analysis were used to gather data. Given that educational reforms or change implementation ultimately aim to improve quality of education, the research participants were given the opportunity to share their understanding of quality education. An interesting finding emerging from the study showed that even some educated parents, teachers and learners simplistically equate quality education to sterling achievements in standardised examinations irrespective of whether or not the outcomes reflect learners' personal transformation and knowledge of the subject matter. Of course, I acknowledge that performance in standardised examinations still remains one of the key criteria that academic institutions and organisations use to decide on which applicants get admission or jobs. However, it is equally simplistic to reduce the concept of quality education to the achievement of excellent examination grades. Another interesting finding emanating from the study pointed to the fact that some parents especially the poor and illiterate associate the concept of quality education with 'free' education where they are completely relieved of any financial commitments to their children's education. For them, by making public basic (kindergarten, primary and lower secondary) and senior high/secondary education in Ghana free, it means quality education has been achieved in Ghana. I do not intend to paint the picture that the views of my research participants are statistically representative of the over thirty-million Ghanaians. At the same time, the views point to the reality of freelance, varied and incoherent perceptions about policy concepts by policy consumers that can depress efforts toward the successful implementation of such concepts including quality education.

Expressing diverse views about quality education by education stakeholders is expected, given the concept's complexity. It also aligns with the morally rational and free nature of the human person which enables people to see and interpret reality differently. Yet, it can be more beneficial to embrace the adaptive challenge of discerning and pooling the divergent views into a co-owned, rich and context-based relevant interpretation of quality education. The danger of incoherence and unbridled atomistic perception of quality education is that stakeholders may be unable to pool ideas and workable strategies for its successful implementation. The audacity to provide a co-owned Ghanaian definition of quality education applicable to our context can specify the direction and coherence education stakeholders need to undertake the ambitious enterprise of implementing quality education. When the Ministry of Education leads education stakeholders to clarify what quality education means for Ghana, it can be a catalyst to think, rethink and formulate the fundamental purposes of education for the 21st century Ghana. Therefore, pinning down contextually such a complex phrase that is in common usage yet not properly understood is crucial (Locke et al., 1999) if the government of Ghana and its development partners are to achieve quality education. In the next section, I present evidence of how the co-owned conceptualisation of policy concepts as exemplified by the Leadership for learning (LfL) Ghana programme and Singapore's tripartite partnership facilitated the successful embrace and application of such concepts.

Co-owned Conceptualisation of Policy Concepts: Lessons from Two Models

The two models are the Leadership for learning Ghana (MacBeath & Dempster, 2009) and the Singapore's triad or tripartite partnership (Tan & Low, 2016). These models have proven to be useful in making education policies more co-owned, contextually relevant, communicable and implementable.

Lessons from the Leadership for Learning (LFL) Ghana

Evidences from the research conducted by the author (2019) on the processes that led to the successful incorporation of the LfL principles in Ghana show that people's collaborative and coherent familiarity with policy or change-oriented concepts inspire successful implementation. The LfL was a programme introduced to over a

thousand Ghanaian government basic schools from 2009 onwards through collaboration among the Ghana Education Service,the University of Cape Coast, and the University of Cambridge. As a distinctive framework that emphasises capacity-building (Swaffield & MacBeath, 2009), the LfL initiative is structured across five principles and practices. The LfL principles are a focus on learning, creating a conducive environment for learning, creating a learning dialogue, sharing of leadership, and sharing of accountability. The principles are aimed to improving the quality of basic education by making a potentially sustainable contribution to building and strengthening the leadership capacity of basic school headteachers in Ghana, and improving the quality of learning through school/classroom leadership (Jull et al., 2014). The five principles for practice, according to Frost and Swaffield (2008), two of the key researchers of the project insist, "were not a rigid checklist against which to compare success or failure of practice; rather, they are statements in which values are embedded, and are sufficiently concrete to enable people to clarify and refine their visions of ideal practice" (p.107). Thus, the initiators of the principles allowed the implementers including directors of education, circuit supervisors, headteachers, and researchers in Ghana to subject the five principles to critique and provide a contextual interpretation based on Ghanaian socio-cultural, economic and political realities. The contextually-inspired conceptual and shared understanding and communication gave these stakeholders confidence to own, teach and practise the ideals of the principles in their respective contexts. This disposition enabled Ghana Education Service (GES) to publish a 100-page Leadership for learning handbook for headteachers. It also brought about headteacher transformation, improvement in pedagogical adaptation, staff collaboration, and improvement in student outcomes (Malakolunthu et al., 2014).

　　　Evidence from Tangonyire's (2019) research revealed that the most exceptional schools in successfully incorporating the ideals of the LfL principles were those that had contextual and shared understanding of the principles. For example, headteachers, teachers, students and parents of such schools had a shared belief that the principles were tools that revealed novel ideas about leading, teaching, and learning, but also reminded them of, and reconnected them to certain educationally beneficial cultural values such as hospitality, collaboration, mutual respect and appreciation, which the stakeholders were fast forgetting.

The shared familiarity and understanding of the principles motivated headteachers, teachers, students and parents to re-orient their attitudes and re-create structures, which attuned them to collaborative action, efficacy, co-agency, resilience and creativity. As the author explains, in interpreting the principle – creating conducive environment for learning for instance, stakeholders perceived it to denote the celebration of everyone's gifts and talents and contribution. Thus, parents felt free to share their expertise in the classroom and other aspects of the school as collaborators in development.

Perhaps the most useful creativity from this shared understanding was to interpret the Leadership for learning principle – shared leadership to mean that leadership is both positional and non-positional activity. They explain non-positional leadership to connote that everyone is a leader in the school. This spurred the sense of responsibility and co-agency. In short, the contextual interpretation of the LfL principles enabled members of the researched schools to understand them based on the local socio-cultural realities. This gave the stakeholders confidence, self and co-efficacy that inspired them to teach and practise the principles that they preached. It can be argued that if key education stakeholders collaborate to analyse and define the concept of quality education, it can engender familiarity, clarity, contextually relevant understanding, coherent and consistent communication of quality education, and how it can be achieved. The Singapore's tripartite partnership model of interpreting and applying education policy concepts can also offer useful lessons.

Lessons from the Singaporean Tripartite Partnership

The Singaporean triad is a tripartite partnership, which according to Tan and Low (2016) was developed by educators, Lee and Low for teacher education in Singapore. I acknowledge differences in geographical, socioeconomic, political, and technological experiences exist between Ghana and Singapore. However, a careful analysis of the tripartite partnership shows that the applicability of its philosophy of prioritising education stakeholder partnership or collaboration to define, communicate and implement policy concepts transcends the borders of Singapore. The triad is illustrated in figure 1.

Figure 1. The Tripartite model for teacher education in Singapore (Tan & Low, 2016, p.34)

With education policymakers situated at the apex of the triangle, what this tripartite partnership does is to enable systemic, consistent co-owned definition and coherent alignment of policy initiatives, communication, and practices across different stakeholders of education – the MoE, the National Institute of Education, and school leaders and teachers (Tan & Low, 2016). The partnership enables all the education stakeholders to be strategically positioned and gives them a collaborative voice to analyse the needs of Singapore, identify its contextually desired educational goals, and based on that interpret what teacher education means for the country. By so doing, all the stakeholders become familiar with this education policy goal and as a result are able to express coherence in communication, ownership and practice. According to Sing Kong Lee, a former director of the National Institute of Education, "at the heart of Singapore's educational success is [this] strong tripartite partnership" (Tan & Low, 2016, p. 35) that gives policy goals a contextual relevance.

One of the beneficiaries of this visit, Lussier (2016) shares something on how this tripartite partnership has made the general concept of 'Teacher profession' co-owned, contextual and communicable. He says that among Singaporeans, the idea of teacher

profession is connected to the understanding of teachers as leaders, carers, and inspirers in whose hands the future of Singapore rests. Thus, Singaporeans including teachers cohere in their belief that there is a strong connection between teachers' work in the classroom and the fate of Singapore. What this perception of the teaching profession means is that teaching is more than acquisition of good pedagogy and content knowledge but includes preparing teachers as leaders, inspirers and powerful brokers as far as Singapore's educational success is concerned (Lussier, 2016). Thus, government, teacher preparation institutions, teachers themselves and the rest of the citizenry respect this understanding and support it. This shows that the teaching profession receives a contextual meaning. Singapore's first Prime Minister, Lee Kuan Yew's (2000) 729-page classic piece, "From Third World to First World: The Singapore Story from 1965-2000" fundamentally explains that Singapore's success story stems from the Singaporeans' shared familiarity with policy concepts and goals that enabled them to be clear, coherent, committed, and focused in pursuit of such goals. Lipschitz (2016), another beneficiary, has the following to say about Singapore's story:

> The fact that [Singapore] has become a chart-topping nation is awe-inspiring. If the essential question is how, the simplest answer is the clarity of purpose and the steadfast commitment that have driven exceptional coherence through the educational system. Listening to Singaporeans, ranging from government official to school leaders, the country's ability to define a strategy and deliver corresponding results rivals some of the best companies in the United States (pp. 92-93).

> The scope of this familiarity includes school children. Then as a doctoral student at the University of Cambridge, I was awestruck by the enviable familiarity with which about fifteen-year-old Singaporean learners who were on summer tour of Cambridge articulated Singapore's current educational goal of pursuing "value-driven student-centred" education. As one of them explained, "we are a multiracial and multicultural nation so we need values of independence, hard work, responsibility, tolerance and respect for others, and unselfishness to live and work with others in harmony". Tan and Low (2016) clarify the value-driven student-centred phase as one that envisions every school as a good school, every student as an engaged student, every teacher as a caring educator, and every parent as a

supportive partner. In other words, everyone matters if Singapore is to matter.

A lesson from this model is that quality education cannot be divorced from national consciousness given that language by nature is very much part of human consciousness that drives social processes of interaction and action. Ghanaians can learn from the tripartite model to transition from the usual mantra of: "the government says it wants to do A or B" or "government tells us to do C or D in a particular way" to "this is what we know and want to do as a nation, these are the reasons for that decision and this is how we will implement the decision". Such a communal familiarity and shared perception of and belief in quality education is a first necessary step towards its successful implementation.

Conclusion

In this article, I argue that human experience, behaviour, and practice are inescapably linked to and expressed through language. At the same time, language is vague, and vulnerable to different interpretations in time and space. Thus, an imprecise interpretation of language can be a recipe for confusions and distortions that depress social practice including institutionalisation of policy concepts. In analysing the current educational milieu and educational policy documents in Ghana including, the current 2018-2030 education strategic plan, I discovered that quality education is a policy concept the yearning for which has become ubiquitous among the citizenry. The existential prominence of quality education is in alignment with the prevailing trends across the globe where the concept is also a catchphrase especially in education fora and documents of international agencies. This is because as part of our consciousness, quality education holds the key to holistic human and socio-economic development of nations as well as global peace, security, fairness and harmony.

However, despite the enviable policy space quality education occupies and the potential role it plays in holistic human and national development, it has not received a contextually relevant interpretation to facilitate co-ownership, communication and implementation in Ghana. This conceptual article acknowledges the complexity of interpreting the concept of quality education. At the same time, it argues that the vague, complex, and heteroglossic nature of language implies

that an imprecise interpretation and application of quality education can depress efforts towards its institutionalisation. Linguistic phrase such as quality education also has the potential to estrange the very people who create it. Thus, it is crucial for policy makers and other key stakeholders of education in Ghana to embrace the adaptive challenge of providing co-owned contextual interpretation of quality education if its institutionalisation is to be successful. Using the Leadership for Learning and the Singapore's tripartite models of interpreting and applying policy concepts, the article provided the benefits of and useful lessons from communal familiarity and application of policy concepts. The following recommendations to the Ministry of Education may help to create a co-owned interpretation of quality education that will be contextually relevant to Ghana:

• The Ministry of Education and its agencies including the Ghana Education Service, National Council for Curriculum and Assessment, and National School Inspectorate Authority should organise works on Quality Education for stakeholders of education to brainstorm what quality education means for Ghana. This will take into consideration the current national and global contextual realities.

• The co-learning and co-conceptualisation of quality education should clarify what quality education means at the different tiers of education – basic, senior high and tertiary levels. This can lead to a co-owned national conceptualisation of quality education.

• Based on the co-owned context-based meaning that is developed, the participants should draw up policy implementation/action plan that will embed the contours of quality education, its objectives, targets, and indicators.

• The National Commission for Civic Education, mass media (mass and print), and religious bodies can use their spaces and tools to educate or disseminate to the citizenry what quality education means for Ghana, its objectives and the indicators that will show that we are achieving it or not.

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Food Safety Regulation: Perspectives of food service operators in the Cape Coast Metropolis

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Abstract

Global reports since the 2000s suggest that food safety is an important public health concern that attracts the attention of governments, food producers and consumers. Governments all over the world try to prioritise the safety of their food because it is a major driver of food security. Nonetheless, foodborne illnesses continue to occur daily basis. Ghana has a legal framework, institutions and agencies at different levels of government for food safety management. Yet, Cape Coast in the Central Region grapples with foodborne related diseases, thus identified by UNICEF as a hotspot for foodborne related outbreaks. This study set out to explore the views and familiarity of food service operators on the regulation of their operations. Three hundred food service operators from the 16 communities were selected using purposive sampling method for the study. The findings showed that food service operators had functional knowledge of the rules and regulations, just about enough to guide their daily operations. Regulators were generally perceived to be friendly and accommodating but inadequate and irregular in their supervisory roles. It was recommended that regulators should have regular encounter with food service operators to enhance compliance and achieve the food safety goal.

Keywords: Food safety, foodborne illness, regulation, food safety regulators, food service operators.

INTRODUCTION

Food is one of the most vital and indispensable fundamental needs of humans required for nourishment and sustainability. Omari and Frempong, (2015) and Ko (2015) opine that safe food significantly improves public health, food security, and environmental protection. Safe food also reflects a positive image of a nation. World Health Organisation (2014) defines safe food as steps taken to ensure that every food is as safe as possible. Nonetheless, issues with food safety pose a serious threat to human existence. Consumers are exposed to

myriad of food safety challenges as a result of the material product (the food itself); the attitude and behaviour of food handlers (crucial in the food production continuum) and the environment in which the food is prepared and served (Goh, Garcia, Joung & Fowler, 2013).

The effects of unsafe food consumption can have a direct impact on a country's productivity. At the micro level, reduced productivity and direct medical cost to individuals who suffer from food-borne illness has been found (World Bank, 2018; Newman, Leon, Rebolledo & Scallan, 2015; WHO, 2014). Literature suggests that the food industry also suffers through reduced sales, high recall costs, and lower consumer confidence (Hussain & Dawson, 2013). At the macro level, national governments are confronted with increased medical expenses, outbreak investigations, and increased demand on the over-burdened and poorly funded healthcare systems (World Health Organization, 2019). Thus, an outbreak of foodborne illness affects all segments of society.

From the literature, about 70-80% of foodborne illnesses are linked to food prepared and served from the food service industry (Monney, Agyei & Owusu, 2013; Food and Drugs Authority, 2013; Chapman, Eversley, Fillion, Maclaurin & Powell, 2010). As Jones, Pavlin, LaFleur, Ingram and Schaffner (2004) succinctly put it: "the food industry cannot ignore the fact that they have been labelled as one of the most recurrent sources of foodborne disease outbreak" (pg. 96). Several studies suggest that the food service sector especially, the informal segment, is dominated by service operators with low or no formal education, relatively ignorant about basic food safety and hygiene practices, and are probable vectors for food contamination (Grace, 2017; FAO, 2016; Cortese, Veiros, Feldman & Covalli, 2016). This implies that the fate of individuals who consume meals outside the home is subject to the controls of the food service operator (FSO) whose attitude and behaviour towards food handling cannot be easily determined (Knight, Worosz, & Todd, 2007).

Although, FSOs are often held accountable for the offer of unsafe food to the consuming public, Khalid (2015) is of the opinion that FSOs are not to be solely held responsible. Food safety is a shared responsibility for all stakeholders; governments, food service operators, and consumers. The government has the duty of care towards its citizens and, thus is responsible for developing food safety policies, standards, rules, and regulations to provide an enabling institutional and

regulatory environment to support and guarantee the achievement of the national food safety goals. Food service operators are also duty and legally bound to provide safe food to the consuming public. They are required to demonstrate to regulatory authorities that their operations are in line with national laws, standards, guidelines, and codes of practice (Khalid, 2016). Consumers are also expected to ensure safe handling of the food they purchase (FAO, 2006). However, the governments take the overarching responsibility by monitoring compliance through inspection and enforcement.

In Ghana, compliance enforcement is done through regulatory bodies such as the Food and Drugs Authority (FDA), Ghana Tourism Authority (GTA), and the Environmental Health and Sanitation Units (EHSU) of the Metropolitan and Municipal Assemblies. Food and Drugs Authority and Ghana Tourism Authority form the main regulatory bodies and are supported by the Environmental Health and Sanitation Unit. Activities of these regulatory bodies are guided by the national laws such as the Public Health Act, 2012 (851), the Tourism Act, 2011 (817), and the Local Government Act, 2016 (462). These Acts define the roles and mandate regulators to conduct formal inspections; register and license; provide education and training; research and communicate risk to both food service providers and consumers. Thus, the food safety regulator is seen as the key functionary who has day-to-day contact with the food industry, trade, and the public.

Cape Coast, in the Central Region of Ghana, has recorded a relatively high incidence of foodborne-related illnesses (UNICEF, 2015). For instance, there were 2,182 reported cases with 60 deaths in 2014, 160 and 261 reported cases in 2015 and 2016 respectively. The statistics are worrying as these disease conditions are avoidable if food safety measures are effectively enforced and complied with. Several studies (Tappes et al. 2019; Iwu, Uwakwe, Duru, Diwe, Chineke, Merenu, & Ohale, 2017; Akabanda, Hlortsi, & Owusu-Kwarteng, 2017) have investigated food safety incidence and have found FSOs as the significant causative agents, yet, no major improvements have been realised. It is therefore prudent that the activities of the regulatory enforcers be investigated to ascertain their contribution toward the food safety goal.

Regulatory enforcement as a concept has rarely been explored in literature. Gaining an understanding of regulatory enforcement from

the perspectives of FSOs is necessary to understand the wider dynamics of regulatory enforcement. Consequently, this paper examines the views and familiarity of the FSOs on the regulatory enforcement regime in the Cape Coast Metropolis. The specific objectives of the study were to examine FSOs familiarity with the regulation; assess the impact of regulators' activities on food service operations and; evaluate FSOs level of satisfaction with regulatory activities. The findings of this study may be useful to regulatory authorities by drawing their attention to the views and concerns of FSOs and the limitations in food safety regulation and enforcement. Thus, help improve food safety and allay the increasing fears of street food consumers.

Theoretical framework

The Social Control Theory was adapted as the theoretical framework for the study. The Theory, propounded by Hirschi (1969) posits that when social constraints on antisocial behaviour are weakened or absent, nonconformity to social norms and regulations emerges. The Social Control Theory contends that because it is in the nature of humans to be deviant, society can regulate that behaviour through the use of laws, rules, and regulations. Social control may deter people from violating social norms and laws; punish those who are not deterred and rehabilitate and reform those who are punished. Thus, in the social context, individuals may conform to rules and regulations because an authority figure threatens sanctions when rules and regulations are not complied with.

There are two main components of the Social Control Theory: informal and formal controls. The informal control often referred to as the socialisation process typically involves an individual internalising certain norms and values of the society. The formal control on the other hand involves external sanctions enforced by the government to prevent chaos or violence in society. The controls (both informal and formal) regulate individual and group behaviour in an attempt to gain conformity and compliance to the rules of a given society, social group, or state.

However, there is evidence that some scholars have critiqued the Social Control Theory. For instance, Gibbson (1994) contends that the Theory explains minor offending but does not adequately account for more serious misconduct. Despite this limitation, the theory has been used successfully in many studies to investigate and explain

school misbehaviour; parental attachment and substance abuse, and regulation conformity.

The Social Control Theory has been adapted to guide this study because of its strengths. For instance, Fairman and Yapp (2004) applied the Social Control Theory in their study and found out that some Food Service Operators make decisions to comply with regulations because their activities are monitored and supervised. Through regular enforcement interventions such as inspection visits, training, seminars, workshops, media information, and phone calls, the FSO is made aware of the relevant regulations on food safety. Through the awareness creation, the FSO in turn, interprets the regulation and decides to comply. Non-compliant FSO are punished by revoking their licenses, named and shamed, or asked to correct the anomaly. The adoption of the Social Control Theory by Fairman and Yapp (2004) suggest that regular encounter with food safety regulators is important in shaping food service operators' attitude toward safe food handling.

MATERIAL AND METHODS

A cross-sectional descriptive survey was conducted to explore FSOs views and familiarity with the food safety regulatory operations in the Cape Coast Metropolis, Central Region, Ghana. For the purpose of this study, food service operation was defined as an informal food service business that provides ready-to-eat foods to the general public in the streets and other public space. A total of 1185 registered food service providers was obtained from the Cape Coast Metropolitan Assembly (Environmental Health and Sanitation Audit Report, 2017). Using Krejcie and Morgan (1970) sample size determination table gave a sample size of 276 to be used for the study. However, 300 participants, 18 years and older, were chosen by proportionate sampling technique on community basis to participate in the study as shown in Table 1.

Table 1: Distribution of study participants by sampled communities

Area/Cluster	Number of operators	Number selected
Abura	117	30
Adisadel	64	16
Akotokyir	18	5
Amamoma, UCC	66	17

Ankaful	42	11
Bakaanu	92	23
Brofoyedru	61	15
Duakor	19	5
Ebubonko	77	19
Efutu	113	29
Ekon	37	9
Kakumdo	45	11
Kotokuraba	242	61
Mpeasem	70	18
Nkanfoa	77	19
Ola	49	12
TOTAL	**1185**	**300**

Source: Environmental Health and Sanitation Unit, Cape Coast Metropolitan Assembly

This method ensured the representation of all the food service operators in the Metropolis. Food Service Operators from these communities were either mobile or stationary and operated either in the day or night time. Out of the 300 foodservice operators, 264 were stationary, 36 were mobile, and 204 and 96 sold in the day and night time respectively. Cooked foods sold included light soup/palm soup/groundnut soup with fufu, okro stew or grilled tilapia with banku, waakye, palava sauce or garden egg stew with boiled yam, fried rice, plain rice, beans and gari.

Data Collection Instrument
A self-developed questionnaire was used to collect data from FSOs in relation to their views and experiences of the regulation. The questionnaire was made up of both open and closed ended items. The open-ended items offered participants the opportunity to formulate their own responses. With the closed-ended items, participants chose the option they considered appropriate. The Data Collection Instrument was scrutinised by two expert professors and was further approved by the University of Cape Coast Institutional Review Board. The Instrument was pretested in Elmina, the next Municipal area with similar characteristics as Cape Coast. The pre-test offered a chance to ensure that the test items were clear and measured what it intended to measure.

Data Collection Procedure

Data was collected over six weeks, on all the days of the week and at different times of the day including the nights to ensure the inclusion of various categories of FSOs. To gain the cooperation and assistance from participants, the basis for the study as well as the procedure for answering the items in the questionnaire was explained to the participants. Participants were informed that the study was purely an academic exercise whose findings could be disseminated to relevant stakeholders to possibly influence policies and strategies. Participants were further assured of their confidentiality and anonymity, hence, no personal identification was required on the questionnaire. Consequently, participants gave their verbal consent and willingly participated by completing the questionnaires. The questionnaires were given to participants who could read and write to respond to the items while those who could neither read nor write were assisted by the researchers and the research assistants. Completed questionnaires were collected the same day. There was 100% return rate. However, two of the questionnaires were discarded because some of the items had either not been answered or were with "don't know" responses. Hence, 298 valid questionnaires with no missing values were used for data analyses.

Data Analysis

Data analysis was carried out after all the data had been collected. The data obtained from the survey was coded and tabulated. Further, the results were interpreted using descriptive statistics of MS-Excel statistical function. Descriptive analysis, such as, frequencies and percentages were used in the analyses.

RESULTS
Socio-demographic characteristics of respondents

From the data collected, 96% of the participants were females. Fifty-eight percent (58%) of the participants were in the age bracket of 30-50 years with less than 14% of them above 50 years. The participants were generally literate; 45% of them were Middle School/JSS/JHS leavers and about 19% of Secondary School Certificate holders. More than half of the participants had some formal education.

Food Service Operator's awareness of food safety regulations and regulators

Food Service Operators were asked specific questions about their awareness of the National Food Safety Acts and the Metropolitan bye-laws. Additionally, their knowledge of the food safety regulation was assessed. Ninety-one percent of the participants were aware of the existence of the National Food Safety Acts and Metropolitan Bye-Laws. However, they could not state precisely the stipulations of the Acts and Bye-Laws. Rather, participants were only able to state aspects of the regulations with which they were conversant. The details are presented in Table 2.

Table 2: FSOs food safety regulation knowledge

Food Laws known to Operators	Frequency	Percentage
Keeping surroundings clean	178	31.6
Observing Personal Hygiene	141	25.0
Covering Food	110	19.5
Keeping food warm	60	10.7
Keeping utensils clean	43	7.7
Undergo medical examination	16	2.8
Acquisition and renewal of license	7	1.2
No idea about rules and regulation	8	1.4

*Multiple responses were elicited N = 563

As observed from Table 2, 31.6% of the participants knew the laws required them to keep their surroundings clean, 25% were aware of personal hygiene, 20% and 11% knew of covering food and about keeping food warm respectively. Acquisition and renewal of licenses were identified by approximately 1.2% of the participants.

Popularity of Food Service Regulators among foodservice operators

Approximately, 80% of the FSOs knew of EHSU officials, thus, they were the most popular state regulators in the Metropolis. This was the regulatory agency FSOs admitted to having had relatively regular contact with. Approximately, 14% and 4% of the participants knew of the existence of the FDA and GTA respectively. Two (0.6%) of the participants were however able to identify FDA and EHSU simultaneously. Most of the participants were not able to demonstrate multiple agency popularity. Table 3 presents the details.

Table 3: Popularity of Food Service Regulators among Food Service Operators

Agency	Frequency	Percentage
EHSU	238	79.9
FDA	42	14.1
GTA	13	4.4
FDA/EHSU	2	0.6
No idea	3	1.0
Total	**298**	**100**

Food Service Regulators Task Assessment

Participants were asked to indicate regulators' level of performance in three specific areas and specify their level of satisfaction towards the regulation. The areas were frequency of visit, regulators' activities, and feedback provision. Table 4 presents regulators' frequency of visits.

Table 4: Frequency of visit by Food Service Regulators

Number of times	Frequencies	Percentage
Yearly	109	36.6
Twice a year	30	10.1
Thrice a year	105	35.2

Everyday	3	1.0
Never	51	17.1
Total	**298**	**100**

Once and thrice a year were indicated by 36.6% and 35.2% respectively by the participants. Seventeen percent of the participants had never received any form of visit from any of the regulatory agency.

Food Service Regulators were found to focus much of their activities on environmental cleanliness as shown in Table 5. Fifty-three percent of the participants indicated that regulators conducted inspections on their immediate surroundings and dustbins. Only 11% of the participants were of the view that regulators observe the food preparation process and collect samples for lab analysis. Fourteen percent of the food service providers maintained that regulators checked on licenses and other documents while five percent of them had never received any form of inspection from any of the regulators.

Table 5: Food Service Regulators activities

Areas	Frequency	%
Inspect the surroundings and dustbins	234	53
Inspect the kitchen and cooking equipment	74	17
Observe the food preparation process and collect some for lab analysis	47	11
Inspect the license and other documents	64	14
Never been inspected	21	5.0
Total	**440**	**100**
Feedback Provision		
Yes	202	68
No	75	25
Don't know	21	7
Total	**298**	**100**
Satisfaction with regulators performance		
Satisfied	185	62
Not satisfied	113	38
Total	**298**	**100**

Multiple responses were provided for area of inspection

More than half (68%) of the participants indicated that regulators provide feedback after inspection while a quarter (25%) were also of the view that feedback was not given after inspection. Sixty-two percent of the operators indicated their satisfaction while 38% of them maintained they were not satisfied with regulators' performance. Food Service Operators' reasons for their satisfaction or dissatisfaction are presented in Table 6.

Table 6: Reasons for Satisfaction and Non-Satisfaction with Food Service Regulators' Activities

Reasons	Frequency	%
Satisfied		
Good and friendly	86	28.9
Encourage us to follow the laws	39	13.1
Friendly but strict on the job	34	11.4
Warn or fine non-compliant behaviour	27	9.1
Not-Satisfied		
Concerned with license than the quality of food	49	16.4
Harassment and extortion of money from operators	32	10.7
Impolite and disrespectful	16	5.4
Less time to explain what they want from operators	15	5.0
Total	**298**	**100**

Based on FSO's interpretation of regulatory performance

From Table 6, almost 30% of the respondents attributed their satisfaction to regulators being good and friendly. Approximately 13% of the operators reported that they were satisfied because regulators encouraged them to follow the laws. Other operators, 11.4% and 9.1% were satisfied because regulators were friendly but strict on the job; issued warnings and fines for non-compliance respectively. About 38% of the respondents were not satisfied with regulators' activities due to various reasons. Sixteen percent of the operators indicated that

regulators were more concerned with license than the quality of the food. Approximately 11% of the respondents specified that they were often harassed and monies extorted illegally from them while 5% indicated that regulators did not have ample time to explain their expectations. About 5% of the operators recognised regulators as impolite and disrespectful.

DISCUSSION

In the realm of food safety regulation, the insights and viewpoints of food service operators play a crucial role in shaping policies, practices, and standards that ensure the well-being of consumers. This study delved into the multifaceted landscape of food safety regulation from the unique vantage point of FSOs, aiming to uncover their perspectives, experiences, and opinions.

The study's findings show a high female dominance amongst the participants studied. This dominance is typical of Africa (Samapundo, Climat, Xhaferi, & Devlieghere, 2015; Okojie, & Isah, 2014; FAO, 2012) where food service operation is often considered a female occupation. The study found 91% regulatory awareness among the respondents. Most of the FSOs were aware that there exist rules and regulations governing their operations. By having a high food safety regulatory awareness, FSOs can comply with the regulations, avoid penalties and fines, and prevent foodborne illnesses. In a similar study, FSOs awareness of the regulation enhanced customer loyalty, improved their competitive advantage and the overall food safety system (Huynh-Van et al., 2022). However, FSOs awareness of the regulation did not reflect their familiarity with the stipulations of the regulation. On one hand, most of the FSOs expressed a high level of awareness about the regulation and on the other hand, their knowledge about the specific provisions and requirements of the food safety laws was very low. Food service operators had fragmented views that related more to a functional or operational understanding and application of the rules and regulations. This seems to suggest that either the current food safety education and enforcement strategies are not effective enough or operators have not substantially internalised the regulations governing their business. It is therefore important that FSOs become conversant with the actual stipulations of the regulation to enhance compliance. This can be made possible through education during inspection visits, seminars, and media information.

Food service operators indicating EHSU officials as their main source for regulatory awareness as well as the most popular among the regulators suggest EHSU lead role in regulating the food service operation in the Metropolis. It gives the impression that enforcement inspection was often done by EHSU officials. This finding supports Forkuor's (2017) study finding that the informal food service operation is considered by FDA and GTA as *"too small"* to regulate. The finding further corroborates Alfer's (2011) claims that local government institutions currently have the mandate and capacity to improve conditions in the informal street vending sector in Africa. FAO and WHO (2013) further substantiate that several countries resort to the use of Environmental Health Officers as food safety inspectors as a result of human resource constraints. Nonetheless, this defeats the legal mandate of the FDA and GTA as the main regulatory agencies for food safety inspection and enforcement. The use of EHSU officers as food safety regulators is said to be appropriate only when the officers are properly trained for the regulation of street food (FAO and WHO, 2013). The finding further reveals some of the inconspicuous challenges associated with multi-agency regulatory system. While having multiple agencies with legal mandates to regulate various aspects of food may be beneficial, it could also lead to poor coordination, duplication of functions, and/or gaps in food safety regulation and enforcement (FAO, 2013; WHO, 2013).

The number of times regulators paid inspection visits to FSOs appeared insufficient to enable the detection of consistent compliance or non-compliance of the regulation. This in turn can subject the fate of the consumers to the controls of the FSOs whose attitude and behaviour towards food handling cannot be easily determined (Knight et al., 2007). The finding also buttress the social control theory which posits that because human behaviour is inherently not conforming, regular encounter with food safety regulators is important in shaping food service operators' attitude toward handling food safely. Consistent presence of regulators for enforcement could be one of the most visible signs of successful food safety management.

Regulators' emphasis on environmental cleanliness as intimated by FSOs is commendable. However, it is quite worrying that regulators did not seem to attach importance to the licensure status of the operators. A few of the participants reported that regulators checked their licenses during inspection. This finding suggests a contrast with

the stipulations of the Public Health Act, 2012 (Act 851); the Tourism Act, 2011 (Act 817), and; the Local Government Act, 2016 (Act 462). The Acts mandate regulators to ensure FSOs acquire licenses prior to business operation and an annual renewal. The non-enforcement of this regulation could be an indication of either a false assumption that all FSOs on the street have been cleared to operate or a lack of trust in the reliability of the license acquisition process and procedure. Food service operators with no or expired licenses could pass on communicable diseases they might have to consumers due to the uncertainty of their environmental and health status.

The results further revealed that FSOs were generally (62%) satisfied with regulators' activities. For instance, regulators were noted to be good and friendly. Perhaps, regulators appeared good and friendly because operators complied with the regulation and therefore had no problems with regulators. Regulators might have also viewed their job as one of enforcement which could be done without being hostile or regulators did not want to incur the wrath and assault (verbally or physically) from operators (Forkuor, 2017). Accordingly, being good and friendly can undermine regulators' performance while being unkind and unfriendly could as well induce hostile response from operators. It is therefore reasonable that regulators are fair and firm during regulatory enforcement.

Quite a significant number (38%) of FSOs also showed non-satisfaction towards regulators' activities. For instance, regulators' inspection of licenses was seen to be a bother to some FSOs. Such respondents were not satisfied because they probably preferred to operate with no checks on their environment and health status. Some operators also noted that regulators often harassed and extorted money illegally from them. This finding corresponds with the findings of Draper (1996) that "food service operators are often a target for harassment and extortion by government authorities and organized crime because they often occupy public space and lack any form of legal recognition". Regulators harassing and taking money illegally from FSOs could likely give the impression that FSOs can escape non-compliance punishment by offering money. This can trigger distrust between FSOs and regulators and encourage non-compliance to food safety rules and regulations. Similarly, issues of bribery and corruption were recorded to have hindered effective food safety regulation in the Kumasi Metropolis (Forkuor et al., 2017). Participants being satisfied

or dissatisfied with regulators' activities have implications for the enforcement and compliance of the food safety regulations. It is therefore important to ensure that FSOs are satisfied with regulators' activities for the right reasons.

CONCLUSIONS AND RECOMMENDATIONS

Food Service Operators had functional knowledge of the rules and regulations, just about enough to guide their daily operations despite the high regulatory awareness among operators. Specific national food safety regulations and Metropolitan Bye-Laws were generally unknown. Food Service Operators had a fair knowledge of and encountered the Environmental Health and Sanitation officials who are thought to be supporting officials often than FDA and GTA who are legally mandated to enforce food safety regulations. While this may be imperative, its major weakness is the fact that EHSU officials are not specifically the main agency to regulate the activities of food service operators and that they have several other responsibilities which make food safety regulation only one of the numerous responsibilities they have to fulfill.

While it was commendable that regulators ensured FSOs worked in a hygienic environment, Food Service Regulators, however, did not seem to attach importance to the licensure status of operators. Regulators were generally perceived to be friendly and accommodating but inadequate and irregular in their enforcement/supervisory roles. Food Service Operators were generally satisfied with regulators' activities because regulators appeared good and friendly and encouraged them to follow the regulations.

It is recommended that policymakers, regulators/enforcers increase the number of times for facility inspection and enforcement. Food Service Regulators should intensify education on food safety regulations during enforcement visits for FSOs to be abreast with the stipulations of the regulation. Finally, Food Service Regulators should establish their maximum interest in FSOs licensure status to prevent possible transmission of communicable diseases from operators to consumers.

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Introduction of History in the Ghana Basic School Curriculum: The Missing Link

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Abstract
This paper addresses the missing link in history education in the Basic School curriculum of Ghana. It examines post-colonial history education in Ghana and acknowledges the frantic efforts made by several authors to help introduce history into the Basic School curriculum. The paper maintains that while introducing history as a core subject at the Primary School level is widely accepted, the neglect of the same at the Junior High School (JHS.) level presents a missing link in history education in Ghana. Many history educators and academics have firmly debated this missing link, particularly historians in the media. The paper discusses the missing link and argues for the introduction of history at the Junior High School (JHS.) level within the context of the episodic memory theory. The paper insists that teaching history at the JHS level provides a crucial link between Primary School history and Senior High School history, which is a leveraging platform for studying history at the tertiary level. It also suggests that teaching history at the JHS level allows students to internalise values such as patriotism, moral values, solidarity, tolerance, national consciousness, etc., which are required social elements for nation-building. It concludes that incorporating history into the JHS curriculum would ensure continuity in the study of history from the Primary School level to the tertiary level and give more meaning to the rationale behind the introduction of history at the Basic School level.

Keywords: History, Education, Curriculum, Basic School, Ghana

Introduction

It has been argued in several research papers that history should be made a required course of study in Ghanaian Basic schools (e.g. Cobbold & Oppong, 2010; Oppong, 2012; Oppong, 2014; Oppong, 2019; Ansong, 2011; Ogah, 2017; Adjepong, 2013b). In all these papers, explicit arguments were made in support of the need to study history as a mandatory subject. All these requests were followed by the proposal submitted by Adjepong, Boadi-Siaw and Kissiedu (2017) to the Government of Ghana when suggestions for national curriculum

reforms were mooted. The proposal requested for the restoration of history as a core curriculum subject without hesitation in Basic schools in Ghana (Adjepong, Boadi-Siaw & Kissiedu, 2017). The reason is that history is an academic discipline with essential values relevant to the development of Ghana, a diverse society in need of a subject that promotes an understanding of the importance of active citizenship, social inclusion and diversity in our society (Cobbold & Oppong, 2010). Indeed, this forms the core of school history.

Research shows the role of history in developing a sound knowledge of the history of one's country for nation-building (Adjepong, Boadi-Siaw & Kissiedu, 2017; Bam & Visser, 2002; Cobbold & Oppong, 2010). In post-colonial Ghana, with its numerous changeovers from republics to military regimes, the need for teaching history in schools became an essential part of the education system. In particular, history education became a tool for tackling deep-seated ethnocentric problems of diverse nature, providing a sense of inclusion and respect for diversity and building a new shared understanding of the Ghanaian past.

The 2021 national census showed the diverse and heterogeneous nature of the Ghanaian population and society (Ghana Statistical Service, 2022). Despite its heterogeny, Ghana could strive for unity in spirit and purpose for the common good through the study of history. Certainly, teaching history in schools can strengthen awareness of our common destiny as a people within this diversity. It is important to note that the discipline of history does not only focus on the past, but can also give us an insight into the present and show us how to deal with the numerous circumstances of our present as well as place us on the appropriate path to the future. In this way, students can appreciate Ghana's unique path of social, economic and political development. This knowledge and understanding are essential for active participation in Ghana's developmental drive.

In many ways, the reintroduction of history as a mandatory subject at the Basic School level in Ghana's education system is a feat after many years of requests for the study of history at that level. Fortunately, in 2019, after deliberations on proposals and research papers, the Government of Ghana published the new Standards-Based Curriculum for Basic Schools in Ghana. In the new curriculum, history was made a core subject, alongside English language, mathematics, and science, among others, from primary one to primary six (grade 1 to

grade 6) (Ghana: Ministry of Education, 2019). The problem, however, is the missing link in history education in Ghana at the Junior High School level. In Ghana, Basic School refers to Primary (B1 to B6), Junior High (B7 to B9), and Senior High (B10 to B12) schools (Adjepong, Boadi-Siaw and Kissiedu (2017).

Post-independence history education in Ghana

The extent to which history education had been represented in the Ghanaian education system before 2019 is considered here. Viewed as a spasmodic progression, post-independence history education in Ghana had long been considered a significant part of the school curriculum that preceded the 1987 education reform. The central episode in the 1987 education reform narrative of the development of history education is a transformation that occurred in the pre-tertiary education curriculum, which incorporated history into the social studies subject. In the early years of post-independence Ghana (1960–1986), education reforms that spanned the various regimes primarily focused on initiatives to shift from transmissive practices to the use of transformative methods (Boakye, 2019). In this regard, the content of the school curriculum was to be diversified to make education more responsive to the needs of the individual, the society and the nation (Dare, 1995; Antwi, 1992a; McWilliam & Kwamena- Poh, 1975). In all these reforms, history was considered a distinct subject of study. At the pre-tertiary level, history was one of the four subjects written during the Middle School Leaving Certificate Examination (M.S.L.C.E.) – now Junior High school. At the secondary school level, history was one of the subjects offered for the School Certificate and General Certificate of Education Advanced Level (SC/GCE 'A' level) examination (Cobbold & Oppong, 2010). At the tertiary level, history was a programme of study that enjoyed curriculum space. In these arrangements, history education was duly represented at all levels of the education systems in the various post-independence governments till the 1987 education reform (Oppong, Gyimah & Yeboah, 2021).

The 1987 education reform initiative used an approach that centred on the curriculum structure more than the previous reforms. The structure of the reform was to diversify the curriculum by promoting more active learning and reducing the length of pre-university education (Agbemabiese, 2007). There were four major dimensions:

the structure and expected destinations of graduates from basic school, duration, curriculum, and education financing. The key issues of the reform, and for which changes were implemented, included:

1. replacement of the existing Middle Schools, an idea suggested by the Dzobo Educational Committee of 1975
2. a reduction in the duration of pre-tertiary education from 17 years to 12 years
3. readjustment of the curriculum and reduction of core subjects from 7 to 4 for S.S.S.1 (S.H.S. 1) and S.S.S. 2 (S.H.S. 2)
4. introduction of new core subjects, including Integrated Science and Social Studies for S.S.S. 1 (S.H.S. 1)
5. initiation of the 1987 Education Reform Programme (ERP) with the objectives of improving education and re-orientating the academically oriented education system to prepare the youth for the world of work
6. change from the 6-4-5-3/4 organisational structure to 6-3-3-3/4 (Ghana: Ministry of Education, 1996a).

An important note in the reform was the introduction of new core subjects, particularly social studies. The introduction of social studies at the pre-tertiary level was a concern in the history education narrative in the post-independence era. As mentioned earlier, history lost its place in the pre-tertiary school curriculum due to the introduction of social studies as a compulsory subject of study. History became part of the many subjects whose contents were merged into the social studies subject. This ended the status of history as a discrete required subject of study in the pre-tertiary education curriculum. The only space created in the reform for history was the opportunity to be studied as an elective subject in the General Arts programme at the Senior Secondary School (now Senior High School) level (Cobbold & Oppong, 2010). It also continued as a programme of study at the university. This marked a turning point in history education in the education system. The representation of history at the pre-tertiary level was negligible from 1987. This meant that the values of teaching history at that level of schooling were regrettably denied. The idea that the new social studies subject would serve the same purpose as school history was misplaced. Notwithstanding the displeasure expressed by

professional historians, history educators, and sympathisers of history, history remained expunged from the pre-tertiary curriculum until 2019. Adjepong, Boadi-Siaw and Kissiedu (2017) note that the health condition of history was poor, if not worse, in that era.

Before the 2019 education reform, two education programmes were initiated – the Free Compulsory Universal Basic Education (F.C.U.B.E.) in 1995 and the 2007 education reform. The major phase was the 2007 reform. The Rawlings/National Democratic Congress (NDC) government, which introduced the F.C.U.B.E., argued that the 1987 education reform and the subsequent implementation of the F.C.U.B.E. programme in 1995 had not yielded the desired outcome for the state (Boakye, 2019). This justified the 2007 education reform. Similarly, the 2007 reform, which was introduced by the Kufour/New Patriotic Party (NPP) administration, focused on structure, content, duration and finance (Boakye, 2019). In particular, the reform only introduced trifling changes to the content at the Basic level, which included the introduction of physical education and creative arts, comprising art and craft, music and dance. Significantly, at all levels of Ghana's education, the 2007 reform introduced information and communications technology (I.C.T.). Again, this arrangement did not consider history education as part of the new subjects introduced at the pre-tertiary level. History continued to remain at the periphery at the Basic level. In this circumstance, several proposals were submitted to the government to consider introducing history as a separate subject of study at that level. However, as noted above, these efforts proved futile. Therefore, history education during that era had no appropriate space for representation. This is why in 2013, the Department of History at the University of Cape Coast complained about the marginalisation of history as a subject at pre-tertiary levels (Faculty of Arts, University of Cape Coast, 2013).

As highlighted in the introductory section, history became a mandatory subject in the Basic School curriculum at the Primary school level in 2019. The proposals submitted when the 2019 reform was mooted made inroads at this time, particularly with a strong basis on Bruner's spiral curriculum theory. History has been reintroduced into the pre-tertiary curriculum, an accomplishment worth commending. This new arrangement made history part of the curriculum from Basic One to Basic Six (B1–B6). The representation of history education

changed under this reform. History, either as a core subject or an elective subject, is a subject of study at all levels of the education system, except at the Junior High School level. This means that the Junior High School level remains the missing link in Ghana's history education scheme.

School History and Bruner's Theory

Globally, teaching history in schools, particularly at the primary school level, received an impetus following Bruner's spiral curriculum theory of 1970. Before Bruner's theory, several scholars believed that history was an abstract subject reserved for mature students (Hallam, 2006). This contention was based on Piaget's theory of human development which classified human cognitive development into four stages: Sensorimotor stage – from birth to 2 years; Pre-operational stage –from 2 years to 7 years; Concrete operational stage – from 7 years to 11 years; and Formal operational stage – from 12 years and above. Piaget argued that the first three stages of cognitive development do not support children with abstract and hypothetical concepts. The ability to think about abstract ideas and situations is the key hallmark of the formal operational stage of cognitive development. This idea led many people to believe that children at the primary school level are not mature enough to study history (Hallam, 2006; Oppong, 2021).

However, Bruner's spiral curriculum theory came to expose the limitations of Piaget's interpretation of what children can do in the early stages of their lives. Bruner (1970) argued that any school subject could be taught in a simple form to any school child of any age. He suggested that those who select content could provide appropriate pedagogical support to reflect the child's developmental stage. Instruction must be relevant to the child's level; being aware of the child's cognitive development allows the teacher to make appropriate pedagogical decisions (Aktin, 2010). After Bruner's seminal work, a myriad of books and articles appeared that supported Bruner's argument. In teaching history, Sheldon (2010) indicates that school children could understand and use the basic ideas in history at any age, as long as learning is structured to enable them to move from the simplest understanding of these ideas to more complex concepts, but without losing the integrity of the concepts. In his seminal work, Rogers (1979) showed how all aspects of a lesson

could be designed to promote understanding of a historical concept. He affirmed that history concepts can be spiralled during instruction by drawing upon contextualised evidence and according to the child's level in the school. The child can appreciate history by using historical sources, questioning these sources, and making assumptions according to the historical materials available (Rogers, 1978). Drawing on Roger's idea, Guyver (2013) added that sources could support the teaching of primary school history as evidence, narratives or stories as interpretations, and chronological and contextual frames with timelines. These ideas offered the discipline of history attention in the primary school curriculum across the globe.

In many ways, Burner's theory provided legitimacy for teaching history in early grades. In Ghana, the request to reintroduce history into the Basic school curriculum had a basis on this theory. Not surprisingly, the response to the reintroduction of history into the school curriculum from most professional historians, curriculum experts, researchers and history educators has been encouraging – notwithstanding the public political debate on a possibly overloaded curriculum.

The missing link, Episodic memory, and the arguments

It has been noted that the missing link in the school curriculum at the Basic School level is at the Junior High School level. That is, history is part of the primary school subjects as a required subject and also as part of the Senior High School programme as an elective subject for students pursuing General Arts. At the Senior High school level, the opportunity is provided for Junior High school graduates who may want to study history as a career subject. It is worth noting that the many calls and proposals submitted to successive governments in the Fourth Republic of Ghana requesting for the reintroduction of history as a distinct and required course of study in the education system had as its objective the study of history from Primary school to Junior High school. Therefore, introducing history as a core subject at only the Primary school level serves as a modified acceptance of the request made by historians, history educators, and non-experts. The disregard for the reintroduction of history at the Junior High School level justifies this paper's 'missing link' argument.

The missing link firmly indicates that throughout the programme structure of the Ghanaian education system, it is at the Junior High School level that history is not studied as a distinct subject, neither as a core nor as an elective subject. In the programme structure of Senior High schools and tertiary institutions, history is made a choice subject for those interested in pursuing it further in their schooling. Apart from the relevance of history to the development of nations, the explicit intention of the various calls was to make history a core subject to be studied up to the Junior High School level. This would allow students to engage with the subject for a more extended period. And that long-term engagement would serve as a leveraging platform for students to make appropriate decisions regarding the study of history at higher levels. Therefore, JHS history could be used to consolidate primary school history and prepare pupils for ongoing study at SHS. Again, given the unpopularity of history at SHS (Dwarko, 2007; Cobbold & Oppong, 2010; Ogah, 2017), the reintroduction of history at JHS could help salvage the situation because students would have had an encounter with history from primary to JHS and gained interest in studying history. More importantly, it was hoped that studying history would help students appreciate the subject and its values for nation-building. This objective was the main point of reference in academic papers and media reportage for reintroducing history as a core subject of study in the early years of schooling.

The call to study history at the JHS level also finds support in the episodic memory theory. Wu and Wang (2017) define episodic memory as the memory of previous events (especially concerning their times, places, associated emotions, and other significant contextual questions about knowledge, including who, what, when, where, and why) that can be explicitly stated. Episodic memory is one of the significant neurocognitive memory systems (Schacter & Tulving, 1994) in terms of its unique functions and properties. Tulving (2002) explains episodic memory as "the collection of past personal experiences that occurred at particular times and places. It makes possible mental time travel through subjective time, from the present to the past, thus, allowing one to re-experience, through autonoetic awareness, one's own previous experiences" (p. 5). Accordingly, this memory enables learners to retrieve and apply what they have studied in school for present and future use. Teaching history in schools for the benefit of inculcating in learners some essential values of tolerance,

patriotism, good morals and ethics, solidarity, and national consciousness, among others, for nation-building become critical in any education system. This is because the level or stage that children could internalise these values for future application is essential in the programme structure of any education system.

As is well known, every subject is unique, with distinctive features which require different methodological approaches. Some subjects have higher graphical representation than others. For instance, the exact or natural science subjects have higher graphical representation with a unique systematic mode of inquiry than those subjects that belong to the humanities, whose features are dispersed and multifarious, of which history is part. Besides, history has much irregular humanistic knowledge with a distinctive mode of inquiry (Wu & Wang, 2017). This suggests that remembering issues from history lessons is complicated, as compared to other subjects with high graphical representations. It also means that primary school learners who fall within Piaget's Concrete Operational (7–11 years) stage are not likely to remember historical content as those in Junior High school who fall within the ages of 12 and above would do. In any case, this does not imply that children in the Concrete Operational group cannot study history.

The query is about how they would remember and apply things they studied in their early years. Amos (2017) admitted that it is true that most people do not remember much of the things they learn in their early years when they become adults. He further posed the question: "So, at what point do children start making long-term memories?" He submitted that "some evidence suggests that young children lose their early years memories as they grow. He further noted that children at age six, for instance, can remember events from their first birthday celebrations, but by adolescence, they would probably forget those celebrations" (p. 73). Wu and Wang (2017) also stressed that young children have long-term-like memories, but these memories typically fade after a certain age or stage of brain development. Rather, Tulving (2002) had established that episodic memories made at adolescence and beyond are more likely to stick because the young brain undergoes essential developmental changes that improve one's ability to store and recall events. Children in this category are more found at the Junior High school level. As a result, their ability to internalise, share and

practise what they study at the JHS level during later years as adults is high. This further strengthens the argument that students in Junior High School are more likely to recollect what they studied at high school levels than in primary school.

Accepting these positions provides grounds for studying history in Junior High school. Indeed, the reintroduction of history as a core subject in the school curriculum is to provide some internal values that would be relevant for students in their working lives as professionals who have the nation at heart and would, therefore, be guided by their nation's past. In that case, having history as a core subject at the Junior High school level is apt. Again, part of the rationale of the primary school syllabus suggests that:

> As Ghanaians, there is less understanding among us about important historical developments and events, such as the evolution of the different ethnic groups in the country and their social and economic institutions; the development of state systems; their contact with the outside world and economic, social and political consequences of that association, such as the loss of political independence, the recovery of sovereignty and the emergence of the modern state of Ghana. Furthermore, there is a need to appreciate the value of our own culture. As learners study Ghana's history, they will appreciate the lives and sacrifices of our forebears, learn about the interconnectedness among the various ethnic groups to promote national integration and develop national pride and identity (Ministry of Education, 2019, p. IV).

In the estimation of the authors, this rationale should be reserved for the Junior High school syllabus and not for the Primary school history syllabus. The reason is that children at the primary school level should be exposed to things in their immediate environment. In the case of history, community historical events may be more appropriate for children as a starter. Several historians and researchers agree that the focus of any primary school history syllabus should be local history (Demers, Lefrançois & Ethier, 2015). Oppong, Gyimah and Yeboah (2021) recommended that at the primary school level, it may not be absurd if the entire syllabus is devoted to the history of local people. In this manner, the syllabus would allow all learners to appropriately appreciate the diversity of their own and one another's backgrounds in their respective societies. Wattanatorn and Thongthew (2007) indicated that local history enables curriculum developers to construct curriculum

that provide sociocultural, historical and community contexts for learners to appreciate local issues in the classroom. Collins (2001) had suggested that the gains of local context history include the appreciation of the connection between families and societal needs and interests. Similarly, Kraipeerapun and Thongthew (2007) intimated the local context knowledge and skills that children derive from local history. The authors argue that local history provides an opportunity for children to develop knowledge, skills, and attitudes that are relevant to local community contexts. This makes learning real and reduces the abstractness of the history subject to learners at that level of schooling.

At the Junior High school level, the wider national history of socioeconomic and political developments and ethnic diversity would be more appropriate. These past developments enable students to appreciate the life and sacrifices of the early people. As mentioned above, learning about this historical past inculcates in learners such socio-political fundamentals as: patriotism, tolerance, national consciousness, solidarity, etc. These elements are genuinely essential for nation-building, especially for heterogeneous societies. Therefore, teaching history for learners to acquire these fundamentals should be at a stage where they are most likely to be internalised appropriately. Hence, the current rationale for teaching history at the Primary School level would become more relevant, and the desired results would be better achieved if the syllabus was reserved for teaching at the Junior High School level.

Conclusion and Recommendation

The paper has examined the study of history in the context of the Ghanaian school curriculum and the missing link therein. Specifically, the paper has provided a historical overview of post-independence history education in Ghana, school history and Bruner's theory, the missing link, episodic memory theory and the arguments of the paper. It has been noted that the study of history that truncates at the Primary school level is not appropriate within the context of the episodic memory theory and other justifiable arguments advanced in this paper. As such, the authors call on the Government of Ghana again to review the Basic school curriculum and provide an opportunity to study history at the Junior High school level. They make this call in the belief that such an arrangement would go a long way to ensure

continuity in the study of history from the Primary school level to the tertiary level. It also would help to train and produce citizens who have appropriate knowledge about the history of Ghana from the remote past to the present. The acquisition of this knowledge would enable them to make meaningful contributions to the present and future development of the country. More importantly, the incorporation of the study of history into the JHS curriculum would complete the government's intention for reintroducing history into the Basic School curriculum and give that intention a deeper meaning.

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Students' Level of Academic Cognitive Engagement in the Learning of Economics

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Abstract

This study examined students' level of academic cognitive engagement in the learning of Economics. The study was a quantitative research that employed the descriptive cross-sectional survey design. In total, 422 Senior High School Economics students were selected for the study. The Academic Cognitive Engagement Scale (ACES) was used to gather data for the study. Descriptive statistics (frequencies, percentages, mean and standard deviation) and inferential statistics (One-Way MANOVA) were used to analyse the data. The study revealed that Economics students' level of academic cognitive engagement was high. Also, it was found that there were statistically significant differences in Economics students' level of academic cognitive engagement based on their school location. In addition, the study showed that there were statistically significant differences in Economics students' academic cognitive engagement based on school category. Therefore, it was recommended that teachers should continue to engage students in instructional activities that require students to use deep strategies. Additionally, teachers in rural schools should employ teaching strategies that would help students employ deep learning strategies in the learning of Economics. Lastly, in the organisation of Continuous Professional Development (CPD) programmes and seminars for teachers on how to sustain and improve the cognitive engagement level of students, equal attention should be given to all the students in the various school categories. The practical implications of the findings are discussed in the study.

Keywords: Academic Engagement, Cognitive Engagement, Deep Strategy, Reliance, Surface Strategy

Introduction

As our society progresses, it is imperative for the educational system to adapt in order to fulfil its changing needs. According to Bertel-Narvaez, Viloria-Escobar and Sánchez-Buitrago (2019),

educational institutions recognise the importance of delivering high-quality teaching, and providing professional development opportunities for students. These educational institutions strive to ensure that education is suitable, logical, interactive, enjoyable, and practical, as stated by Markopoulos, Einolander, Vanharanta, Kantola and Sivula (2019) (2019). Consequently, student engagement has emerged as a significant concern for teachers and institutions, leading to the recognition of the need to measure it as a valuable tool (Markopoulos et al., 2019). Different definitions have been provided for the multidimensional concept of students' academic engagement (Balwant, 2018). One such definition, presented by Guz and Tetiurka (2016), describes it as "the extent and manner of involvement manifested by learners in relation to academic activities" (p. 136). According to Bedenlier, Bond, Buntins, Zawacki-Richter and Kerres (2020), student engagement is characterised as the physical or mental energy and effort exerted by students within their academic setting. Hiver, Al-Hoorie, Vitta and Wu (2021) recently defined the concept of student academic engagement, stating that it encompasses both the quantity and quality of learners' active participation and involvement in a learning activity (p. 2). Zhou, Guan, Ahmed, Ahmed, Jobe and Hiramoni (2021) suggest that a heightened level of student engagement leads to profound learning, active participation, and a favourable reaction to challenges.

The conceptualization of students' engagement involves a comprehensive model that considers emotional, cognitive, and behavioural aspects (Bedenlier et al., 2020; Christenson et al., 2012; Doğan, 2014). These dimensions provide a holistic approach to studying engagement. Emotional or affective engagement focuses on students' interests and responses within the classroom (Skinner et al., 2009; Xie et al., 2019). The behavioural dimension encompasses classroom activities such as active participation and voluntary contributions (Doğan, 2015).

Cognitive engagement plays a crucial role in predicting classroom learning outcomes, as it involves the extent of students' psychological investment in the learning environment (Fredricks et al., 2005). In the study conducted by Rotgans and Schmidt (2011), cognitive engagement was defined as the willingness and ability of students to undertake the learning task at hand (p. 467). It encompasses a commitment to learning, and the capacity to strategically plan the learning process (Doğan, 2015). Moreover, cognitive engagement

entails students' effort to comprehend their learning and establish connections between the learned content and real-life problems over an extended period of time (Iqbal et al., 2022). All the research studies examined in this review provide evidence in supporting the notion that cognitive engagement involves students' capacity and willingness to comprehend the content taught in the classroom. The focus of the present study was specifically on the cognitive dimension of students' academic engagement. The rationale behind this choice is based on previous findings by Arthur and Akwetey (2021), and Chew and Cerbin (2021), which identified various cognitive obstacles that hinder effective learning, including students' mental mindset, inadequate prior knowledge, ineffective learning strategies, and limitations in mental effort. These challenges, as revealed by the studies, can lead to disengagement of students during the learning and instructional process. Consequently, the present study aimed at investigating the levels of academic cognitive engagement among Economics students in senior high schools.

Kong et al. (2003) conceptualised cognitive engagement into three dimensions: surface strategy, deep strategy, and reliance. They claimed that these domains encompass various learning strategies and approaches, such as memorisation techniques, test preparation methods, understanding question formats, summarising learned information, seeking guidance from teachers, making connections between new and existing knowledge, and integrating different learning methods. According to Kong et al., surface strategy involves memorisation, practicing for and handling of tests. Also, they defined deep strategy as the students' understanding of questions, summarising what is learnt and connecting new knowledge with previous ones. Lastly, reliance involves students' dependence on teachers for the understanding of the content delivered in the classroom. This current study focused on these three dimensions proposed by Kong et al. since the study of Economics involves an understanding of Economic concepts, models, and arithmetic. Economics students may employ a surface strategy in memorising concepts, or a deep strategy for understanding models and the mathematical aspect of it. Students may also rely on the teacher for the understanding of concepts, models and arithmetic dimensions of Economics.

According to Xie et al. (2019), cognitive engagement occurs when students exert mental effort while studying a particular subject. This engagement can be characterised by the use of both deep and superficial study methods during the learning process. Cognitive engagement involves various mental efforts, such as reflection, strategy implementation, and a willingness to fulfill the requirements for comprehending complex concepts and developing proficiency in challenging skills. These efforts contribute to the acquisition of new knowledge and the mastery of course material (Fredricks et al., 2004). Furthermore, cognitive engagement enhances problem-solving flexibility, and fosters a positive attitude towards encountering setbacks or failures (Fredricks et al., 2004).

Hiver et al. (2021) emphasized that students' disengagement poses a significant threat to their academic achievement. Recognising the critical role of students' academic engagement in their overall success (Carver et al., 2021; Khajavy, 2021), numerous studies have been conducted to investigate this area. Consequently, teachers in various instructional-learning contexts must prioritise the promotion of students' academic engagement (Wang & Ye, 2021). Generally, cognitive engagement appears to be linked to academic performance, although the nature of this relationship may vary depending on whether students employ deep or shallow learning strategies (Wang et al., 2015; Wara et al., 2018).

Conceptual Framework

Kong et al. (2003) proposed a three-dimensional cognitive academic engagement construct: surface strategy, deep strategy, and reliance. Surface strategy refers to a shallow or superficial approach to learning (Dinsmore & Alexander; Greene, 2015; Kong et al., 2003). When students adopt a surface strategy, they tend to focus on memorising facts, definitions, and formulas without fully grasping the underlying concepts (Green, 2015). Their main goal is to reproduce the information when needed, often for examinations or assessments, but they may lack a deep understanding of the subject matter. In the context of Economics, students employing a surface strategy might simply memorise economic theories, definitions of key terms, and basic economic principles without critically analysing the implications or understanding the real-world applications. This approach can lead to

limited retention and difficulty in applying the knowledge in more complex scenarios.

Deep strategy, on the other hand, involves a more profound and meaningful engagement with the subject material (Annansingh, 2019; Kong et al., 2003). Students who adopt a deep strategy seek to understand the underlying principles, connections, and applications of the concepts they are learning (Entwistle et al., 2014). They are more likely to critically analyse the information, ask questions and actively connect new knowledge with their existing understanding. In the learning of Economics, students employing a deep strategy would try to understand the rationale behind economic theories, explore real-world examples and case studies, and engage in discussions and debates about economic issues (Giddings & Lefebvre, 2023). This approach fosters a more comprehensive understanding of Economics, and enhances the ability to apply economic principles to various contexts. Furthermore, reliance refers to the extent to which students rely on their teachers in the learning process (Kong et al., 2003). Low reliance indicates that students take ownership of their learning, actively seek out resources, and invest effort in understanding the subject matter independently (Lee & Hannafin, 2016). High reliance, on the other hand, suggests that students depend heavily on external factors like teachers' instructions or simply go through the motions without taking full responsibility for their learning. In the Economics class, students with low reliance will proactively seek additional reading materials, engage in extra research, and participate in extracurricular activities related to the subject. In contrast, those with high reliance may only engage with the content presented during class without delving deeper into the subject matter.

Eventually, understanding these three dimensions of cognitive engagement (surface strategy, deep strategy, and reliance) can help educators and policymakers design effective teaching strategies and support systems to promote deeper learning and critical thinking among SHS students in Economics. Encouraging students to adopt a deep strategy, and fostering self-reliance can lead to better academic outcomes and a more comprehensive understanding of Economics as a discipline. The researchers formulated a conceptual framework based on the three dimensions of academic cognitive engagement. Figure 1 shows the conceptual framework proposed to underpin the study.
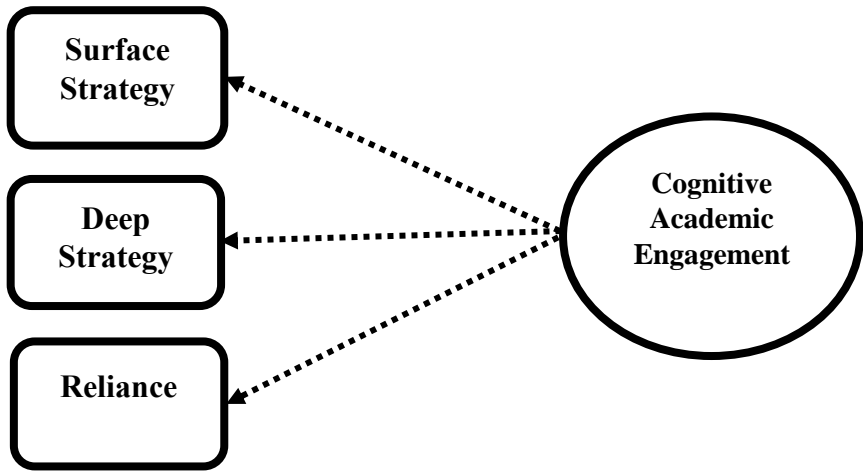
Figure 1: Conceptual Framework
Source: Authors' Construct

Empirical Literature

Many studies (e.g., Effah & Nkwantabisa, 2022; Wang & Ye, 2021; Zhang et al., 2022; Zheng, 2021) have explored the academic engagement level of students. For instance, Effah and Nkwantabisa studied the academic engagement of Accounting students. The study revealed that Accounting students had a higher score in dedication as compared to the other dimensions of academic engagement. The study involving Accounting students used different dimensions of academic engagement, different from the dimensions used in the current study. Again, other studies (e.g., Cornell et al., 2016; Delfino, 2019) revealed that students' cognitive engagement level was high. However, Ayub et al. (2017) found out that students' level of engagement in Mathematics was moderate.

Also, in contrast to these studies (e.g., Ayub et al., 2017; Cornell et al., 2016; Delfino, 2019), other studies (e.g., Estévez et al., 2021; Mahama et al., 2022; Shukor et al., 2014) revealed that students had low cognitive engagement level. However, the context and sample characteristics of these studies differ. For instance, Mahama et al. used College of Education students in Ghana while Estévez et al. sampled primary school students in Spain. Likewise, Brenneman (2016) found out that college students had low levels of engagement in classrooms. In a different study, Kew and Tasir (2021) revealed that more than half

of the students had a low cognitive engagement level.

Concerning the differences in students' academic engagement levels based on their school location, González and Glasserman-Morales (2020) opined that features of students' profiles (e.g., gender, age, school location, school category) could be factors that contributed to their engagement level. For example, Ayub et al. (2017) explored secondary school students' mathematics engagement levels. They found out that students in urban schools had higher cognitive engagement level as compared to students in rural schools. Rotgans and Schmidt (2011) asserted that cognitive engagement can be affected by a student's learning environment. This assertion confirms that of Gonzalez and Glasserman-Morales that students' school context may affect their academic engagement; therefore, there is the need for further studies to be conducted to augment the body of knowledge in this field.

Many studies (e.g., Casimiro, 2016; Delfino, 2019; Estévez et al., 2021; Li, 2021; Sesmiyanti, 2016) have explored cognitive engagement with different constructs in the field of Educational Psychology. Green et al. (2007) observed that academic engagement may vary from school subject to school subject. Therefore, it may be worthwhile to examine students' cognitive engagement in different fields (e.g., Accounting, Economics and Management). Cognitive engagement is a critical factor that needs to be explored in the learning of Economics in Ghana. Thus, this study explores students' level of academic cognitive engagement in the learning of Economics. Moreover, this work contributes to the extant body of literature in the following ways. First, the current study re-confirms an instrument for measuring Economics students' academic cognitive engagement level. Secondly, the study extends the literature on academic cognitive engagement to the field of Economics by examining differences in students' academic cognitive engagement levels based on school location and school category.

Purpose of the Study

The aim of this study was to explore students' level of cognitive engagement in learning Economics. Specifically, this descriptive cross-sectional study sought to:

1. examine Economics students' level of cognitive engagement in learning Economics.

2. determine whether there was any statistically significant difference in Economics students' level of cognitive engagement based on school location.

3. determine whether there was any statistically significant difference in Economics students' level of cognitive engagement based on school category.

Research Hypotheses

The study tested the following research hypotheses:

1. H0: There was no statistically significant differences in Economics students' levels of cognitive engagement in learning Economics based on school location.

2. H0: There was no statistically significant differences in Economics students' levels of cognitive engagement in learning Economics based on school category.

Methodology

Research design, population and sampling

The descriptive cross-sectional survey design was employed for the study. It was used to gather data from senior high school Economics students about their cognitive engagement level in the learning of Economics. This study took place in an unrestrained environment where Economics students willingly responded to the survey without manipulations (Yidana & Arthur, 2023; Yidana et al., 2022; Yidana et al., 2023).

The decision to employ this design was influenced by Brewer's (2009) claim that the descriptive cross-sectional survey design involves observing and collecting information from groups of individuals in their natural settings without manipulating any variables. Also, the design was used because the researchers were interested in studying certain characteristics and behaviour of a population (Bryman & Bell, 2015; Salant & Dillman, 2004). Salant and Dillman opined that a cross-sectional survey design is employed to examine the views of individuals on a phenomenon.

The population of the study comprised all senior high school Economics students in the Kumasi Metropolis of Ghana. The Metropolis had a total of 9,500 Economics students (GES, 2022). The sample size was determined by using a multi-stage sampling technique,

which involved a three-stage selection process. Initially, the Senior High Schools in the Kumasi Metropolis were classified into three strata: namely, Categories A, B and C schools, using the stratified sampling technique. These groupings were based on the Computerised School Selection and Placement System (CSSPS) [2022] stratification criteria. These groupings aimed at ensuring that schools within each category shared common attributes, such as the quality and quantity of their infrastructure (including school buildings, ICT labs, libraries, etc.), the availability of learning facilities, the staffing levels (both in terms of teacher quality and quantity), and academic performance (Nsiah-Peprah, 2004). Secondly, a sample of 10 senior high schools was randomly chosen from the 67 Senior High Schools in the Metropolis using the simple random sampling technique. The proportionate sampling technique was then employed to select 500 Economics students, following the sample size determination table proposed by Krejcie and Morgan (1970).

Instrumentation

The Student Engagement in the Mathematics Classroom Scale (SEMS) developed by Kong et al. (2003) was adapted to develop the Academic Cognitive Engagement-Scale (ACES) which was used for data collection. The SEMS comprises 52 items with three sub-scales, specifically, academic cognitive, affective and behavioural engagement. A five-point Likert scale, ranging from 1 (Strongly Disagree), 2 (Disagree), 3 (Neither agree nor disagree), 4 (Agree) to 5 (Strongly Agree). The first eighteen items (items 1-18) which measure student cognitive engagement (deep strategy = 7; surface strategy = 5; and reliance = 6) in the classroom were drawn from the SEMS and converted to statements on the ACES. A sample item for deep strategy is, "I would try to connect what I learn in Economics with what I encounter in real life or in other subjects". Under the surface strategy, a sample item is "In learning Economics, I prefer memorising all the necessary formulas rather than understanding the principles behind them". Lastly, a sample item for reliance is, "In learning Economics, no matter what the teacher says, I will follow accordingly". The Cronbach alpha value obtained for cognitive engagement in Kong et al.'s study was .849.

Instrument Validation

A preliminary Exploratory Factor Analysis (EFA) was performed on the ACES to confirm the three academic cognitive engagement factors. The EFA with Promax rotation yielded a Kaiser-Meyer-Olkin measure of sampling adequacy of .755, Bartlett's test of sphericity, $\chi2 = 1377.218$, $p < .001$, indicated that the correlation among the generated factors was adequate for the test. Five factors were obtained with an extracted variance of 52.56%. Also, the content of the items was adjusted, and experts in the field of Economics education subsequently authenticated their validity. In this context, as proposed by Samuels (2017), it is recommended to employ Confirmatory Factor Analysis (CFA) to reaffirm the factors. Hence, the five factors were then subjected to a Confirmatory Factor Analysis (CFA) using Analysis of Moment Structures (AMOS) version 24.
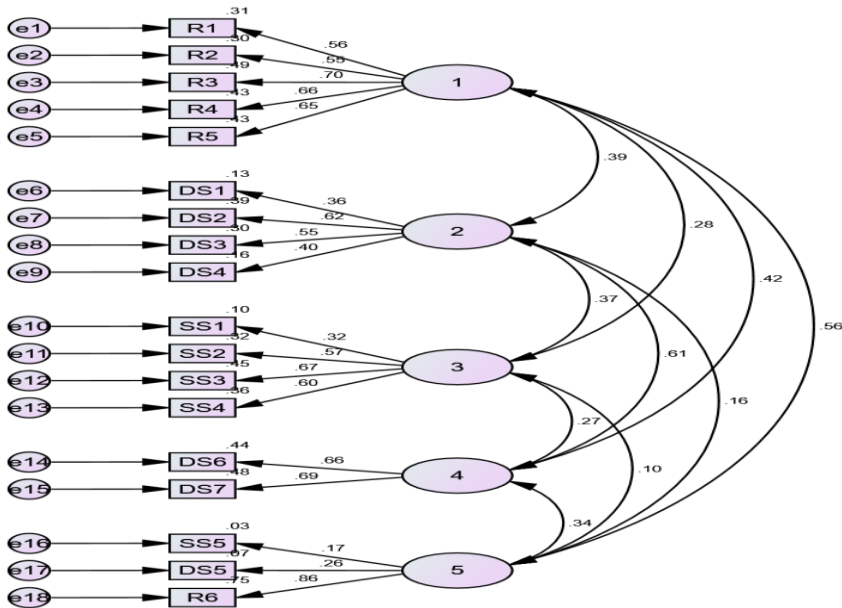
Figure 2: Five-factor academic cognitive engagement CFA model

Figure 3 presents the three-factor academic cognitive engagement CFA model along with the standardised factor loadings and factor covariances. Also, Table 1 presents the fit indices for the CFA model.
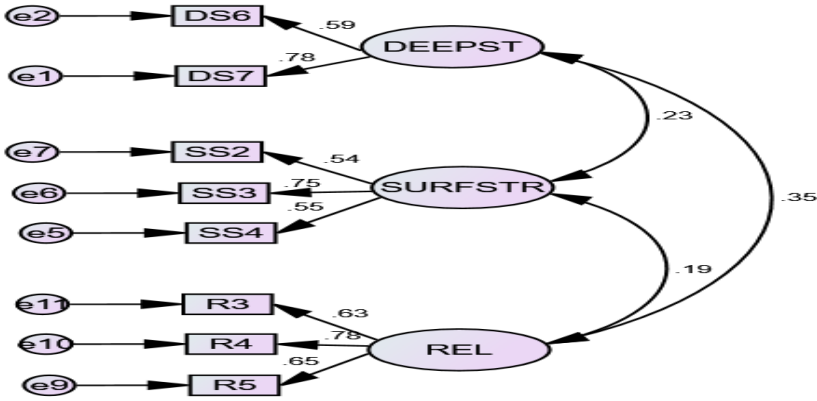
Figure 3: Three-factor academic cognitive engagement CFA model; arrows represent standardised factor loadings, and factor connectors represent collinearity between factors.
Note: DEEPST = Deep Strategy; SURFSTR = Surface Strategy and REL = Reliance

Figure 2 presents the five-factor cognitive engagement model. It can be seen in Figure 2 that some of the factor loadings are below the threshold of .50 and above; hence, the modification indices were used to prune the model. The pruning process helped in deleting the items with less factor loading and also to obtain good model fit indices. Figure 3 shows the three-factor academic cognitive engagement CFA model after the pruning process. Table 1 shows the goodness of fit indices for the three-factor cognitive engagement CFA model.

Table 1: Goodness of Fit Indices for Academic Cognitive Engagement Scale

Fit Indices	Estimates	Threshold	Reference
χ^2	24.517 (p = .106)	> .05	Hair et al. (2010)
CMIN/DF	1.442	≤ 2 or 3	Schreiber et al. (2006)
CFI	.987	≥ .90	Kline (2013)
NFI	.959	≥ .90	Kline (2013)
IFI	.987	≥ .90	Kline (2013)
TLI	.978	≥ .90	Kline (2013)
RMSEA	.032	≤ .08	Schreiber et al. (2006)
SRMR	.033	≤ .08	Kline (2016)

Note: χ^2 = Chi-square; CMIN/DF: Ratio of χ^2 to df; CFI = Comparative Fit Index; NFI = Normed Fit Index; IFI = Incremental Fit Index; TLI = Tucker-Lewis Index; RMSEA= Root Mean Square Error of Approximation; SRMR = Standardised Root Mean Residual

The goodness of fit indices provides whether exact fit (χ^2 not significant) or approximate fit (SRMR ≤ .08) is tenable (Asparouhov & Muthen, 2018), to allow for the examination of the standardised regression weights (loading) and Average Variance Extracted (AVE) for assessing construct validity. All the indices, except for RMSEA, communicate that the ACES is approximately fit (SRMR ≤ .08) for the three-factor academic cognitive engagement construct. The item loadings, AVE and reliability are displayed in Table 2.

Table 2: Item Loadings, AVE and Composite Reliability for Economics Students' Academic Cognitive Engagement Scale

Factors/Constructs	Items	Factor Loading	AVE	CR	Cronbach alpha (α)	McDonald's ω
Deep Strategy	DS6	.781***	.477	.641	.627	.641
	DS7	.587***				
Surface Strategy	SS2	.536***	.384	.646	.635	.656
	SS3	.748***				
	SS4	.553***				
Reliance	R3	.626***	.478	.731	.725	.733
	R4	.784***				
	R5	.653***				
ACES					.660	.625

All the factor loadings exceeded the minimum threshold of .5 (Apostolakis & Stamouli, 2006; Hair et al., 2014; Hulland, 1999) and they were significant at p < .001. The AVEs of the constructs were quite lower than the .5 AVE criterion (Bagozzi et al., 1991; Fornell & Larcker, 1981, Holmes-Smith, 2001; Story et al., 2014). However, Malhotra and Dash (2011) opined that the AVE is often too strict, so convergent validity can be established through CR alone. Hence, convergent validity has been achieved. The composite reliability as shown by the Cronbach's alpha (α = .660) and the McDonald omega (ω = .625) was below the minimum threshold of .7 (Huck, 2012; Nunnally, 1978). Even if AVE is less than 0.5 but composite reliability is higher than 0.6, the convergent validity of the construct is still adequate (Fornell & Larcker, 1981). Additionally, Hamid et al. (2017) asserted that values of composite reliability/Cronbach alpha between 0.60 and 0.70 are acceptable. As a result, the instrument (ACES) was deemed fit for purpose.

Discriminant Validity

The discriminant validity of the instrument was examined through the use of Fornell-Larcker and HTMT criteria. The study conducted both the Fornell-Larcker and HTMT ratio criteria for discriminant validity. Table 3 presents the Fornell-Larcker criterion for evaluating the discriminant validity of the measurement model.

Table 3: Fornell-Larcker Criterion for evaluating Discriminant Validity

	CR	AVE	MSV	MaxR (H)	Deep Strategy	Surface Strategy	Reliance
1. Deep Strategy	0.641	0.477	0.120	0.676	**0.691**		
2. Surface Strategy	0.646	0.384	0.053	0.679	0.229**	**0.620**	
3. Reliance	0.731	0.478	0.120	0.749	0.346***	0.185*	**0.691**

$*p < .05; **p < .01; ***p < .001$

The bolded values (0.691, 0.620 and 0.691) on the diagonals are the square roots of the AVE of the latent variables, and they are the highest in any row or column (Fornell & Larcker, 1981). Table 3 shows that the square root of the AVEs for the constructs is greater than its correlation. This implies that discriminant validity has been achieved from the Fornell-Larcker criterion. The HTMT ratio criterion was further conducted to confirm this result.

Discriminant validity using the Heterotrait-Monotrait (HTMT) Criterion

This section shows the results of the HTMT ratio criteria for discriminant validity. Table 4 displays the HTMT criterion for evaluating the discriminant validity of the measurement model.

Table 4: Heterotrait-Monotrait (HTMT Ratio) Criterion for evaluating Discriminant Validity

	1	2	3
1. Deep Strategy			
2. Surface Strategy	0.279		
3. Reliance	0.592	0.234	

Note: 1 = Deep Strategy; 2 = Surface Strategy; 3 = Reliance and the shaded diagonals are the inter-construct correlations of the constructs of the academic cognitive engagement scale used in the study (Kline, 2011).

From Table 4, it is apparent that the HTMT ratio for the constructs is less than .85. According to Hair et al. (2019), the HTMT ratio should be less than .90 for conceptually similar constructs and .85 for conceptually different constructs. The thresholds .85 and .90 are for strict and liberal discriminant validity respectively (Henseler et al., 2015). Hence, it is evident that discriminant validity has been achieved from this HTMT criterion.

Procedure for data collection

For the duration of the study, five research assistants were employed, and they were given comprehensive training on the instrument's administration and research ethics. Each research assistant was assigned to four schools to ensure smooth data collection and adherence to research standards. The research assistants visited all the schools included in the sample to administer the designated instrument to the Economics students. The students were allotted a specific timeframe of 25 to 30 minutes to respond to the questionnaire. Subsequently, the research assistants diligently reviewed each completed instrument for accuracy and completeness. As a result, a total of 422 fully completed questionnaires were successfully collected from the Economics students, out of the 500 questionnaires that were initially distributed. The return rate for the questionnaire was 84.4%.

Data processing and analysis

The collected data passed through a thorough screening to identify and remove incomplete and void questionnaires. Subsequently, the data were coded and entered into Statistical Product for Service Solution (SPSS) version 28 for further processing. Mean and standard deviations were then utilised to assess the level of academic cognitive engagement among Economics students. Also, the research hypotheses were analysed using One-Way Multivariate Analysis of Variance (MANOVA). The scale mean score interpretation is provided as follows:

1.00-1.49 = Very low
1.50-2.49 = Low

2.50-3.49 = Moderate
3.50-4.49 = High
4.50-5.00 = Very High

Results

The following section presents a comprehensive analysis of the results, focusing on the research objectives that were formulated to guide the study.

Economics Students' Level of Academic Cognitive Engagement

This research objective was meant to examine Economics students' levels of cognitive engagement. The results of Economics students' levels of cognitive engagement in learning Economics are summarised in Table 5.

Table 5: Economics Students' Academic Cognitive Engagement

S/N	Dimensions of Cognitive Engagement	*M*	*SD*	Interpretation
1	Deep Strategy (DS)	3.92	1.01	High
2	Surface Strategy (SS)	3.74	1.16	High
3	Reliance (R)	3.49	1.15	Moderate
	Level of Cognitive Engagement	3.72	1.11	High

Scale M: 1.00-1.49 (Very Low); 1.50-2.49 (Low); 2.50-3.49 (Moderate); 3.50-4.49 (High); 4.50-5.00 (Very High).

The results from Table 5 show that the cognitive engagement level of the Economics students was high (M = 3.72, SD = 1.11). Concerning deep strategy, the highest mean was recorded on students' ability to use their time to study topics discussed in class (M = 3.92, SD = .97), and their willingness to ask questions that would help them to understand the core of Economics (M = 3.92, SD = 1.06). Thus, this result suggested that deep strategy was the highest cognitive engagement among the rest. At a significance level of .05, a repeated-measures ANOVA was performed to validate this observation. Table 6 shows the results of the repeated-measures ANOVA.

Table 6: Tests of Within-Subjects Effects for Academic Cognitive Engagement Dimensions

Source		Type III Sum of Squares	Df	Mean Square	F	Sig.	Partial Eta Squared (η_p^2)
Cognitive Engagement	Sphericity Assumed	39.269	2	19.635	30.476	<.001	.068
	Greenhouse-Geisser	39.269	1.990	19.732	30.476	<.001	.068
	Huynh-Feldt	39.269	2.000	19.639	30.476	<.001	.068
	Lower-bound	39.269	1.000	39.269	30.476	<.001	.068
Error(Cognitive Engagement)	Sphericity Assumed	542.472	842	.644			
	Greenhouse-Geisser	542.472	837.860	.647			
	Huynh-Feldt	542.472	841.830	.644			
	Lower-bound	542.472	421.000	1.289			

The preliminary Mauchly's test for sphericity did not show any violation, with $\chi 2$ (2) = 2.080, p = .353. As a result, the assumption of sphericity was upheld, indicating that the disparities in the cognitive engagement factors hold statistical significance F (2) = 30.476, p < .001, η_p^2 = .068. Further substantiating this observation, the partial eta squared value (η_p^2 = .068) suggests a small difference, in line with Cohen's (1988) effect size guidelines. In Table 7, the Bonferroni pairwise comparison result supports the ranking of the academic cognitive engagement dimensions.

Table 7: Bonferroni Pairwise Comparison of Academic Cognitive Engagement Dimensions

(I) Cognitive Engagement	(J) Cognitive Engagement	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval for Difference	
					LLCI	ULCI
1	2	.182[*]	.055	.003	.050	.313
	3	.430[*]	.054	<.001	.300	.559
2	1	-.182[*]	.055	.003	-.313	-.050
	3	.248[*]	.057	<.001	.111	.385
3	1	-.430[*]	.054	<.001	-.559	-.300
	2	-.248[*]	.057	<.001	-.385	-.111

Note: 1 = Deep Strategy; 2 = Surface Strategy; 3 = Reliance

It can be observed from Table 7 that deep strategy (1) is statistically higher than both surface strategy (2) and reliance (3) cognitive engagement. Also, a significant difference is observed between surface strategy engagement and reliance engagement. This result implies that Economics students' deep strategy engagement is higher than their surface strategy and reliance engagement.

Also, the researchers were curious about finding the levels of cognitive engagement among Economics students; hence, a further analysis was done. The questionnaire was 5-point; thus, strongly disagree = 1, disagree = 2, neither agree nor disagree = 3, agree = 4, and strongly agree = 5. The items were transformed and after that: low, moderate, high and very high levels were computed using frequencies and percentages against score ranges of 8-16, 17-24, 25-32, and 33-40. Table 8 shows the results on the levels of cognitive engagement among Economics students.

Table 8: Levels of Students' Academic Cognitive Engagement

Level	Score Range	Frequency	Percentage
Low	8-16	4	.9
Moderate	17-24	55	13.0
High	25-32	252	59.7
Very High	33-40	111	26.3
Total	4	422	100.0

From Table 8, over half of the students (n = 252, 59.7%; range = 25-32) demonstrated a high level of academic cognitive engagement, while more than a quarter of the number (n = 111, 26.3%; range = 33-40) exhibited a very high level of cognitive engagement. In contrast, a negligible percentage of students (n = 4, .9%; range = 8-16) displayed a low level of academic cognitive engagement. These results indicate that a significant majority of the Economics students were highly engaged cognitively.

Difference in Economics Students' Academic Cognitive Engagement

The initial research hypothesis aimed at ascertaining whether there existed a statistically significant disparity in academic cognitive engagement among Economics students based on their school location.

Following the determination of the correlation among the cognitive engagement domains, the MANOVA test was conducted. This step was essential as MANOVA is more effective when dependent variables are correlated, as explained in (Tabachnick & Fidell, 2019). The correlation results among the dependent variables (deep strategy, surface strategy and reliance) are indicated in Table 9.

Table 9: Correlation Matrix for Dimensions of Academic Cognitive Engagement

Dimensions of Academic Cognitive Engagement	Deep Strategy	Surface Strategy	Reliance
Deep Strategy (DS)	1		
Surface Strategy (SS)	.176**	1	
Reliance (R)	.232**	.155**	1

** Correlation is significant at .01 level (2-tailed).

Table 9 shows that the correlations among the dependent variables are significant. Thus, MANOVA was used to determine the differences in Economics students' academic cognitive engagement levels based on school location and school category. Table 10 shows the descriptive statistics for Economics students' academic cognitive engagement based on school location and school category.

Table 10: Descriptive Statistics for the Academic Cognitive Engagement Dimensions Based on School Location and School Category

Dimensions of Academic Cognitive Engagement	Variable	M	SD
	School Location		
Deep Strategy	Rural	3.68	.94
	Urban	3.99	.83
Surface Strategy	Rural	3.59	.88
	Urban	3.78	.88
Reliance	Rural	3.44	.90
	Urban	3.51	.93
	School Category		
Deep Strategy	School A	3.94	.80
	School B	4.09	.86
	School C	3.63	.97
Surface Strategy	School A	3.72	.91
	School B	3.93	.80
	School C	3.54	.89
Reliance	School A	3.47	.90

School B	3.56	.99
School C	3.45	.89

In Table 10, it appears that Economics students who are in urban areas have high deep strategy ($M = 3.99$, $SD = .83$), surface strategy ($M = 3.78$, $SD = .88$) and reliance engagement ($M = 3.51$, $SD = .93$) as compared to those in rural areas. Also, it seems that Economics students who are in category B schools have higher deep strategy ($M = 4.09$, $SD = .86$), surface strategy ($M = 3.93$, $SD = .80$) and reliance engagement ($M = 3.56$, $SD = .99$) than those in categories A and C schools. Table 11 presents the results of differences in Economics students' academic cognitive engagement based on their school location.

Table 11: Differences in Students' Academic Cognitive Engagement Based on School Location

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared (η_p^2)
School Location	Pillai's Trace	.026	3.660	3.000	418.000	.013	.026
	Wilks' Lambda	.974	3.660	3.000	418.000	.013	.026
	Hotelling's Trace	.026	3.660	3.000	418.000	.013	.026
	Roy's Largest Root	.026	3.660	3.000	418.000	.013	.026

Source: Fieldwork (2021)

The evaluation of homogeneity of variance-covariance matrices was performed using Box's M test. The results of Box's M test showed no statistically significant differences, with M = 4.329, F (6, 149570.509) = .712, p = .640. Thus, the assumption of variance-covariance matrices was deemed to be met. Subsequently, the Wilk's Lambda (Λ_W) test was employed to assess statistical significance. Table 11 shows that there is a statistically significant difference in Economics students' academic cognitive engagement based on their school location, F (3, 418.000) = 3.660, p = .013; Λ_W = .974, η_p^2 = .026. This result suggests a significant dependence of Economics students' academic cognitive engagement in the learning of Economics on their school location. Table 12 presents the univariate results.

Table 12: Tests of Between-Subjects Effects

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared (η_p^2)
Corrected	DS	6.710	1	6.710	9.144	.003	.021
Model	SS	2.603	1	2.603	3.352	.068	.008
	R	.309	1	.309	.363	.547	.001
Intercept	DS	4089.556	1	4089.556	5572.881	<.001	.930
	SS	3780.629	1	3780.629	4868.960	<.001	.921
	R	3359.765	1	3359.765	3948.385	<.001	.904
School	DS	6.710	1	6.710	9.144	.003	.021
Location	SS	2.603	1	2.603	3.352	.068	.008
	R	.309	1	.309	.363	.547	.001
Error	DS	308.209	420	.734			
	SS	326.120	420	.776			
	R	357.387	420	.851			
Total	DS	6805.500	422				
	SS	6231.889	422				
	R	5503.889	422				
Corrected	DS	314.919	421				
Total	SS	328.723	421				
	R	357.696	421				

Note: DS = Deep Strategy; SS = Surface Strategy and R = Reliance, Bonferroni adjustment $p < .017$

The corrected model for deep strategy, $F (1, 420) = 9.144$, p = .003 was statistically significant. On the contrary, the corrected models for surface strategy, $F (1, 420) = 3.352$, p = .068; and reliance, $F(1, 420) = .363$, p = .547 were not statistically significant. Hence, a significant difference was found in Economics students' deep strategy engagement based on their school location. The null hypothesis is rejected, suggesting that there is a statistically significant difference in Economics students' academic cognitive engagement based on their school location. Hence, Economics students who were in urban areas had high deep strategy engagement as compared to those in rural areas.

Differences in Students' Academic Cognitive Engagement based on School Category

The research hypothesis determined whether there was any statistically significant difference in students' academic cognitive engagement based on school category. Table 13 shows the results of differences in students' cognitive engagement based on school

category.

Table 13: Differences in Students' Academic Cognitive Engagement Based on School Category

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared (η_p^2)
School Category	Pillai's Trace	.050	3.547	6.000	836.000	.002	.025
	Wilks' Lambda	.950	3.576	6.000	834.000	.002	.025
	Hotelling's Trace	.052	3.605	6.000	832.000	.002	.025
	Roy's Largest Root	.050	6.911	3.000	418.000	<.001	.047

Source: Fieldwork (2021)

The assessment of homogeneity of variance-covariance matrices was carried out using Box's M test. The results of Box's M test revealed statistical significance (M = 15.832, F [12, 296248.886] = 1.303, p = .209), indicating that the assumption of variance-covariance matrices was not violated. Consequently, the Wilk's Lambda (Λ_W) test was employed to determine statistical significance. Table 13 shows that there are statistically significant differences in Economics students' academic cognitive engagement based on school category, F (6, 834.000) = 3.576, p = .002; Λ_W = .950, η_p^2 = .025. Table 14 presents the univariate results.

Table 14: Tests of Between-Subjects Effects

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared (η_p^2)
Corrected Model	DS	10.575	2	5.287	7.279	<.001	.034
	SS	7.459	2	3.730	4.864	.008	.023
	R	.851	2	.425	.499	.607	.002
Intercept	DS	5330.448	1	5330.448	7338.579	<.001	.946
	SS	4902.413	1	4902.413	6393.855	<.001	.938
	R	4313.797	1	4313.797	5065.169	<.001	.924
School Category	DS	10.575	2	5.287	7.279	<.001	.034
	SS	7.459	2	3.730	4.864	.008	.023
	R	.851	2	.425	.499	.607	.002
Error	DS	304.345	419	.726			
	SS	321.263	419	.767			
	R	356.845	419	.852			
Total	DS	6805.500	422				

	SS	6231.889	422	
	R	5503.889	422	
Corrected Total	DS	314.919	421	
	SS	328.723	421	
	R	357.696	421	

Source: Fieldwork (2021)   *Bonferroni adjustment $p < .017$

The corrected models for deep strategy, $F(2, 419) = 7.279$, $p < .001$; and surface strategy, $F(2, 419) = 4.864$, $p = .008$ were statistically significant. However, the corrected model for reliance, $F(2, 419) = .499$, $p = .607$ was not statistically significant. Thus, significant differences were found in Economics students' deep strategy and surface strategy engagement based on their school category. Hence, the null hypothesis is not sustained, indicating that there are statistically significant differences in Economics students' academic cognitive engagement based on school category. Specifically, the differences were found in deep strategy and surface strategy engagement.

In order to investigate the disparities in academic cognitive engagement among Economics students based on their school category, a post-hoc analysis was performed. A summary of the post-hoc analysis is presented in Table 15.

Table 15: Multiple Comparison of Difference in Students' Academic Cognitive Engagement based on School Category

Dependent Variable	(I) School Category	(J) School Category	Mean Difference (I-J)	Std. Error	Sig.
Deep Strategy	School Category A	School Category B	-.1562	.09714	.243
		School Category C	.3128*	.11094	.014
	School Category B	School Category A	.1562	.09714	.243
		School Category C	.4690*	.12364	<.001
	School Category C	School Category A	-.3128*	.11094	.014
		School Category B	-.4690*	.12364	<.001
Surface Strategy	School Category A	School Category B	-.2104	.09981	.089
		School Category C	.1781	.11398	.263
	School Category B	School Category A	.2104	.09981	.089
		School Category C	.3884*	.12703	.007
	School Category C	School Category A	-.1781	.11398	.263
		School Category B	-.3884*	.12703	.007
Reliance	School Category A	School Category B	-.0960	.10519	.633
		School Category C	.0140	.12013	.993

School Category B	School Category A	.0960	.10519	.633
	School Category C	.1099	.13388	.690
School Category C	School Category A	-.0140	.12013	.993
	School Category B	-.1099	.13388	.690

In Table 15, the Turkey's HSD post-hoc test indicates that there are statistically significant differences in Economics students' deep strategy between students who are in Category A and Category C schools. This result means that Economics students who are in Category A schools have higher deep strategy engagement level as compared to those in Category C schools. Also, it can be observed from Table 15 that there are statistically significant differences in Economics students' deep strategy among students who are in Categories B and C schools. This result implies that Economics students who are in Category B schools have higher deep strategy engagement level than those in Category C schools. Moreover, the results of the study show that there is a statistically significant difference in surface strategy between students who are in Category B and Category C schools. This result suggests that Economics students who are in Category B schools have higher surface strategy engagement level than those in Category C schools. However, no significant difference was found in reliance based on school category.

Discussion

The study examined the academic cognitive engagement level of Economics students in the learning of Economics. The first objective sought to examine Economics students' level of academic cognitive engagement in the learning of Economics. The study revealed that Economics students' had a high level of academic cognitive engagement in the learning of Economics. The finding tallies with recent studies (e.g., Delfino, 2019; Effah & Nkwantabisa, 2022) which identified that students had high cognitive engagement level. However, this finding is contrary to that of Shukor et al. (2014) and Mahama et al. (2022) who found that students had a low cognitive engagement level. This inconsistency may be due to the different context of the current study, and also the different instruments that were adopted for the study. Also, it is important to note the possible bias in comparing the current study's findings and those of Mahama et al. because the latter focused on College of Education students, and also measured academic engagement as a one-dimensional construct. Similarly, Brenneman (2016) found out that college students had low levels of

engagement in classrooms.

Additionally, the study revealed that more than half the number of the students had a high level of academic cognitive engagement in the learning of Economics. This result suggests that the majority of the students involved in the study possessed a high level of academic cognitive engagement. The findings of the study validate that of Cornell et al. (2016) who revealed that the majority of the students possessed high levels of engagement. On the contrary, Kew and Tasir (2021), and Shukor et al. (2014) found out that more than half the number of the students had low cognitive engagement level. Again, this finding refutes previous findings of Mahama et al. (2022) who found out that the majority of students possessed a low level of academic engagement. Rotgans and Schmidt (2011) asserted that students with a higher level of cognitive engagement were the individuals with more knowledge, autonomy, and self-determination. Therefore, it can be presumed that these students had mastered much more knowledge, and were autonomous learners, thereby enabling them to have a higher level of cognitive engagement in the learning of Economics. For the students who had a low cognitive engagement level, teachers should act to determine the alternative methods to augment students' cognitive engagement level.

The findings of the study suggest that the extent to which students try intellectual tasks or how much mental effort they use in the learning activities provided, for instance, the effort students put into completing a task using knowledge and cognitive strategy is high (Chapman, 2003). This is because the learning of Economics heavily relies on the students' cognitive domain, particularly, the linguistic and mathematical aspects of Economics. Also, students' level of deep strategy was higher as compared to other dimensions of academic cognitive engagement because evoking deep learning would be beneficial to the quality of learning outcome (Kong et al., 2003).

The first research hypothesis determined whether there were any statistically significant differences in Economics students' academic cognitive engagement based on their school location. The study revealed that there were significant differences in Economics students' academic cognitive engagement based on their school location. This finding validates that of Ayub et al. (2017) who found out that there was a significant difference in cognitive engagement between students who were in rural and urban schools. Specifically, the

study discovered that there were statistically significant differences in deep strategy cognitive engagement between rural and urban school students. This result confirms the descriptive results that indicate that urban school students have higher deep strategy cognitive engagement as compared to those in rural schools. This suggests that students from different geographic backgrounds may approach learning and problem-solving in distinct ways. Surprisingly, no significant differences were found in surface strategy and reliance cognitive engagement based on location of school. The absence of significant differences in surface strategy and reliance cognitive engagement based on school location implies that these cognitive engagement dimensions might be more universally influenced by other factors, such as curriculum design, teaching methods, or individual learning preferences, rather than being tied to rural or urban environments.

Finally, the last research hypothesis ascertained whether there were any statistically significant differences in Economics students' academic cognitive engagement based on school category. The findings of the study indicated that there were statistically significant differences in Economics students' academic cognitive engagement based on school category. This finding confirms the assertion of González and Glasserman-Morales (2020) that students' profile such as school category can affect their engagement level. Again, at the univariate level, the findings showed clearly that there were significant differences in Economics students' deep strategy and surface strategy engagements based on school category. One unanticipated finding was that no significant difference was found in reliance based on school category.

Specifically, the study revealed that Economics students who were in Category A schools had a higher deep strategy engagement level as compared to those in Category C schools. Also, it was discovered that Economics students who were in Category B schools had higher deep strategy engagement level than those in Category C schools. One possible reason for this finding could be the difference in academic resources and teaching methodologies between schools in different categories. Category A and Category B schools might have access to better educational facilities, more experienced teachers, and a curriculum that emphasises critical thinking and deep engagement with the subject matter. This enhanced learning environment could encourage Economics students in these schools to adopt a deeper strategic approach to their studies. On the contrary, Category C schools

might face limitations in terms of resources and teaching quality, which could lead to a less conducive learning environment for fostering deep strategy engagement among Economics students. This discrepancy in educational opportunities could contribute to the observed differences in deep strategy engagement levels between the school categories. Moreover, the study found that Economics students who were in Category B schools had higher surface strategy engagement level than those in Category C schools. However, no significant difference was found in reliance based on school location.

Conclusions and Recommendations

The study revealed that Economics students' academic cognitive engagement level was high. The current study contributes to academic engagement studies, specifically academic cognitive engagement with a focus on Economics students in senior high schools in Ghana. It can be concluded that students can maximize their effort in deploying deep strategy, surface strategy and reliance in the learning of Economics. Again, it can be concluded that Economics students' level of deep strategy engagement will depend on whether the student is from a rural or urban school. Conversely, Economics students' level of surface strategy and reliance engagements are not dependent on the location of the school.

Additionally, school category influences students' deep strategy and surface strategy engagements. It can be concluded that Category A and Category B schools seem to provide environments that foster deeper learning approaches in Economics, while Category C schools might lack certain factors that support such engagement. However, Economics students' reliance engagement is not susceptible to school category. Hence, irrespective of the school category, students will have the same level of reliance engagement. Firstly, it is recommended that further research should be carried out to establish the influence of Economics students' academic cognitive engagement on their academic success. Additionally, it is recommended that teachers should continue to engage students in instructional activities that require students to use deep strategies. Also, teachers in rural schools should employ teaching strategies that help students to use deep learning strategies in the learning of Economics. Moreover, in the organisation of Continuous Professional Development (CPD) programmes and seminars for teachers on how to sustain and improve the cognitive

engagement level of students, equal attention should be given to all teachers in the various school categories (A, B and C SHSs). Further studies should explore the role of peer interactions and social networks in shaping the cognitive engagement of Economics students. Lastly, future studies should investigate how cultural factors, such as cultural norms, values, and expectations, influence the cognitive engagement of Economics students.

Implications of the Study for Practice
1. Teachers and educators should be aware of the differences in cognitive engagement approaches between rural and urban students. They can adapt their teaching methods to better suit the learning preferences and needs of students from diverse geographical backgrounds. Also, collaboration between rural and urban schools could be encouraged to share best practices and experiences in enhancing cognitive engagement. This could facilitate the exchange of ideas and strategies that have proven effective in different educational contexts.
2. Teachers in Category A and Category B schools should continue employing instructional strategies that promote deep learning, and encourage active engagement with Economics content. These strategies could include collaborative projects, case studies, discussions, and real-world applications to enhance students' understanding of the subject matter. In addition, teachers in Category C schools should be supported with professional development opportunities to help them incorporate more effective teaching methods that foster deep strategy engagement among Economics students.
3. Heads of SHS, and educators should work together to create a positive learning environment that encourages curiosity, critical thinking and independent exploration of Economics concepts in all categories of schools.

Policy Implications of the Study
1. Educational policymakers (e.g., Ministry of Education [MoE], Ghana Education Service [GES] and National Council for Curriculum and Assessment [NaCCA]) should consider implementing targeted interventions to enhance deep strategy cognitive engagement among rural students. This might involve

providing additional resources, teacher training, and curriculum adjustments that foster critical thinking, problem-solving, and deeper understanding of academic concepts.

2. MoE, GES and Non-Governmental Organisations (NGOs) should focus on identifying and understanding the factors present in Category A and Category B schools that contribute to higher deep strategy engagement levels. These factors could be used as models for implementing effective teaching practices in Category C schools, potentially leading to improved cognitive engagement among Economics students.

3. It is crucial for policymakers (MoE and GES) to address the disparities in educational resources between rural and urban schools. Efforts to bridge the gap in infrastructure, technology, and access to extracurricular activities could contribute to more equitable cognitive engagement outcomes.

Conflict of Interest

The authors state that there are no potential conflicts of interest to disclose.

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Influence of programme of study on the adjustment challenges faced by Colleges of Education students in Eastern Region, Ghana

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Abstract
The purpose of the study was to explore the influence of the programme of study on the adjustment challenges faced by colleges of education students in the Eastern Region of Ghana. Using the descriptive research survey design, data were collected from 320 students through an online questionnaire. The Validity of the research instrument was ascertained through a pilot study carried out at Foso College of Education. The reliability coefficient for the questionnaire, estimated through Cronbach's alpha coefficient, was 0.872. The collected data were analysed using ANOVA. The study found that the programme of study had a significant influence on the adjustment challenges faced by colleges of education students in Eastern Region of Ghana. The B.Ed. JHS programme respondents' adjustment challenges differed significantly from those of the other two programmes (B.Ed. Primary and B.Ed. Early Childhood). The researchers suggested that college counsellors/administrators assess the frequency and intensity of adjustment problems among students, JHS major students especially, so as to assist relevant bodies at colleges of education in Eastern Region in designing appropriate orientation programmes and peer mentoring programmes.

Key Words: adjustment challenges, colleges of education, programme of study, coping methods.

Introduction

Studying in higher education exposes students to a variety of new challenges including academic demands, autonomy toward their

needs and activities, and becoming more independent in their learning than the case was at the previous levels of education (Credé & Niehorster, 2012).   For many students, college life can be both challenging and exciting. Students are placed into rigorous academic curriculum while at the same time trying to establish who they are socially, mentally, financially and often geographically (Lynch, Gander, Kohls, Kudielka, & Walach, 2011). "Transition from high school is a 'culture shock' involving significant social and psychological relearning in the face of encounters with new ideas, new teachers and friends with quite varied values and beliefs, new freedoms new opportunities, and new academic, personal and social demands" (Pascarella & Terenzini, 1991, pp. 58–59).

Moving from high school to college is a big event in the lives of students. School settings that make the students feel warmly welcome are able to influence students to perform better in their academic work. The adjustment required is the one characterised by psychological process of adapting to, coping with, and managing the problems, challenges, and demands of everyday life. Adjustment is not easy and it involves several dimensional processes. In addition, it demands a lot of skills and ability to help an individual to acclimatise with his or her environment.

Furthermore, because adjustment also involves (a) the quality and quantity of studies, and (b) the accommodation with new teachers and classmates, it may lead to psychological, social and academic problems. However, if students get adjusted properly, it will improve their quality of living. Hence, adjusting to college life is one of the main indicators of success in tertiary institutions of learning. Through achieving adjustment with college life, students are able to form good relationship with others in the college leading them to enhance their academic achievement.

The stage of tertiary education is an important part of the students' life as they move from total dependence on the teacher, family and curriculum into complete independence. Moreover, many students move away from their cities into new places causing a change in their cultural, social and psychological environments. This may affect their adjustment with the tertiary life (Al-shinawi & Abdurrahman, 1994). Essentially, students' ability to set goals and achieve a balance between academic and social activities plays a critical role in their success during the first year, and eventually towards their chances of graduating

successfully from the college (Secuban, 2012). It is known that tertiary life has its own demands and challenges, and failure in meeting those demands and challenges causes academic, psychological and social problems for the student who is affected by those problems (Baker, & Siryk, 1986). Therefore, it is important to guide students to achieve adjustment in order to avoid those problems and achieve their goals.

The domains of college adjustment challenges that usually engage the attention of researchers include, but not limited to the following: academic adjustment challenges, social adjustment challenges, personal-social adjustment challenges, and goal commitment and institutional attachment challenges (Rienties, Beausaert, Rohnert, Niemantsverdriet, & Kommers, 2012; Tinto, 2006). Programmes offered in the Colleges of Education in Ghana are; B.Ed. Early Childhood Education; B.Ed. Primary Education and B.Ed. JHS Education. Course content for each programme is different even though there are general courses, selection of programme is by choice but the fact that students do not know what it entails as they are all coming from the senior high schools may pose a challenge to the new academic environment.

Statement of the problem

Every year, hordes of colleges of education students in Ghana are withdrawn from their colleges nation-wide. This phenomenon leaves a negative mark on the colleges which results in some tutors and continuing students putting fear in fresh students' minds. This situation puts heavier task on their adjustment and coping abilities. (Ghanaweb, September, 2019). The Eastern Region of Ghana, having seven colleges of education automatically has a preponderantly high number of students being withdrawn. It has been widely acknowledged that the factors that influence student dropout are not fully understood (Coley & Coley as cited Bailey & Phillips, 2016; Tinto, 2006), and that there is rarely a case where only one issue is the reason why a student does not complete a course (Crosling, Heagney, & Thomas, 2009). Tinto (2006) has therefore, suggested that "a broad array of forces, cultural, economic, social, and institutional shape students' retention" (p. 3). According to Jones (2008), these include poor preparation for higher education, weak institutional and/or course match, unsatisfactory academic experience, lack of social integration, financial issues and personal circumstances.

Arising from the foregoing, it is apparent that various programmes of study and their influence on adjustment challenges need to be investigated with a view to addressing them. If this is done, it is hoped that it will help relevant bodies in the colleges of education in Eastern Region of Ghana to design more appropriate programmes that would be geared towards mitigating the negative impacts of adjustment challenges that colleges of education students in the region face. In Ghana, there has not been much research work on how college students adjust to their new environments after senior high schools, (Edjah, Domey & Ankomah, 2019; Esia-Donkoh, 2011; Kwaah & Essilfie, 2017). This gap, arising from a dearth of knowledge in this important area of research, is what this study sought to fill.

Research Question

The study sought to answer this research question: *"What are the adjustment challenges that students in colleges of education in Eastern Region of Ghana face?"*

Research Hypothesis

The null hypothesis formulated to guide the conduct of the study was:

There is no statistically significant difference in the adjustment challenges of students in colleges of education in Eastern Region of Ghana based on programme of study.

Research Methods
Research Design

Descriptive survey was used in soliciting for the responses from students concerning adjustment challenges. The descriptive research design was deemed best for the study because, according to Cohen, Morrison and Manion (2007), in descriptive survey design, researchers are able to gather data at a particular point in time with the intention of describing the nature of existing conditions or identifying standards against which existing conditions can be compared.

Sample and sampling procedure

The population for this study, which comprised all students in the seven colleges of education in Eastern Region of Ghana, was 8,395. The target population was 5,550 made up of all the first- and second-

year students in the seven colleges of education in Eastern Region of Ghana. The total accessible population for the study was 1,896 from the seven colleges of education sampled. According to Krejcie and Morgan (1970), accessible population of 1,896 will require a sample size of 320, which was the sample size used for this study. Multi-stage sampling technique comprising census, internet-based survey, proportionate sampling and systematic sampling were used to select the sample. The multistage sampling procedure adopted was chosen due to the fact that the students were from various colleges, studying different courses and located throughout the region (Table 1). Respondents were reached via internet survey where questionnaire were sent into their mails and WhatsApp platforms.

Table 1: *Distribution of Respondents by College*

College	Frequency	Percent
Abetifi Presby College (Kwahu East)	51	15.9
Kibi College of Education (East Akim)	38	11.9
Mount Mary's College (Yilo Krobo)	51	15.9
Oda Methodist College of Education (Birim South)	45	14.2
Presbyterian College of Education (Akuapim North)	32	10.0
Presbyterian Women's College of Education (Akuapim North)	58	18.1
Seventh Day Adventist College (New Juabeng)	45	14.0
Total	320	100.0

Instrumentation

A 32-item questionnaire was adapted from Baker and Siryk's (1999) Student Adaptation to College Questionnaire (SACQ) by the researchers for collecting the necessary data.

Psychometric properties of the instrument

Kimberlin and Winterstein (2008) reported that Cronbach's alpha, which was used in estimating the internal consistency of the instrument, is used for summated   scales or Likert-type items. The Cronbach's alpha was deemed the best method to estimate the reliability of the instrument. The Cronbach's alpha has a correlation coefficient ranging in value from 0 to 1. The closer a reliability

coefficient value is to 1, the more reliable the test, while the closer the reliability coefficient value is to 0, the less reliable the test (Gay, Mills & Airasian 2012). Face or content validity was established for the instrument. According to Amedahe (2001), it is the soundness of the interpretations given to the assessment scores that are validated, not the instrument. If the instrument measures what it intends to measure and the results are used for the intended purpose, then the instrument can be said to be valid. The overall Cronbach alpha value of the questionnaire was 0.872 which was deemed sufficiently high because, according to Nunnaly and Bernstein (1994) the minimum alpha value for a standardised questionnaire should be 0.7.

The section of the questionnaire that elicited respondents' demographic data was scored using frequency counts and percentages. However, items that sought answers on adjustment challenges of Colleges of Education students, had a cut-off point. Adjustment challenges comprised 27-items which answered the research question. The five-point, Likert-type scale format with Strongly Agree as 5, Agree as 4, Undecided as 3, Disagree as 2, and Strongly Disagree as 1 were used to measure adjustment challenges. All items on the five-point, Likert-type scale were analysed using mean and standard deviation of the individual items. Since it is a five-point, Likert-type Scale, the highest mean of an item was 5 whereas the lowest mean was 1. The midpoint of an item on five-point, Likert-type Scale was 3.00. Therefore, any item with a mean of 3.00 or above was considered as high mean, whereas items with the mean below 3.00 was considered as low mean.

Ethical Considerations

The respondents were made aware that their participation was voluntary. They were made aware that they were free to decline or accept to be part of the research. In addition, anonymity of the respondents was taken into consideration in the study. Oliver (2010) pointed out that anonymity is a vital issue in research ethics because it gives the respondents the opportunity to have their identity concealed. Neither names nor any identifiable information from respondents were taken as a way of ensuring the ethical principle of anonymity. This was to prevent possible victimization of respondents where certain responses may be viewed as unpalatable to other stakeholders.

On the issue of confidentiality, efforts were made to maintain confidentiality of the responses. Respondents were told that their responses would be kept confidential and that no one known to them would have access to the information provided and none of the respondents' names was recorded in the study. Respondents were given sufficient time to decide if they wanted to share the information with the researchers, without any much inducement.

Results

The data gathered were analysed and presented in Table 2.

Table 2 - *Adjustment Challenges of Respondents*   N= 320

Adjustment Challenges	Mean	SD	Rank
Worry about finances	3.59	1.42	1st
Intellectually demanding colleges than high school	3.47	1.33	2nd
Difficulty being responsible	3.02	1.42	3rd
Unsatisfied with academic performance	2.76	1.44	4th
Difficulty coping with the stresses	2.59	1.32	5th
Finding academic work at college difficult	2.47	1.27	6th
Self-learning is a difficult task for me in college	2.42	1.40	7th
Problem with sleep at College	2.41	1.30	8th
Insufficient motivation for studying in college.	2.37	1.33	9th
The general environment of the college does not facilitate teaching and learning	2.35	1.37	10th
Difficulty to be involved in extra-curricular activities in college	2.30	1.28	11th
More tense or nervous in college	2.27	1.25	12th
Indecision about programme of study	2.14	1.21	13th
Adaptation difficulty to new approaches to teaching and learning at college	2.06	1.10	14th
I am not confident that I will be able to deal in a satisfactory manner with future challenges here at college.	2.037	1.08	15th
I could not get adequate academic preparation before coming to this college	2.03	1.18	16th
I get angry too easily at college	2.01	1.18	17th
I haven't been able to control my emotions very well in college.	2.01	1.19	17th
Making new friends is a difficulty for me in college	2.00	1.20	19th
It was difficult for me to move away from my family to college	1.99	1.22	20th
I have difficulty mixing with other students in the college	1.93	1.10	21st
I usually feel lonely at college	1.93	1.15	21st
Separation from my families has affected my adjustment in college	1.85	1.08	23rd

I sometimes think about dropping out of this college	1.82	1.19	24th
I face discrimination in this college	1.80	1.02	25th
Our teachers seem not to be properly trained to facilitate teaching and learning	1.78	1.21	26th
I feel like deferring my programme in college for a while	1.71	1.07	27th

From Table 2, it can be seen that students do have many adjustment challenges. The three highest adjustment challenges that affected college students were "worry about finances" (M= 3.59, SD=1.42), "intellectually demanding at college than high school" (M=3.47, SD=1.33) and "difficulty being responsible at college" (M=3.02, SD=1.42).

Hypothesis: H0: There is no significant difference in the adjustment challenges of students in colleges of education in Eastern Region of Ghana based on programme of study.

The hypothesis was tested using the one-way between groups analysis of variance (ANOVA) statistical procedure. Prior to embarking on the use of ANOVA, the researchers ensured that its use was justified. For instance, the dependent variable (adjustment challenges) was determined using a continuous scale – the five-point, Likert-type scale. Also, a random sample of the population of colleges of education students in the Eastern Region of Ghana was selected for participation in the study. Furthermore, the independence of observations requirement was achieved through the use of an online questionnaire to reach participants individually, not as a group assembled in one place. The population from which the sample was selected was normally distributed, and the variability of scores for each of the groups was similar when Levene's test for equality of variances was performed. Lastly, the sample size of 320 was much larger than the 30 recommended by Pallant (2010, p. 206) as the minimum required in order not to violate the normal distribution assumption.

The Hypothesis was tested using analysis of variance ANOVA statistical method (Tables 3 & 4).

Table 3 – *ANOVA*

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2340.806	2	1170.403	3.882*	.022
Within Groups	81110.661	269	301.527		
Total	83451.467	271			

*Significant, p< .05

      One-way Analysis of Variance was used to determine significant difference in the adjustment challenges of students in colleges of education in Eastern Region of Ghana based on programme of study. The analysis showed significant differences among the three programmes of study [F $(2, 269)$ =3.882, p< 0.05)]. Hence, the hypothesis that states, "there is no significant difference in the adjustment challenges of students in Colleges of Education in Eastern Region of Ghana based on programme of study" was not supported.

      The significant difference in adjustment challenges found among students from the three programmes called for the use of a post-hoc test to discover which of the programmes was the source of the difference.

Table 4 - *Scheffe Test*

(I) Programme of study	(J) Programme of study	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
B.Ed. JHS programme	B.Ed. Primary programme	1.85430	2.30939	.725	-3.8301	7.5387
	B.Ed. Early Childhood Education	9.92051*	3.56569	.022	1.1438	18.6972
B.Ed. Primary programme	B.Ed. JHS programme	-1.85430	2.30939	.725	-7.5387	3.8301
	B.Ed. Early Childhood Education	8.06621	3.76255	.102	-1.1951	17.3275
	B.Ed. JHS programme	-9.92051*	3.56569	.022	-18.6972	-1.1438

B.Ed. Early Childhood Education	B.Ed. Primary programme	-8.06621	3.76255	.102	- 17.3275	1.1951

*. The mean difference is significant at the 0.05 level.

This was done through the use of Scheffe test which showed that B.Ed. JHS programme differed significantly from the other programmes of study, but the difference between B.Ed. Early Childhood Education and B.Ed. Primary programme was not statistically significant. The size of the effect is quite small: the programme of study predicts only 2.8% of the variability in adjustment challenges of college students. It can be concluded that, there is significant difference among the three programmes of study and it was the B.Ed JHS programme that differed from the rest because they do experience more of adjustment challenges. This affirms Lu, Lv, and Deng's (2014) study that over one-third students cannot adapt to college's teaching and learning mode, and a large portion of students are short of reading motivation the student's adaptability to teaching and learning in college, the reason of course election and the concentration in class are significant positive factors affecting student's adjustment challenges.

Again, it could be that the JHS major students face more adjustment challenges because of the uniqueness of their course content – JHS students are far above primary students as such, being prepared to teach at that level may require extra preparation. This is in line with Kokemuller's (2020) view that students face a number of academic challenges in college, including finding time to study, understanding course content and maintaining a high degree of motivation.

Conclusion and Recommendations

From the findings of the study, adjustment challenges found to be affecting students in the seven colleges of education in the Eastern Region were financial worry, high intellectual demand at college and difficulty to be responsible. The implication of this finding was that the students may need more prior knowledge about the choice of programmes. Some may not complete their education because of difficulty adjusting in the new academic environment. Thinking independently might be a new experience for some students who are

accustomed to relying on the teacher as the ultimate authority on the course subject.

It is therefore, recommended that much attention should be given to the B.Ed JHS programme by school authorities (tutors) in order to help students in this programme adjust better. This could take the form of tutors being well-prepared in their respective subject areas and orientation service incorporating programmes of study and their contents.

Family members should also support their wards financially in colleges to ameliorate the worries students go through as a result of finances.

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