

**Comparative Review of Educational Reforms, Policies, and Systems:
A Case of China and Ghana**

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Abstract

In contemporary times, there is a greater movement of learners not merely moving from one nation to the other but also from a continent to another, and each single national education system profits from each other. A classic case is the movement of students from Ghana to China, with the number of students studying in China reaching up to 6,500 and Ghana ranking first (in student migration to China) among African countries for four consecutive years. Ghana's bond with China, however, goes beyond education to social and economic connections. The over-arching aim of the review is to provide readers with comprehensive information on education in the two countries. This review is not an attempt to evaluate or judge the quality of education in either China or Ghana, but to provide valuable understandings of the driving forces, which have wrought the outcomes and inputs of their educational system, and to offer a clear direction on impending needs and obstacles that both nations faced in their educational journey. The review comparably highlights the educational flight of both nations emphasizing the educational reforms, policies, and structures. In conclusion, this paper highlights the essence for Chinese and Ghanaian administrative governments to take charge of strengthening and refining their present educational policies and not altering and introducing new policies that may be irrelevant in the development of education.

Keywords: China, Ghana, educational reforms, educational policies, educational systems, educational development

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Introduction

Education is a very potent weapon used in the world's transformation (Duncan, 2013). There is no doubt that education is amongst the greatest of all human events and ensures the building of the harmonious structure of the nation (Gu, Li, & Wang, 2009). Education is, therefore, a key in the economic development and growth of nations like Ghana and China. For this to be possible, there is a need for education to satisfy the aspirations and needs of the persons who patronize (Olejurulo, 2018). According to Green and Hannon (2007), education is an act of transporting information in the form of ideas, customs, experiences, values, and skills from one party to the other or from one generation to another. Supporting the view of Green and Hannon (2007), Arnett (1998) strongly indicated that education is all about culture and this might differ from one group of people to another. Arnett (1998) further reiterated that because education is all about culture, different cultural cohorts have their educational systems, and thus, the benchmark for judging the quality of education differs from one culture to the other (Arnett, 1998). Up to this point, it is not out of place to believe that education in China and Ghana might differ in most regards due to differences in way of life of their citizens. But is this true in reality? Are the Ghanaian educational reforms, policies, and systems similar to that of China?

Owing to globalization, there is a greater movement of learners not merely migrating from one nation to the other but again from continent to continents, and thus, every single education system profits from each other (Altbach & Teichler, 2001). Altbach (2007) noted that the governmental plots in Africa and Asian are continuously shifting and this is impacting the educational structures and credentials provided to prospective students. In a typical case of China and Ghana, China has supported Ghana predominantly in the field of vocational, technical, and technology training, which is central to creating an experienced workforce. Notwithstanding this, the number of students studying in China reached 6,500 and Ghana ranking first among African countries for four consecutive years (Wang, 2019).

The bond between Ghana and China regarding education has reached greater heights, principally under the administration of President Xi Jinping, with the Chinese government providing nearly 7000 chances to study (undergraduate and post-graduate levels) to Ghanaian students in recent times. The two countries, in 2018, endorsed eight Cooperation Agreements and Memoranda of Understanding in diverse regions of their economies to aid expand their mutual relationships. These agreements were endorsed when President Nana Addo Dankwa Akuffo-Addo visited China. Both presidents held two-sided conversations before endorsing such agreements on Saturday, September 1, 2018. One of the notable contracts which are the focus of this write up is education (GhanaWeb, 2018).

This paper comparatively reviews the educational reforms, policies, and systems in China and Ghana. The over-arching aim of the review is to provide readers with comprehensive information on education in the two countries. We believe that this review will provide valuable understandings of the driving forces which have wrought the outcomes and inputs of their educational system and offer a clear direction on impending needs and obstacles that both nations faced in their educational journey. This review is, however, not an attempt to evaluate or judge the quality of education in either China or Ghana but rather to unravel their educational journey. In subsequent sections of this paper, the conceptual framework and the review methodology are discussed. The remaining sections shed light on Ghana's cooperation with China and brief historical antecedents of education in both

countries. The paper further highlights and discusses the educational reforms, policies, and systems in China and Ghana. The paper ends with conclusion on the emerging trends found in the review.

Conceptual Framework

The conceptual framework for this paper took a narrative form. Three key concepts underlying this review were educational reforms, policies, and systems. According to Armstrong (2015), reforms in education signify a renovative movement and plan aimed at yielding a systematic transformation in educational practice and theory at all levels of education within a society/community/nation. Ordinarily, educational reforms automatically necessitate the formulation of policies which later drives the educational system (Armstrong, 2015). In the views of Xu and Mei (2009), educational policy comprises plans, regulations, rules, and principles in the field of education which directs the set-ups of the education system. For the education system, it is the structure of schooling that includes all the phases of education (Yang, 2009). In a very rare situation, educational policies can be made without necessarily having a reform but whenever there is a reform, policy emerges naturally. Both educational reforms and policies shape the educational system. The review clearly showed that education policies are often embedded in educational reforms. Thus, the paper did not have a delineated theme for only educational policy but has rather been implicitly discussed under educational reforms. Review on such concepts is very essential since these concepts interact and drive education in any country and this is a major reason why this review focused on these three key concepts.

Methodology

A laid-out plan was used from an information search to synthesize the data from various sources. First, we searched for information from various databases such as Web of Science, Scopus, ERIC, Science hub, and other open-access databases. The search was guided by some keywords/phrases like *education in Ghana/China*, *educational reforms in Ghana/China*, *Ghanaian/Chinese educational system*, *educational policies in Ghana/China*, and *history of education in Ghana/China*, among others. Secondary sources of information were first fetched, and a further search was conducted to fish out primary literature sources. Other books like that of Yang (2009) titled *Educational System in China*, and *Education: Society and Development in Ghana* authored by Antwi (1992) were retrieved from the library. After the internet and manual searches, a large chunk of literature was amassed. Two criteria were used to include or exclude papers and books: (1) the information should be well referenced, documented and the source should be credible, (2) the information should be focused on the history, educational reforms, policies, and systems in any or both countries. This was because some unrelated papers, for instance, focused on issues like school enrolment and retention rates at all levels of education in Ghana/China. Although such information highlights issues in education this was not the focus of this paper. Using index cards and highlighting techniques, each paper was read, and summaries of each paper were written upon which pairing was done based on content similarity. With this, the synthesis of

the literature was carried out. It must be noted that all the authors were involved in this process. An a priori approach of theme creation was utilized such that themes were already formulated before in-depth text reading was done, and adjustments were later made based on the content of the literature retrieved. The themes which emerged were: (1) Ghana cooperation with China, (2) Historical antecedent of Ghanaian/Chinese education, (3) Educational reforms in Ghana/China, and (4) Educational system of Ghana/China.

Ghana's Cooperation with China

In 1960, The People's Republic of China and The Republic of Ghana established an authorized political bond. From then, the link between the two nations has been heightened through robust dealings from the era of Kwame Nkrumah (First Prime Minister and President of Ghana) and Zhou Enlai (First Premier of the People's Republic of China), and by high-elite planned visitations, comprising of President John Kufuor visit to China in 2002 and President Hu's trip to Ghana in 2003. In 2007, the Second leg of Premier Wen Jiabao toured Africa and visited Ghana as part. Both Ghana and China endorsed a mutual communication on a solidification collaboration in telecommunications, culture, infrastructure, trade, health, and education. By extension, the Chinese premier's tour to Ghana ended-up endorsing about six agreements comprising of the construction of a basic school, malaria center, and a loan facility of 66 US dollars to extend the telecommunication networks in Ghana. It is not surprising that for some period now Ghana has offered critical diplomatic assistance to China (Idun-Arkhurst, 2008).

During the 2000s, the size of Chinese investment and trade in the Ghanaian spaced has greatly increased. From a sheer 4.4 million USD in Chinese ventures enumerated by the Ghana Investment Promotion Centre in 2000, China's registered tides had amplified to 1.6 billion USD in 2014 alone. Notwithstanding the manufacturing sector regaining its top spot as a retainer of Chinese investments in 2014, the General Trade sector has acknowledged a large receipt of a stable movement of Chinese investments particularly since 2004. Consequently, the Chinese influence largely detected in the trading zone. Up until 2015, nevertheless, Building and Construction zones of Ghana's economy had appeared as the principal receiver of Chinese investment tides shadowed by Manufacturing and General Trade. In 2006, the Services segment also appeared as a substantial beneficiary of Chinese investments from 2006. In 2009, the Cooperation sector which failed to attract any Chinese investment from 2000-2008 started attracting investments (Dankwah & Marko, 2019).

Currently, China is the second highest exporter in Ghana. In 2005, 433.74 million USD rate of importations from China landed in Ghana, with Ghana exporting 0.1 USD worth of exports. This reproduced a strident increase in bilateral trade between the two nations from 93.13 million USD in 2000 to 433.74 million USD in 2005. The majority of China's external direct investment in Ghana is concentrated around construction, trading, service zone, tourism, and manufacturing with a full investment value of 75.8 million USD in 2008. Out of 283 projects invested in, by the Chinese national, 48 were in tourism, 15 in construction, 44 in services, 59 in trading, and 97 were in manufacturing (Idun-Arkhurst, 2008). By 2014, the overall Chinese investments in Ghana had moved up by 1.6 billion USD. While the overall Chinese investment in Ghana for the period of 2000-2007 was 199 million USD, cumulative investments for the period of 2008-2015 were 2.2 billion USD (Dankwah & Marko, 2019).

Concerning education, Ghana has established bonds with China in the area of Century Career Training Institute, the completion of phase two of University of Allied Sciences, Confucius Institute, Human Resource, and Capacity Building, Higher Education Research Cooperation, and Chinese Language Training School, to promote the Chinese and Ghanaian culture, landscape and innovations.

Historical Antecedent of Chinese Education

The historical antecedent of education in China is linked far-off to the 16th century BC. All through this era, only the elite was privileged to access education. The Confucianism pieces of training within the Autumn and Spring and Warring States eras, the core curriculum, were principally grounded on *The Four Books and The Five Classics*. These books were the accredited courses of the Confucian philosophy in the medieval culture in prehistoric China. The first book highlighted *Confucian Analects, The Doctrine of the Mean, The Works of Mencius, and The Great Learning*. The second book comprised *The Book of Poetry* (also known as *The Book of Odes or Songs*), *The Book of History, The Spring and Autumn Annals, The Book of Changes, and The Book of Rites*. Confucianism possibly is the leading driver in China's education throughout history. Earlier in Han Dynasty, a system of the public education structure was developed (Lee, 2000).

Commonly, primeval Chinese education was categorized into public school and private school education. These complemented one another in training talents for the governing classes. Olden government school education was supported by local and central governments of feudal and slave societies. It targeted nurturing abilities of numerous forms for the reigning classes, whose fall and rise were associated with political and social growths in primordial China. Referring to historic brochures, nevertheless, principal public school education was merely introduced in the Western Han empire (206 BC-9 AD), and it was polished and moderated throughout the Wei (220-265), Jin (265-420), and Northern and Southern (420-589) reigns, due to modifications in the political condition. It was not until the Tang reign (618-907) that the principal public school education touched its highest under the sponsorship and inspiration of the governing party. Public school education was managed from the era of the Northern Song Empire (960-1127), and throughout the Qing rule (1644-1911) were in name merely as a mechanism of the nation-wide examination structure (Gu, Li, & Wang, 2009).

While public school education was on the decline, private school education thrived throughout the reigns of Wei (220-265), Jin (265-420), and Northern and Southern (420-589). Private education transformed the style of traditional Confucianism, and it furthermore comprised technology, Taoism, Buddhism, and metaphysics. Private schools were present all over urban and rural settings throughout the Tang Empire (618-907), and Confucian rulers were embodied by Kong Yingda (574-648) and Yan Shigu (581-645). The private schools were categorized into two in the Song (960-1279), the Yuan (1271-1368), the Ming (1368-1644) and the Qing (1644-1911) reigns; academies supported by state noblemen and sishu (successors of existing private basic schools) managed by academics. *Approaches to Teaching Kids* authored by Yi Jun (1783-1854) from the Qing Reign (1644-1911) was a book providing a comprehensive outline of the approaches to developmental education (Lee, 2008).

The Qing Rule, in 1911, was dethroned by rebellion, and a pro-republic nature of administration was created. During this time, the government restrained the traditional mode of education. Novel educational replicas from Japanese, American, and European were established in China. According to Zarrow (2006), the implementation of the reform/policy and the inauguration to the external universe in 1978, resulted in education crossing into an innovative growth age. The Central Committee of the Chinese Communist Party, in 1985, noted the *Decision on the Reform of the educational Structure*, emphasizing the standard that local administrations should be accountable for education. The novel policy was a motivation for indigenous governments, particularly those of the townships and nations. The National People's Congress in 1986 propagated the *Compulsory Education Law of the People's Republic of China*, therefore enlisting education in the nation on a stable lawful foundation. China began an educational system of 9-year compulsory schooling (Guan & Meng, 2007).

Historical Antecedent of Ghanaian Education

The entire progression of foreign education in the Gold Coast (now Ghana) started due to the British pursuit to control their industry with raw materials. The purpose of foreign education was to offer an impulse to the economy in various homes. Throughout the 19th century, Christian Missionaries were documented as trainers to the populaces. The British believed that local education should be supervised by the colonial government. British bureaucrats were present in the Gold Coast days as far as 1821 (Djamila & Yasmina, 2011). In his book *Ghana: Evolution and Change in the 19th and 20th Century*, Adu Boahen contended that the Europeans traveled to the Gold Coast from the 1470s as their mission was to propagate the gospel of Jesus Christ. He additionally highlighted the several efforts by the evangelists to launch schools to train the local populace; for instance, Jacobus Elisa Johannes Capitein of Ivory Coast ancestry begun the set-up of two schools in Elmina in 1742 which included one for the mullato kids and another for Africans in general. Both schools, nevertheless, were dissolved in 1747 after his death. Similarly, Philip Quacoe established a school in 1766, until it collapsed after his death.

Citing Akyeampong (2010), Ghana at independence had developed strategies on how schooling was to be made effective in supporting the determinations to becoming a wealthy nation. Akyeampong (2010) further noted that Dr. Kwame Nkrumah outlined his administrations' vision with education as the pivot to the old Parliamentary Assembly. Nkrumah's education growth was to realize three objectives: first, to be employed as a strategy to produce a methodically well-educated populace. Furthermore, to resolve the ecological reasons for low output; and thirdly, for constructing knowledge to improve the economic potentialities of Ghana. Nkrumah was well-known to be strongminded to roll-out educational strategies that were valuable for economic development. He particularly focused on technical education since he understood that technical training was indispensable to Ghana's path for hastening economic and technological development (Akyeampong, 2010).

Antwi (1992) underscored that from 1952-1957, primary and middle school amplified and there was an enhancement in the arena of technical training. Likewise, there were several challenges related to the availability of classrooms and the prerequisite skills of instructors. Yet, under Nkrumah's government, the Seventh Standard School Leaving Certificate Examination was substituted by the Middle Form 4 examination (Antwi, 1992). In 1958, an Educational Trust which provided funding to the secondary school, in terms of infrastructure,

in the country was established and several schools benefited and still benefiting from the fund. Currently, Ghana has many public and private secondary schools with higher enrolment rates. The growth of teacher training led to the formation of the National Teacher Training Council in 1958 to project the teachers' interest. Throughout Nkrumah's government, two university colleges (i.e., University College of the Gold Coast and the Kumasi College of Arts, Science, and Technology) made significant strides (Boahen, 2000).

Educational Reforms in China

In the previous five decades, educational expansion in China has been branded by brave changes, key modifications, and setbacks (Tsang, 2000). In the initial 15 years, the young Socialist administration tried to convey basic education to the grassroots and concurrently organized a *leading elite* throughout tertiary education. In 1966, these aspiring strategies, conversely, were quickly terminated when the Great Cultural Revolution exploded. College education was terminated, and the organizing of corps with Socialist ethics became the principal objective of schooling at every stage of education. Merely the reign of Deng Xiaoping as a national leader saw the initiation of reforms in 1978 for China to start a number of developments in education (Tsang, 2000).

During the 1950s, the newly instituted Chinese administration dedicated the utmost of its educational energies toward reformation. All-inclusive institutions of higher education were separated into several specialist polytechnic universities and colleges. Due to this, both the number of higher institutions and college learners experienced swift development (Tsang, 2000). Primary education initially saw prompt development, however, went into a lasting degenerative opening in 1958, due to the financial disaster that led to the huge expansion. When China disconnected its links with the Soviet Union at the end of the 1950s, the ruling administration drifted from the Soviet prototypical to a two-tiered scheme with stability among a modern, a traditional, and Confucian Western form of schooling (Goldman, Kumar, & Liu, 2008).

With the demise of Mao and the upswing of Deng Xiaoping, educational plans relapsed to those introduced during the early part of the 1960s. Academic values were re-established. Whereas the focus before the Cultural Revolution was on accessibility, quality instead of quantity was now stressed. To strip off anxieties about superiority, the mandatory nine-year education programme was inaugurated in the year 1985 and strengthened in the year 1993 (Tsang, 2000). The fiscal thriving of the 1980s empowered China to develop and adapt its education structure grounded on the reforms that imitate the social standards of the nation, and economic and political realities. Because China had attached grave significance to the education quality, energies focused on protecting and maintaining the educational privileges of the underprivileged cohort. Two worth noting instances include the development of western zones and supporting underprivileged students (Xu & Mei, 2009).

In May 1985, the verdict on Reform of Educational System was announced by the Central Committee of the Chinese Communist Party (CCP) and in 1993, Programme of China's Educational Reform and Development was instituted by the Central Committee of the CCP and the State Council (Yang, 2009). The reforms aimed to augment nationwide effectiveness and offer better and extra workforce adjusting to the transformation of the collectivist market-oriented political and economic system, and the technological and scientific expansion (Yang, 2009). From 1978, all over the era of opening up and reform,

China instigated a mandatory education scheme, a graduate education scheme, an academic degree structure, and improvement in adult schooling. Since the institutionalization of mandatory education in China in 1986 and the establishment of monitoring education growth in 1993, there was a huge improvement in access to education before the end of the 20th century (Wang, 2009).

In 1995, a vast determination to increase entry rates in pre-tertiary and tertiary education was announced. The restructuring had numerous purposes: to simplify mandatory education for nine years; reduce illiteracy rates; advance continuing, adult and technical education; increase girl-child accessibility to education, and of nationwide minorities in deprived regions; construct and renovate buildings for teaching and research to expand school's capacity to accommodate a large number of students. The mandatory schooling and literacy education by 2007 had achieved a 98% coverage rate (Ministry of Education [MoE] China, 2007). The Chinese State Council in 1999 announced a decision on developing educational reform and encouraging education quality in a multifaceted manner and an equitably comprehensive contemporary curriculum structure operated in China during the latter part of the 20th century (Xu & Mei, 2009). China, in 1995, passed the Education Law and expanded the policies defined in the 1985 policy, with an assurance to both world-wide education to train skillful workers and for higher education to focus on training scientists and scholars.

From 1978, China's educational policy is seen largely in four phases: the reconstruction and recovery of the educational order (1978-1984); the complete start-up of educational structure reform (1985-1992); the amendment of educational policy faced during the reform of the market fiscal structure (1993-2002) and the new growth of the educational policy under the supervision of Scientific Outlook on Development (Xu & Mei, 2009) (Figure 1). Virtually all the phases of educational policy flourished intending to refine the educational structure. Xu and Mei (2009) recounted that the swift expansion of the economy and the establishment of mandatory education have offered an adequate groundwork for the additional education reform in this century. The Chinese government continues to roll-out several reforms to improve the current system. These reforms have highlighted on teacher education, continuing education, pre-school education, and international education. China's education system has, thus, progressively thrived from primary, secondary, and tertiary education (Wenjing & Li, 2007).

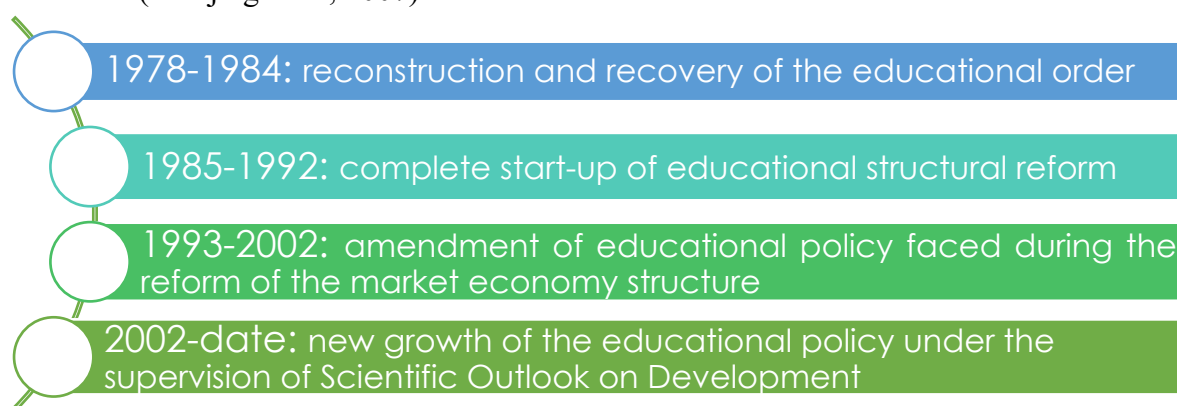


Figure 1: Reforms in Educational Policy in China from 1978 to date (Xu & Mei, 2009)

Educational Reforms in Ghana

The education system of Ghana had formerly been considered as among the greatly effective and advanced in West Africa. During the 1980s, Ghana's education system closely broke down and was regarded as not functional in terms of the aspiration and goals of the nation. From March 6, 1957, when Ghana achieved independence from British foreign rule, education has been the main concern on the consecutive governments' agenda. This explains the reason why the country's education has gone through several changes directed towards the search for a well fit, quality, and expected quality education (Department of History and Political Studies, Kwame Nkrumah University of Science and Technology (KNUST), 2015). Numerous educational reforms have been introduced over the ages targeted at discovering long-lasting resolutions to challenges regarding education in Ghana. For instance, the duration students spend in pre-tertiary education has not been consistent. Throughout the National Redemption Council (1974) under the headship of Ignatius Kutu Acheampong, the second cycle education was four years. Though, the Provisional National Defense Council (1987) reformed this duration to three years instead of four (Department of History and Political Studies, KNUST, 2015).

The Accelerated Development Plan of 1951 and Education Act of 1961 were the initial reforms introduced under the headship of Dr. Kwame Nkrumah. The Accelerated plan offered support for the development of secondary education. The central administration roughly constructed 15 new second cycle institutions in several neighborhoods (Adu-Gyamfi, Donkoh, & Addo, 2016). Technical institutions were set up in Kumasi, Tarkwa, Sekondi-Takoradi, and Accra to improve the Vocational/Technical education to produce a skillful workforce. In 1962, the second stage of expansion in the education sector started. The seven-year plan for national development and reconstruction for elementary education begun, and the growth of teacher training was also paramount. The strategy also announced a comprehensive structural procedure which covered 6 years of primary education (Adu-Gyamfi, Donkoh, & Addo, 2016).

In 1966, the National Liberation Council (NLC), headed by General E. K. Kotoka and Major A. A. Afrifa, inaugurated a new Education Review Committee to embark on a complete appraisal of the whole formal educational structure. The current administration, conversely, was swift to scrap off the Seven-Year Development Plan introduced by Dr. Kwame Nkrumah (Awaisu, 2014). The nature of the education structure under the NLC was such that the ten-year basic education by Nkrumah was re-designed to eight years rudimentary course to equip students for further entry to second cycle education and an additional two years of course protraction to middle school. The elementary condition of admission into secondary school education was dependent on the Common Entrance Examination by final year students. The secondary education took up to five years to train students for School Certificate of the West African Examinations and four years for university education (Awaisu, 2014).

The 1973 Dzobo Report resulted in the reportage of the New Structure and Content of Education (NSCE) in 1974, which saw the introduction of Junior Secondary School (JSS) and the Senior Secondary School (SSS). The 'NSCE' abridged the length of schooling in secondary education from seventeen to thirteen years (Stanislaus, 2004). It is important to emphasize that the six years of primary education did not change; the four years of middle

school equal to JSS was shortened to three years. Furthermore, the five years of senior secondary education were shortened to four years (Stanislaus, 2004).

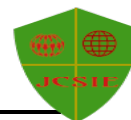
Flight Lieutenant Jerry John Rawlings inaugurated a commission to evaluate the current educational structure under the headship of Evans Anfom in 1987. The major key policies highlighted were a nine-year basic education and a three-year senior secondary school (Adu-Gyamfi, Donkoh, & Addo, 2016). Nonetheless, the reforms suggested the upgrading of polytechnics into technical institutions. Considerably, the National Council for Tertiary Education supported the construction of the University for Development Studies (Tamale) and the University College of Education (Winneba) (Adu-Gyamfi, Donkoh, & Addo, 2016). The John Agyekum Kuffour managed government established a new education structure, appraising the content of the structure and also stretching the completion period for Senior High School (SHS) from three to four years (Awaisu, 2014).

Suggestions proposed by the Anamuah-Mensah report were not dissimilar from that of the 1987 reforms by Evans Anfom. A single disparity was the enclosure of two years Kindergarten into the Universal Basic Education hereafter totaling to eleven years of Universal Basic Education (Anamuah Mensah Committee Report, 2007). The Universal Basic Education was designed into two years of Kindergarten, six years of (Upper and Lower) Primary Education, three years of JHS. In 2008, a new party (i.e., National Democratic Congress, NDC) reversed the earlier government's decision of a four-year SHS just in a year of assuming office (Anum, 2007). Presently, Ghana runs a free education system from the basic level through to the SHS level, led by President Nana Addo Danquah Akuffo-Addo.

Educational System in China

Peoples' Republic of China's education has a government-managed system of education monitored by the Education Ministry. Throughout the 1979–1983, the administration approved the "9-3-4" system (i.e., 9 years basic education, 3 years second cycle education and 4 years of higher education. It was noted that basic education should be mandatory and tuition-free and that schools should be located in convenient places for easy accessibility. Guardians or parents were, however, required to take care of book expenses together with food and transportation where necessary. This resulted in a high level of enrolment in schools (Ikechukwu, 2015). After the completion of mandatory education, students were at liberty to select a programme of their choice in any second cycle institution which took three years to complete. China has five types of second cycle schooling: crafts schools, vocational secondary, general senior secondary, adult secondary, and technical or specialized secondary. Apart from the general senior secondary, the rest of the four are collectively called secondary vocational schools. Eligible students take public assessment tasks called Zhongkao before being admitted to the senior secondary schools, and of course, ones' score determines his/her admission assurance and which programme to pursue (Hu, 2002).

For tertiary education, four years is required as the study duration. For Bachelor's degree, a four-year duration is required to complete and about two to three years is required for a master's degree depending on the programme. Three to five years is used to attain a doctoral degree. Moreover, some institutions also run professional higher education which usually takes three years. Scores of students on the college entrance examination (*gaokao*) determine students' admission to undergraduate programmes in the university. An



uncommon and unique situation may arise for a candidate to be eligible even without taking the examination. Similarly, entrance exams are also organized for candidates who may be eligible for a postgraduate degree. Nonetheless, some students are enrolled based on endorsements from reputable professors (Muthanna & Sang, 2015).

Educational System in Ghana

In Ghana, the present system of education consists of a nine-year free basic education (6 years primary education comprising 3 years each for lower and upper primary and 3 years JHS), three years of free SHS and three or four years of tertiary education (9-3-3/4). The length of years in primary school has been constant till now. As earlier indicated, the primary stage of education has a 3-year duration lower primary and a 3-year upper primary education. These phases of the primary education provide a scaffold to the child's development of basic skill and attitude in problem-solving and gratifying his/her curiosity (Anamuah Mensah Committee Report, 2007). The JSS, now JHS, is a three-year education after primary schooling. It is the intermediate between primary and secondary education. JHS stage of education aims at introducing learners to fundamental technical and scientific skills and knowledge and makes learners ready to advance academic studies and gaining of vocational/technical abilities at the SHS level. It is worth noting that final year pupils in JHSs in Ghana take a general examination (called BECE) which is used for certification and placement into SHS (Adu-Gyamfi, Donkoh, & Addo, 2016).

The SHS registers eligible students for further education to build upon the developed competencies attained in JHS. The duration for SHS education has not been stable even though it has been largely three years. Some citizens, however, attended SHS for 4 years although not many (Awaisu, 2014). Until 2005, SHS final year students took a final examination called the Secondary School Certificate Examination (SSCE). This was changed to another similar examination, called WASSCE, also taken by final year students in SHS. The WASSCE, as is currently called, is written in May/June each year and results are normally released in October (Adu-Gyamfi, Donkoh, & Addo, 2016). The establishment of Tertiary Education in Ghana, inaugurated in 1948, was a pronounced programme by the British. By the endorsements of the Royal Commission on Cambridge and Oxford universities, there was the formation of University College of Gold Coast. Tertiary institutes in Ghana enrolled learners for certificate, diploma, undergraduate, and graduate studies (Adu-Gyamfi, Donkoh, & Addo, 2016).



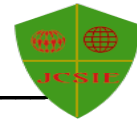
Table 1: Comparison of the Educational System of China and Ghana

GHANA				CHINA			
Education	School level	Years	Comments	Education	School level	Years	Comments
Primary	Primary School	6	Basic education comprising of lower and upper primary	Elementary /Basic	Primary school	6	This runs usually for 5-6 years for 6-12 children.
Middle	Junior High School	3	Basic Education Certificate Examination (BECE) at the end of JHS	High School	Junior (Lower) Secondary School	3	This system is called chuzhong (初中) in China
Secondary	Senior High School (SHS)	3	The entrance to SHS is competing. WASSCE (SSCE up till 2005; WASSCE starting in 2006) at the end of SHS education. Nationwide examinations are conducted in May/June every year.	Senior high/ Secondary	Senior (Upper) Secondary/ Vocational	3	This follows the effective achievement of the middle-lower school. Learners have to make two selections to either apply to the general senior (gaozhong 高中) or vocational (zhongzhuān 中专). The vocational system is up to 3/4 years whereas the general high school is for 3 years.
Post-Secondary	Professional Health Sciences	6	Dentistry and Medicine certifications.	Post-secondary	Undergraduate Level - Bachelor's Degree	4	Certificates are granted after completing 4 to 5 years programmes demanding 4 to 5 years is known as (xueshi xuewei 学士学位) in China.
Tertiary	First level diplomas/ certificates	2	Certificates and Diplomas degree	Post-secondary	Graduate Level - Master's Degree	2	Certificates are granted for the completion of a master's degree (known as shuoshi xuewei 硕士学位, 2 to 3 years of education) depending on the study area. In China, applicants above 35 years may be unable to apply for a



							master's degree.
Tertiary	Higher National Diploma	3	Higher National Diploma, Teacher/Nursing Training	Post-secondary	Graduate Level - Doctoral Degree	3	Doctoral degree programme for 3 to 5 years after completing a master's degree programme. In some exceptional instances, it probable to syndicate a master's/doctoral degree programme. This combined programme is called shuobo liandu 硕博连读. After completion, the student will be granted a doctoral degree instead of two certificates: master's and a doctoral degree.
Tertiary	Bachelors	4	Several public universities and private institutions are also accredited by the National Accreditation Board to award Bachelor's degrees.				
Tertiary	Master's	1-2	Master's degree (1-2 years)				
Tertiary	P.H.D	3-4	P.H.D (3-4 years)				

Source: Scholaro International (2019)



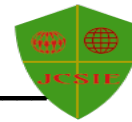
Discussions

China and Ghana have for the past years developed a comprehensive education system that suited a planned economy formally abandoning the long-established system of education. These two countries have mutual significant structures in their corresponding expeditions toward a contemporary nation-wide education system. As such, respective governments in both nations have extensively professed education as fundamental to their economic growth. Taking Ghana, for example, the first president, Dr. Kwame Nkrumah modernized education to satisfy the country's ambitions and needs of constructing a democracy with a government-led economy. A parallel standard was supported by Chinese Deng Xiaoping in his well-known "three faces of orientation": We agree with these leaders that education indeed needs to be concerned with the transformation of the universe and impending demands of the future.

Within the 1950s, China and Ghana began stressing higher education. The Soviet Union's developmental model deeply influenced both nations in the adaptation of curriculum-based science and technology. This planned choice led to an enormous group of abilities in the area of science and technology. It appears, however, the paths of these nations diverged in the late 1970s. In China, the outburst of the Great Cultural Revolution (1966–1976) histrionically disturbed the previous advancement on pre-tertiary and higher education, but accidentally lengthened accessibility to primary education (Goldman, Kumar, & Liu, 2008). This change, and the certainly democratic viewpoint of socialism, successfully addressed the challenge of mass illiteracy. The ending of 1970 saw a huge reform in economic and land in China, almost half of its populace was educated to the basic education level. In disparity, the higher education concentration in Ghana continued to be unrestricted by riot. This resulted in Ghana building one of the biggest higher education structures in West Africa.

China and Ghana have embraced numerous rules, administrative regulations, and laws that established the rudimentary framework of the educational system of both countries. The objective of reforming the educational system of the two nations was originally to create a system of education similar to the socialist market economy system, the political structure, and the technological structure. In China, the financial booming around the 1980s empowered them to develop and adapt its education structure grounded on changes that reflected their political, economic, and social realism. It must be admitted, in the case of Ghana, that since 1960, educational reforms reflected shared aspiration to create an educational system that aims to meet the economic, social, and political needs of the entire population. Studying the preceding educational reforms of China and Ghana, it is obvious that reforms introduced by both nations included reforms that permeate the entire regions of the nation deprived of any prejudices; for instance, in Ghana, the FCUBE was implemented nationwide following some specified laws, which required all children of school-going age together with all adolescents to access free mandatory, universal and free education. A similar free mandatory basic education was also introduced in China.

Again, major reforms in both China and Ghana affected the curriculum because of its critical role in the educational system. The reforms in the curriculum were a fruitful aspect of the education quality in both countries and greatly contributed to the cultural, economic, and political development. The major purpose of China's curriculum was to cultivate the essence of collectivism, democratic and socialist awareness, patriotism, awareness to national cultural tradition, and respect for community morals and national acts, the refinement of good attitudes

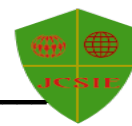


and values of the learners in life and towards the world, and as well to increase the flexibility of school curriculum (MoE China, 2001). Thus, the 1999 curriculum reform considered individual growth and supported the development of inclusive practical accomplishments centered on direct experiences of learners, assimilating hypothetical understanding in societal life. In Ghana, on the other hand, the fundamental notion behind the curriculum changes was to empower students to cultivate abilities to help them functional and employable regardless of the time of completion. The curriculum enactment started on a tentative foundation where new courses like Automobile, Tailoring, Catering, Woodwork, Technical Drawing Masonry Dressmaking, and Metalwork, were mounted. This curriculum reforms, conversely, did attain the purpose envisioned such that its impact could not be overlooked.

The analysis of the educational systems of China and Ghana has revealed that both countries have a similar educational system, thus the "9-3-4" system indicating 9 years primary to junior secondary (basic education), 3 years senior secondary, and 4 years tertiary education. The entry stage of both nations was the same with 5-6 years of primary education and 12-15 years of junior secondary education. The management education structure in both nations is handled by the ruling government through the Ministry of Education, although, in China, the local authority provides huge input to education development at the local communal level. However, despite these similarities there exist remarkable differences between the educational systems of the two countries. Whereas in Ghana, education is free (including feeding, and school textbooks) from primary level to senior high in government-owned school, primary education to junior secondary education in public schools in China are also accessible at no cost except that transport expenses, feeding charges, heating levies, and uniform fees are taken care of by the guardians/parents. It appears therefore that the Ghanaian free education covers more expenses than the Chinese free education. The junior secondary in China is popularly called the middle school but in Ghana, it is known as JHS. The management and development of basic schools in Ghana is largely the responsibility of the ruling government with other relevant institutions having little control and input. In China, there is administrative decentralization of schools giving local administration more command in the development of the basic education system.

Conclusion

Undoubtedly, gigantic energies have been shown by the Chinese and Ghanaian governments for years to raise the level of education. The educational system of both nations is similar. Perhaps, this may be one of the reasons why students migrate to China to study. Although education has seen some development in both countries, there are yet some hitches in the educational administration and management. While China is far advanced, there still challenges facing its education system just like Ghana. These hindrances are common to both countries like discrimination of underprivileged persons, inadequate funds, and high education cost for the deprived; these issues are real in both nations' education system. These concerns breed unfairness and bias to access to education concerning gender, social class, and ability. For



Ghana, in particular, challenges go beyond inequality to the limited supply of teaching and learning material at various education levels which questions education quality. Faced with novel socio-economic concerns that necessitate globalization, China and Ghana should largely invest in their education systems to satisfy the dynamic and growing needs of their populace. Additionally, it is indispensable to follow-up the assessment and the monitoring of compulsory education to guarantee that all categories of persons are catered for.

Declaration of Conflicting Interests

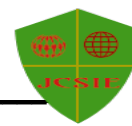
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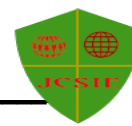
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References

- Adu-Gyamfi, S., Donkoh, W. J., & Addo, A. A. (2016). Educational reforms in Ghana: Past and present. *Journal of Education and Human Development*, 5(3), 158-72.
- Akyeampong, K. (2010). Educational expansion and access in Ghana: A review of 50 years of challenge and progress. *Research Monograph No. 33*.
- Anamuah-Mensah, J. (2007). *Meeting the challenges of education in the Twenty First century*. Accra, Ghana: Ministry of Education.
- Antwi, M. K. (1992). *Education: Society and development in Ghana*. Accra, Ghana: Unimax Publishers.
- Anum, A. K. (2007). *Educational reforms in Ghana, 1974-2007*. Retrieved from <http://www.GhanaWebBlogEducatonalReformsinGhana,1974-2007.htm>.
- Armstrong (2015). *International encyclopedia of the social & behavioural sciences* (3rd ed.). Retrieved from www.sciencedirect.com.
- Arnett, J. J. (1998). Learning to stand alone: The contemporary American transition to adulthood in cultural and historical context. *Human Development*, 41(5-6), 295-315.
- Awaisu, I. B. (2014). One State, two school systems: The instability of Ghana's school system since the Fourth Republic. *Journal of Education and Practice*, 5(9), 22-28.
- Boahen, A. A. (2000). *Evolution and change in the nineteenth and twentieth centuries*. Accra, Ghana: Sankofa Educational Publications.



- Department of History and Political Studies (2015). *History of education in Ghana*. Ghana: Kwame Nkrumah University of Science and Technology. Retrieved from KNUST databases.
- Djamila, A., & Yasmina, D. (2011). *The role of colonial education in retrospect: The Gold Coast case in the era of imperialism*. Algeria: University of Abdelhamid Ibn Badis.
- Duncan, A. (2013). *Education: The most powerful weapon for changing the world*. Washington, DC: U.S. Agency International Development (U.S.ID).
- Goldman, C. A., Kumar, K. B., & Liu, Y. (2008). *Education and the Asian surge: A comparison of the education systems in India and China*. Pittsburgh, PA: Rand Corporation.
- Green, H., & Hannon, C. (2007). *Their space: Education for a digital generation*. Retrieved from: <http://www.demos.co.uk/files/Their%20space%20-%20web.pdf>.
- Gu, J., Li, X., & Wang, L. (2009). *Higher Education in China*. China: Zhejiang University Press.
- Guan, Q., & Meng, W. (2007). China's new national curriculum reform: Innovation, challenges and strategies. *Frontiers of Education in China*, 2(4), 579-604.
- Hu, G. (2002). Recent important developments in secondary English-language teaching in the People's Republic of China. *Language Culture and Curriculum*, 15(1), 30-49.
- Ikechukwu, E. C. (2015). Towards a pragmatic system of education: a comparative study of Nigeria 6-3-3-4 and Chinese 9-3-4 system. *International Journal of Education and Research*, 3(5), 79-88.
- Lee, T. H. (2000). *Education in traditional China: A history*. Boston: Brill.
- MoE China. (2001). *Outlines of the reforms of basic education curriculum*. Retrieved from http://www.moe.edu.cn/publicfiles/business/htmlfiles/moe/moe_2792/.
- MoE China. (2007). *Ministerial press release on the development of compulsory education and literacy education*. Beijing. Retrieved from <https://www.kpmg.de/docs/Education-in-China-201011.pdf>.
- Muthanna, A., & Sang, G. (2015). Undergraduate Chinese students' perspectives on Gaokao examination: Strengths, weaknesses, and implications. *International Journal of Research Studies in Education*, 5(2), 3-12.
- Olejurulo, E. B. (2018). Historical analysis of educational policies in colonial Nigeria from (1842-1959) and its implication to Nigerian education today. *International Journal of Scientific Research in Education*, 11(3), 392-410.
- Scholaro International. (2019). *Educational systems of Africa and Asian countries*. Retrieved from: <https://www.scholaro.com>.
- Stanislaus, K. (2004). Policy Initiative for change and innovation in basic education programmes in Ghana. *Critical Review*, 4(2), 10-15.
- Tsang, M. C. (2000). Education and national development in China since 1949: Oscillating policies and enduring dilemmas. *China review*, 579-618.
- Wang, L. B. (2009). *Basic education in China*. China: Zhejiang University Press.
- Wang, Y. (2019). *Speech by Chinese ambassador to Ghana*. Retrieved from: www.africanexponent.com.



- Wenjing, W., & Li, Z. (2007). *Educational reform and curriculum change in China: A comparative case study*. China: International Bureau of education.
- Xu, X., & Mei, W. (2009). *Educational policies and legislation in China*. China: Zhejiang University Press.
- Yang, M. (2009). *Educational system in China*. China: Zhejiang University Press.
- Zarrow, P. (2006). *China in war and revolution, 1895-1949*. London: Routledge.

