



Special and inclusive education in Ghana: Status and progress, challenges and implications[☆]



Lawrence Kofi Ameteepee^{a,1}, Dimitris Anastasiou^{b,*}

^a Southern Illinois University Carbondale, Department of Curriculum and Instruction, Wham 223/Mail Code 4618, 625 Wham Drive, Carbondale, IL 62901, USA

^b Southern Illinois University Carbondale, Department of Educational Psychology & Special Education, Wham 223/Mail Code 4618, 625 Wham Drive, Carbondale, IL 62901, USA

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ABSTRACT

This case study investigates the special and inclusive education in Ghana. The authors first delineate the wider human well-being and historical contexts. Applying a descriptive design based on measurable pre-established indicators, drawn from Anastasiou and Keller's (2011) typological framework, the authors provide a systematic description of the 2008 status of special and inclusive education in Ghana. Furthermore, the produced outcomes compared to pre-established observable goals set in the Education Strategic Plan 2003–2015 were recorded to evaluate the progress in Ghana's special and inclusive education. The main challenges for special and inclusive education in Sub-Saharan African countries are discussed.

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1. Introduction

To study systematically the case of status of and progress in a country's special and inclusive education, it is important to set measurable or/and observable criteria, and delineate the “big picture” of the context in which a special needs education (SNE) system is situated (Yin, 2012). In this section, we address the requirement of the “big picture” using a human development framework. Specifically, we describe the human well-being development of Ghana, compared to that of macro-geographical regions such as Sub-Saharan Africa, Europe and North America, and the world (Table 1).

The United Nations Development Programme (UNDP, 2013) has developed the Human Development Index (HDI), which is a composite measure of indicators along three dimensions: (a) life expectancy, (b) education attainment, and (c) income indices, to indicate human development across the vast majority of countries (as of 2012, 187 countries). The HDI provides a balanced index of a

nation's human well-being beyond narrow economic indicators (Haq, 2003). Comparisons of a country's HDI with macro-geographical regional HDIs can give its comparative status of human capabilities.

Between 1990 and 2012, of 132 countries with a complete data series, Ghana was among the rapidest HDI improvers. Still, as of 2012, the Sub-Saharan Africa region had the lowest HDI value, 0.475 (UNDP, 2013). Ghana, a country on the west coast of Africa, with a HDI of 0.558 (see Table 1, Fig. 1), outperformed the average Sub-Saharan countries due to remarkable progress in human well-being over the last two decades (UNDP, 2013). Despite this progress, Ghana is still a typical developing Sub-Saharan country with a low-medium HDI, and far below the average value of 0.694 of the global HDI (UNDP, 2013).

Ghana has a population of about 24.4 million, according to the 2010 census of Ghana. Public investment, not just in economic infrastructure (mainly cocoa and gold), but also in health and education, has been key to achieving human development (UNDP, 2013). The fact that Ghana is a typical Sub-Saharan country, but also an example of heartening progress in terms of human well-being among developing countries, can make the study of its special and inclusive education a revelatory or *heuristic case* for Sub-Saharan Africa (Eckstein, 2000; Merriam, 1988). Specifically, it poses the question of whether the status of special and inclusive education in Ghana is at comparable level to that of HDI and that of general education development in particular.

[☆] The actual work was done in Ghana and the United States.

* Corresponding author. Tel.: +1 618 453 1819; fax: +1 618 453 7110; mobile: +1 618 203 3354.

E-mail addresses: lamet@siu.edu (L.K. Ameteepee), anastasiou@siu.edu (D. Anastasiou).

¹ Tel.: +1 940 453 8886.

Table 1
HDI and its components for Ghana and UNESCO's macro-geographical region (2012).

Region/country	HDI	Life expectancy at birth (years)	Mean years of schooling	Expected years of schooling	GNI per capita
Ghana	.558	64.6	7.0	11.4	1684
Sub-Saharan Africa	.475	54.9	4.7	9.3	2010
South Asia	.558	66.2	4.7	10.2	3343
Arab states	.652	71.0	6.0	10.6	8317
East Asia & the Pacific	.683	72.7	7.2	11.8	6874
Latin America & the Caribbean	.741	74.7	7.8	13.7	10,300
Europe, North America, and Central Asia	.771	71.5	10.4	13.7	12,243
World	.694	70.1	7.5	11.6	10,184

Source: UNDP (2013, pp. 146–147).
GNI: gross national income.

Additionally, like most other developing countries in Sub-Saharan Africa, Ghana struggles to achieve goals of the Education for All (EFA) program. In accordance with generic EFA goals, Ghana has worked to come up with the Education Strategic Plan (ESP) 2003–2015 (Ministry of Education, 2003). The ESP has made projections concerning the services to learners with disabilities by 2015. Today, there is the question of how close the country is to achieving the goals set in the ESP. Moreover, there is the question of whether the progress in educating children with disabilities is comparable to that of HDI or general education. Before addressing these questions, we delineate the historical development of special and inclusive education in Ghana.

2. Historical development of special and inclusive education in Ghana

The historical development of special and inclusive education in Ghana followed the same pattern as in many other developing and Sub-Saharan countries (Anson-Yevu, 1988). We could distinguish three main stages (see also Table 2).

2.1. Early Special Education Efforts before Ghana's Independence (1936–1956)

Traditionally, children with mild to moderate disabilities in Ghana were trained in trades just like their peers without

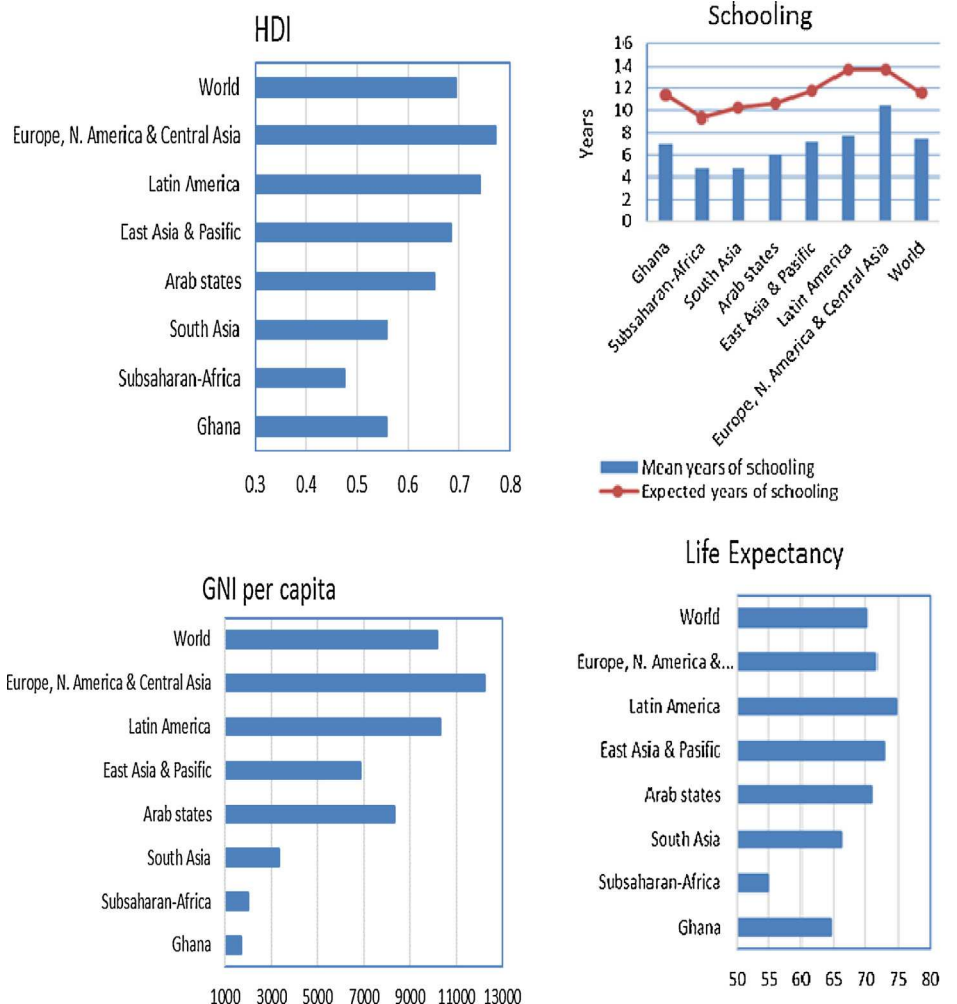


Fig. 1. HDI and its components for Ghana and UNESCO's macro-geographical region (2012).

Table 2
Highlights of historical special education development in Ghana.

Time	Highlight
1936–1956	<i>Early Special Education Efforts before Ghana's Independence</i>
1936	Missionaries attempted at providing special education to children with disabilities.
1945	The Basel Mission, a Christian missionary society, established the first special school for children with visual and orthopedic impairment.
1948	The Presbyterian and the Methodist Churches established the second special school for blind students at Wa, Northern Ghana.
1957–1993	<i>Independence – Establishment of Public Special Education System</i>
1957	Independence. The government of Ghana took the responsibility of educating children with disabilities.
1961	Educational Act stated that the government should provide compulsory and free basic education for all Ghanaian children, including children with disabilities.
Late 1960s to 1970	The Ministry of Education, took responsibility for the administration of special schools.
1988	17 special schools for students with deafness, blindness, and intellectual disabilities were established.
1980s	Efforts made for an “integrated” system to supplement the special schools system.
1992	The new Constitution of Ghana emphasized the provision of free and compulsory universal basic education for all.
1994 to present	<i>Emphasis on Inclusion</i>
1994	The UNESCO Salamanca Statement gives priority to inclusion.
2000	World Education Forum in Dakar, Senegal: EFA goals
2003	ESP 2003–2015 intends to have all students with mild to moderate disabilities in schools by 2015.
2012	Ghana ratified the United Nations CRPD.

disabilities. Missionaries established the first special schools for children with disabilities in Ghana focusing first on children with blindness, and then on deaf students. The special schools, at the time, mainly offered literacy courses, and training in how to weave baskets using local materials (Anson-Yevu, 1988; Avoke, 2001).

2.2. Independence – Establishment of Public Special Education System (1957–1993)

The government of Ghana took the responsibility of catering for the educational needs of children with disabilities in 1957, when Ghana became the first nation in Sub-Saharan Africa to declare independence. However, full responsibility did not begin until the passage of the Educational Act of 1961. The Ministry of Education (MoE) only took over the affairs of special education from the Ministry of Labor and Social Welfare in the late 1960s (Anthony and Kwadade, 2006), and in 1970, the Special Education Unit (currently known as the Special Education Division [SED]) assumed full responsibility for special schools (Anson-Yevu, 1988). In 1980s, after criticisms about the alienation of special schools' students from their communities, the government came up with a so-called integrated system that was to supplement the traditional special education. The term integration typically means students with disabilities are educated together with students without disabilities (Vislie, 2003). Whether the integrated system, at that time, satisfied the above requirement is not clear. An integrative innovation of that time was two unit schools for students with intellectual disabilities. *Unit schools* are two to three classrooms attached to regular schools where small groups of students with disabilities receive special education (Anson-Yevu, 1988; Ghana Education Service [GES], 2008). Additionally, in that integrated context, special schools for deaf and blind students followed ordinary curricula with some modifications (Anson-Yevu, 1988).

2.3. Emphasis on Inclusion (mid 1990s to present)

Although the influence of international organizations and policies was not obvious in Ghana's special education before the Salamanca Statement of 1994 (UNESCO, 1994), the same cannot be said about the country's special education policies after the Salamanca call to give priority to inclusive education. Arguably, the country's current special education policies are influenced by the big inter-governmental organizations. Recently, Ghana ratified the United Nations Convention on the Rights of Persons with Disabilities (CRPD) on July 31, 2012. The Article 24, which focuses on education, prioritizes “individualized support measures . . . provided in environments that

maximize academic and social development, consistent with the goal of full inclusion (emphasis added)” (CRPD, 2006). The exact meaning of the phrase “full inclusion” is not clarified, and thus it is open to interpretations. Like other human rights treaties, the CRPD establishes an expert committee that provides suggestions and recommendations in response to reports of countries. However, the exact role of these committees and the legal effect of their recommendations is a subject of some debate among member states and academics (Meyer, 2013). Both the Salamanca Statement and the CRPD provide no time frame. Instead, the Dakar Framework (2000) underlined that countries should prepare comprehensive National EFA plans by 2002 (p. 10). Since then, the key document directing the provision of special needs has been Ghana's ESP 2003–2015.

3. Criteria for exploring the status of Ghana's general, special, and inclusive education

To explore the 2008 status of general, special, and inclusive education in Ghana, we used a set of measurable or/and observable criteria based on the A&K framework.

3.1. A&K framework

Anastasiou and Keller (2011) used a typological approach to classify educational systems and special education subsystems of 143 countries worldwide into six types. The A&K typology depends upon placement on three axes: (a) the extent to which the country provides education to all of its potential students, considering the national educational system as a whole; (b) the extent of special education services; and (c) the extent of inclusive services. In this way, they provided a unified framework for the description of educational provision for exceptional learners in different countries. The A&K typology is an extension of the EFA framework to economic and special education indicators. Anastasiou and Keller (2011) used educational variables reflecting the six EFA goals established in the Dakar Framework for Action (2000) at the World Education Forum in Dakar, Senegal (UNESCO, 2000), as well as variables such as the special education coverage, and the gross national income (GNI) per capita.

The six EFA goals to be attained by 2015 are as follows: Goal 1: Expand early childhood care and education; Goal 2: Provide free and compulsory primary education for all; Goal 3: Promote learning and life skills for young people and adults; Goal 4: Increase adult literacy by 50%; Goal 5: Achieve gender parity by 2005, and gender equality by 2015; Goal 6: Improve the quality of

education (UNESCO, 2000). Unfortunately, international comparable data relating to Goal 1 are not available, and it is not clear how to measure outcomes and monitor progress on Goal 3 (Carr-Hill, 2010). In this study, we use indicators related to the EFA goals, as well as other indicators included in the A&K typology.

Special education coverage (SPEDC), a newly invented concept by Anastasiou and Keller (2011, 2014), refers to the proportion of the student population receiving special education in a country, summarizing special education services across educational settings; an indicator that makes comparable the provision of special education services around the world. Based on a set of international comparative indicators, we attempt an analysis of how Ghana provides education to exceptional learners within the context of its national educational system.

4. Criteria for evaluating the progress of Ghana's special and inclusive education

To evaluate the outcomes and progress of special, and inclusive education in Ghana, we used the notion of SPEDC, and a set of observable ESP goals.

4.1. The Education Strategic Plan (ESP) 2013–2015

The ESP, which sets the guidelines for the education system as a whole, has two major specific targets for the education of learners with disabilities in Ghana (MoEYS, 2003). First, there should be increase in attendance for students with special education needs (SENs) in schools to 50% in 2008, 80% in 2012, and 100% by 2015. Second, an inclusive education system should be achieved by 2015 for students with non-severe SENs. In addition, the Ministry lists a number of strategic objectives that are the pathways to achieving the targets (see Table 5, column 1). Although these goals and objectives seem clear, questions are raised as to whether they are achievable by 2015. Moreover, there is no research to determine whether the country is making progress.

The purpose of this case study is threefold:

- To systematically describe the 2008 status of special and inclusive education in Ghana using a set of quantitative indicators and thresholds drawn from A&K typological framework.
- To evaluate the progress in Ghana's special and inclusive education in terms of growth in SPEDC and observed outcomes corresponding to the ESP 2003–2015 goals.
- To determine the relationship between SPEDC and participation rate in elementary and secondary educational levels, while controlling for GNI per capita or HDI.

5. Method

5.1. Research design

Ghana's special and inclusive education is the *case* or the phenomenon of interest (Yin, 2012). As special and inclusive education are systems consisting of several concepts, events, programs, and processes, *case study* is a vehicle for investigating these complex social phenomena (VanWynsberghe and Khan, 2007). However, as VanWynsberghe and Khan have argued, case study is not a specific research design in the sense that offers a prescriptive plan to collect, analyze, or interpret data. Yin (2014) has also admitted that there are few fixed formulas to guide a case study strategy.

Applying a descriptive design based on measurable pre-established indicators and thresholds drawn from the A&K

(2011) typological framework, an extension of EFA framework, we explore the 2008 status of special and inclusive education in Ghana. In essence, we treat the special and inclusive education statuses as two distinct units of analyses (Merriam, 1988; VanWynsberghe and Khan, 2007). The A&K framework guided here the case study protocol (Yin, 2014). In addition, we investigate them within the general education context, as the boundaries of the units of analyses are not always clear (Yin, 2012, 2014); this is especially true for inclusive education. It is noteworthy that a contextualized analysis, with regards to the human development and historical contexts, has been already provided.

To evaluate the progress in Ghana's special and inclusive education in terms of SPEDC and observable goals set in the ESP 2003–2015, we follow a descriptive design of program evaluation (GAO, 2011; McDavid et al., 2013). In essence, the ESP goals guided here the case study protocol. To further provide a specific temporal boundary (VanWynsberghe and Khan, 2007), we conducted an evaluation on how well the ESP was working as of the period 2010–12, focusing on the produced outcomes. Typically, experts external to the program conduct evaluation and examine achievement of program goals in a broader context (GAO, 2011). The broader context has been already described by the HDI, which relates to the general education context addressed by the first research question.

5.2. Data collection and analysis

Data collection was based on official documentary information, and in most cases was cross-validated across time and sources. In this sense, the provided data are stable and non-contradictory, specific (e.g., corresponded precisely to the ESP 2003–2015 targets), broad (included a long span of time, many events and settings), and unobtrusive, as they were not created because of the case study (Yin, 2014). To evaluate the progress in the ESP, we followed an analytic strategy by juxtaposing the goals with the observed outcomes in Table 5; a strategy consistent with the inductive (without prior theoretical propositions) nature of this case study (Merriam, 1988; Miles and Huberman, 1994; Yin, 2014).

5.2.1. Data sources

The main sources of data were (a) UNESCO's Institute for Statistics (UIS) for general education indicators, (b) the World Bank for the economic indicators, (c) Ghana's Ministry of Education for SPEDC, and general, special and inclusive education outcomes which sometimes were cross-validated across sources using UIS or World Bank information, or across time using several annual reports, and (d) a range of official sources for SPEDC in other countries. Data for the status of general, special, and inclusive education were targeted for the year 2008 or the closest year; however, the reported year of reference covered a wider range (1999–2010) for most variables with the exception of GNI per capita (2008). The largest proportions of data for each variable, however, did fall within 2005–2009 period.

5.2.2. Variables

(1) *Special education coverage*. It is an indicator of the access of students with disabilities to a special education subsystem within the country's national educational system. It is expressed as the percentage of the number of children receiving special education to the total official school-aged (6–18) population. In the case of Ghana, special education coverage refers to students served in special schools, special units and integrated senior high schools, according to the official statistics (MoESS, 2008; MoE, 2012a, 2013). The year of reference of these data for six countries (Mali, Zambia, Eritrea, Cote D'Ivoire, and Democratic Republic of Congo) was between 1999 and 2001; for six countries (Congo Republic, Liberia, Nigeria, Senegal, Swaziland, and Uganda), between

2002 and 2004; and for the remaining countries between 2005 and 2009. There were complete data on SPEDC for 23 North American and Western European countries. There were 14, out of 43 (32.6%), Sub-Saharan countries, however, with missing data on this variable.

(2) *Adjusted net enrolment rate (aNER) in elementary education*. It measures the actual participation of the school-aged population at the elementary educational level. As the classic NER underestimates the enrollment of children in elementary education, the UIS uses aNER, which includes children in elementary education who have reached secondary education either because they had accessed elementary education earlier than the typical age or had skipped some grades (UIS, 2009, 2013).

(3) *Net enrolment rate (NER) in secondary education*. It measures the actual participation of the school-aged population at the secondary educational level (UIS, 2009, 2013).

(4) *Survival rate to last primary grade*. It is the percentage of a cohort of students enrolled in the first grade of primary education who are expected to reach the last grade of elementary school (usually Grade 5 or 6), regardless of repetition. It reflects the extent to which students drop out of primary education (UIS, 2009, 2013).

(5) *School life expectancy*. This variable measures the total number of years of formal schooling that a child of a country can expect to receive in his or her lifetime (UIS, 2009, 2013).

(6) *Pupil/teacher ratio (primary)*. It is the average number of students per teacher in the elementary level of education in a given school year (UIS, 2009, 2013).

(7) *Adult literacy rate (ALR)*. The ALR is the percentage of adult literate persons, age 15 and above, who can both read with understanding and write a short simple statement on his or her everyday life (UIS, 2009, 2013).

(8) *Gross national income (GNI) per capita*. It measures the average income of the country's citizens and reflects its economic strengths, needs, and general standard of living (World Bank, 2013).

(9) *Human Development Index (HDI)*. It is a composite index measuring the human development in a country (UNDP, 2013).

6. Results

6.1. The 2008 status of general, special, and inclusive education in Ghana

According to Anastasiou and Keller (2011), most countries in Sub-Saharan Africa (e.g., Benin, Burkina Faso, Burundi, Cameroon, Chad, Eritrea, Ethiopia, Gambia, Guinea, Lesotho, Liberia, Madagascar, Malawi, Mali, Mozambique, Niger, Nigeria, Senegal, Sierra Leone, Togo, Uganda, and Zambia), fall into the type of limited special education in a limited education system (p. 777). National educational systems of this type are limited and special and inclusion services are very rudimentary. The “limited special

education” category corresponds to a low degree of SPEDC for the school-age population of less than 1%.

Using the A&K (2011) threshold descriptors for the general education indicators in Table 3, the following three indicators, the NER in secondary education, the survival rate to last primary education, and the adult literacy rate, can be described as limited; they were equal or less than 65%, 75% and 75% respectively (pp. 775–776). However, other four indicators, the aNER in primary education, the school life expectancy, the GNI, and the pupil teacher ratio in primary education, can be described as developing, as they were just above the limited thresholds equal or less than 75%, 10 years education, \$975 respectively, and equal or greater than 36 students. Therefore, as of 2008, Ghana's national education system was *marginally developing*, and more precisely in a transition from a limited to a developing education system, following the A&K typological criteria. Moreover, all values of educational indicators were above the average value for Sub-Saharan African countries, but below the world average, and much below the average value for North American and Western European countries.

Instead, Ghana's SPEDC was clearly limited, much below the limited threshold of 1%, according to the A&K typology. As of 2008, only 6308 students with disabilities received special education services; that is, SPEDC was 0.098%. At the same time, there were 13 special boarding schools for students with deafness, two special boarding schools and three units for students with blindness, 12 schools and 23 units for students with intellectual disabilities, three special boarding secondary/vocational schools for students with deafness, five senior secondary schools for students with blindness, as well as five technical schools for students with deafness and two for students with blindness (MoESS, 2008). These special schools and units were concentrated in the southern part of the country, especially in Greater Accra, Central, and Eastern Regions (MoESS, 2008).

Additionally, the extent of inclusion services is very low, much below the corresponding threshold in the A&K typology. Even the most recent data confirm this. As of 2011/12, the Inclusive Education policy was operated in 34 out of 170 districts and 19,775 students with disabilities participated in the program. However, only 8000 of the students were somehow supported. The quality and intensity of inclusive services were unclear. For example, the available information shows that the students received some additional services, but not in the form of additional special education teacher services; for example, co-teaching (MoE, 2012a).

6.2. Evaluation of the progress in special and inclusive education

6.2.1. Trends in special education coverage

Total enrollment increased from 3361 in 2001 to 6180 in the 2012/13 school year (MoE, 2012a; World Bank – AFTED, 2010). Table 4 indicates that the number of students receiving special

Table 3

The 2008 status of economy, general and special education in Ghana, Sub-Saharan Africa, North America and Western Europe, and the World based on UIS (2013) data, unless otherwise noted.

Indicators	Ghana	Sub-Saharan Africa	North America and Western Europe	World
1. Special education coverage	0.098	0.183 ^a (N=28)	4.999 ^a (N=23)	1.682 ^a (N=144)
2. aNER in primary education	78.4	76.4	96.1	89.8
3. NER in secondary education	48.4	26.9	90.6	59.5
4. Survival rate to last primary grade	72.2	64.0 (N=42)	95.9 (N=26)	83.5 (N=172)
5. School life expectancy	10.5	9.0	16.3	11.2
6. P/T ratio in primary education	32.3	45.1	13.9	24.9
7. Adult literacy rate	66.6 (2009)	65.3 (N=45)	98.6 (N=28)	84.8 (N=196)
8. Gross national income per capita	1170	1797 (N=45)	44,905 (N=24)	14,243 (N=192)

Notes. N/A: not available; aNER: adjusted net enrollment ratio; P/T ratio: pupil/teacher ratio.

^a Anastasiou and Keller (2014).

Table 4
Trends in special education coverage (SPEDC) in Ghana.

Academic year	aNER in primary education	NER in secondary education	Special ed. population	Special ed. coverage (%)	% yearly difference in sped coverage
2001/02	60.2	33.0	3361 ^a	.059	
2002/03	62.7	34.7	4144 ^a	.070	.011%
2003/04	65.1	35.7	4203 ^a	.071	.001%
2004/05	60.5	38.6	4435 ^a	.073	.002%
2005/06	67.4	40.0	4722 ^a	.077	.004%
2006/07	67.0	41.2	5092 ^a	.082	.004%
2007/08	72.4	47.1	5654 ^a	.089	.007%
2008/09	77.9	47.0	6308 ^a	.098	.011%
2009/10	76.5	45.7	6900 ^a	.105	.007%
2010/11	80.2 (est.)	47.2 (est.)	5504 ^a	.077	-.028%
2011/12	83.9	48.6 (est.)	6432 ^a	.088	.011%
2012/13	82.3	50.5 (est.)	6180 ^a	.083	-.005%
2013/14	87.6	51.5	N/A	N/A	N/A

Notes. N/A: not available; SPEDC is calculated on demographic data on school-age population provided by UIS (2013, December); est. = our estimation based on the mean of the UIS adjacent observations.

^a MoE (1996, 2010, 2012a, 2013).

education and inclusive services almost doubled between 2003 and 2009, but then remained relatively stable. The rate of growth also almost tripled in the same period. Actually, the increase in number of special and inclusive settings was the lever to increase the number of students in special education, as the supply is much below the demand for placements.

6.2.2. Goals of Education Strategic Plan

Table 5 shows the progress in six observable goals for special and inclusive education set by the ESP 2003–2015. Apparently, the access of students with disabilities to national education system and the establishment of an inclusive system across the country are the most important targets.

ESP Goal 1. A large number of children with disabilities do not go to school. The Basic Education Division of the GES (2004) estimated that only 0.6% of children with disabilities in the country receive any form of education. According to MoE (2012a, p. 26), as of 2011/12, only 26,207 students with identified disabilities attended schools (general or inclusive schools, separate special settings). About 11,800 students with identified mild to moderate disabilities just attended schools without any support (MoE, 2012a). The Ghana Statistical Service (2006) survey showed that about 16% of children aged 2–9 had at least one form of disability; a percentage that exceeds the 10% estimated by

World Health Organization (GES, 2004). Given the estimate of 10%, Ghana must have about 862,160 school age children with disabilities aged 4–14, based on the 2012 data of UNESCO Institute for Statistics (UIS, 2013). Compared to the total enrolment of 26,207 students, about 3% of the population of children with disabilities in the country received any form of education, as of 2011/12. Even though this figure is far below the MoE's (2003) expectations, a small increase in attendance for students with disabilities has taken place.

ESP Goal 2: The inclusive education program was initiated in the 2003/04 academic year. As of 2006/07, there were only 129 inclusive schools serving 309 students with mild to moderate disabilities (MoESS, 2008). As of 2011/12, about 8000 students with mild to moderate disabilities received some inclusive services, as it is aforementioned (MoE, 2012a). On balance, an inclusive system is currently not in place.

ESP Goals 3–5: Ghana seems to be on the road to fulfill some of the four minor goals [strategies and activities in MoEYS (2003) terminology] that are supposed to be the pathways to achieving the two major targets. For example, some important steps have been taken toward organizing screening and identification (Goal 3 in Table 5), and sensitization workshops for parents (Goal 5). Nevertheless, less progress has been made in training prospective teachers in special education (Goal 6).

Table 5
Progress in observable goals for special and inclusive education.

Goals	Observed outcomes
1. "Increase attendance of those with SENS in schools to 50% in 2008, 80% in 2012 and 100% by 2015." (MoE, 2003, p. 22).	About 11,800 students with identified mild to moderate disabilities (visual and hearing impairments, intellectual disabilities) had access to schools, as of 2011/12. About 3% of learners with disabilities aged 4–14 attended any form basic education (MoE, 2012a). The target has not been met.
2. An inclusive education system should be achieved by 2015 (including girls and boys with non-severe SENs integrated into mainstream schools).	As of 2011/12, about 8000 students with disabilities received services in the context of the Inclusive Education Program operated in 34 out of 170 districts (MoE, 2012a). There is not available info on the quality and intensity of inclusive services. An inclusive system is currently not in place.
3. The SED was to organize screening and identification of children with special needs by 2005.	Development of a screening and an assessment tool (GES, 2008). A screening manual details a step by step process for targeted districts and schools. Also, the SED developed the <i>Ghana Achievement Test</i> to identify children with various disabilities within and outside the school system.
4. The SED was to establish special education assessment centers in all districts by 2004.	There are only four special education assessment centers. There is no evidence that centers have been established in all 170 districts (MoE, 2010).
5. The SED was to organize sensitization workshops for parents and children with special needs from 2005 to 2015.	The SED organized sensitization seminars for educators, parents, and guardians. Over 1000 parents and guardians participated in the seminars (MoE, 2012a).
6. The Tertiary Education Division was to incorporate training in special needs education (SNE) into all teacher training college courses by 2004.	SNE has incorporated into a two-credit compulsory course for pre-service teachers in the three-year curriculum of all Colleges of Education (MoESS, 2008; Nketsia and Saloviita, 2013).

With regard to Goal 4, there were only four poorly resourced special education assessment centers in the whole country as of 2011/12. Two of the existing centers concentrate mainly on assessing children with hearing impairment and the other two are multi-purpose assessment centers. The four centers are located in urban areas and they are poorly equipped (Ametewee, 2010; MoE, 2010, 2012a). The goal of establishing special education assessment centers in all 170 districts by 2004 has not been met, and the progress here is very little.

With regard to Goal 5, there is some information to the effect that seminars were organized to orient and sensitize parents and guardians. However, there is no information to the effect that seminars are currently a continuous process as part of the efforts to provide education to individuals with disabilities in the country.

ESP Goal 6. Teachers in Ghana are trained in Initial Teacher Training Colleges (ITTCs) and universities. More than 20 ITTCs provide education for teachers in primary and junior high schools offering a 3-year post-secondary diploma. Two universities provide training to teachers in senior high schools offering a 4-year B.Ed. (Basic Education) program (Kuyini and Mangope, 2011; University of Cape Coast, 2014). Historically, the ITTCs were part of the second tier of education. Since 2007, ITTCs have been designated as tertiary level institutions providing a 3-year teacher education, in which the final year is off-campus teaching practice in primary or junior high schools (Kuyini and Mangope, 2011; Nketsia and Saloviita, 2013). The UNESCO Teachers' Resource Pack (RP) on Special Needs in the Classroom has been used for training general education teachers in special needs, since 1989. In 1995 the training in inclusive education was enhanced through the Pilot Action Research Project (PARP) (Kuyini and Mangope, 2011; Nketsia and Saloviita, 2013).

There is evidence that all ITTCs have a two-credit compulsory course on special needs and inclusive education in their three-year teacher curriculum (MoESS, 2008; Nketsia and Saloviita, 2013). The government has had the assistance of international non-governmental organizations in this area. The USAID (through Education Quality for All [EQUALL] project) is the main partner involved in the training of teachers for the inclusive education pilot project. The trainers of trainers is an in-service project aiming at training special educators, who in turn would train kindergarten and elementary regular education teachers in inclusive schools. Through these efforts in five districts (out of the 14 for the pilot program), a total of 2393 regular teachers were trained from October 2007 to March 2008 (Gadagbui, 2010; MoE, 2010). However, this USAID project stalled due to lack of funds (Gadagbui, 2010). In total, between 2004 and 2012, over 5000 teachers, head teachers and administrators have been trained (MoE, 2012a). This figure represents 1.99% of the 251,417 teachers who worked in pre-elementary, elementary, and lower secondary education, based on UIS (2013) data on teaching staff for 2012.

6.3. Relationship between SPEDC and participation in elementary and secondary education

Table 6 shows an interesting pattern of interrelations. The bivariate correlations between aNER in primary education, NER in secondary education, HDI and GNI per capita are very strong (Pearson r s between .93 and .99, $p < .01$), whereas SPEDC is less highly correlated with the other four variables (Pearson r s between .56 and .75) across time (2001–2012). Partial correlations providing a measure of linear association while adjusting for the effects of GNI per capita, indicated an almost zero relationship between SPEDC and aNER primary (partial $r = .06$, $p > .05$, $N = 9$) and a moderate relationship between SPEDC and NER secondary (partial $r = .44$, $p > .05$, $N = 9$). When controlling for HDI, the strength of partial correlations were similar (partial $r = .19$ and partial $r = .49$, $p > .05$, $N = 6$, respectively). Consequently, the progress in SPDC is not associated with the progress in participation rate in elementary education, and it is moderately associated with the progress in participation rate in secondary education, holding constant GNI per capita or HDI. Noteworthy, the growth in participation rate in secondary education is less rapid than that in elementary education (see Table 4). Between 2001 and 2013, the growth in the aNER in elementary education was 27.4 units (from 60.2 to 87.6), while the growth in secondary education was 18.5 units. Arguably, different sectors of education (special education, elementary, secondary education) develop different accelerations under the same external (economic and human development) circumstances.

7. Discussion

We attempted to describe the 2008 status of Ghana's special, and inclusive education within their broader education context by using measurable indicators drawn by the A&K framework, and to evaluate the progress in educating students with disabilities in terms of growth in SPEDC and observed outcomes corresponding to ESP 2003–2015 goals for special and inclusive education.

Ghana's special and inclusive education system is limited within a marginally developing national education system. The number of students receiving educational services in inclusive settings is low. Moreover, the special and inclusive education system currently caters for only three types of students with disabilities (deafness, blindness, and intellectual disabilities) after over three decades of being in existence (MoE, 2010). Programs for other disability categories are not in place. As of 2008, the special education coverage was only 0.098%. A practical implication is that it takes years of waiting to be admitted to a special school, and the average school entry age in a special school is around 10–12 years (Kniel and Kniel, 2008). In addition, partial correlation analysis, despite the small number of observations, indicated that different

Table 6
Bivariate correlations among SPEDC, aNER in primary education, NER in secondary education, HDI, and GNI per capita across time (2001–2013).

Variable	1	2	3	4
1. Special education coverage (2001–2012)	–			
2. Adjusted net enroll. rate in primary education	.68 [*] (N=12) [.17, .90]	–		
3. Net enroll. rate in secondary education	.75 ^{**} (N=12) [.31, .95]	.94 ^{**} (N=13) [.81, .98]	–	
4. Human Development Index (2001, 2005–2012)	.56 (N=9) [–.17, .89]	.98 ^{**} (N=10) [.92, .99]	.93 ^{**} (N=10) [.73, .98]	
5. Gross national income per capita (2001–2012)	.69 [*] (N=12) [.19, .90]	.98 ^{**} (N=13) [.93, .99]	.95 ^{**} (N=13) [.84, .99]	.99 ^{**} (N=10) [.96, .99]

Note: The brackets enclose the limits of a 95% Confidence Interval for the bivariate correlations.

^{*} $p < .01$.

^{**} $p < .001$.

sectors of education develop different accelerations under the same external (economic and human development) circumstances, and the growth in special education coverage lags behind the remarkable growth of elementary education. For the sake of argument, we refer to this situation as “Janus imbalance” after the Roman mythology god of transitions with two faces, one looks backward at the past while the other looks forward toward the future. Janus imbalance currently affects the development of special education in Ghana. Besides, the progress in elementary education seems to be consistent with the economic or human development growth (zero order Pearson $r_s = .97$ and $.98$ respectively; see Table 6).

7.1. The main challenges

Focusing on the access to education, only 3% of the children with disabilities in the country receive any form of education. Children and youth with disabilities either drop out of basic education in a very short time or have never had the opportunity to go to school at all (Kniel and Kniel, 2008). The target of ESP (2003–2015) has not been met, and despite a small progress, the low percentage of school attendance is disheartening. A closer look at the data provided by MoE (2012a, p. 26) shows that the improvement happened within the first years of the ESP, between 2004 and 2006, due to an increase in enrolment of students with disabilities in mainstreamed schooling, but since then the attendance figures remain stagnant. In addition, the new Education Strategic Plan 2010–2020 (MoE, 2012b) does not include any specific, observable or measurable goal for the education of people with disabilities, and this rather shows the discontinuity in pursuing targeted goals for special and inclusive education.

The discrepancy between the progress in the general access to educational system and the progress in the specific access of students to education is noteworthy. This also indicates a policy priority for improving elementary education. The enrolment growth of students with disabilities in elementary education is arguably not proportional to the admirably achieved aNER size. Nevertheless, the 2015 deadline is rather unrealistic for Ghana to meet the EFA goal of universal elementary education.

Logically, this important EFA goal of “free and compulsory primary education for all,” above the level of 90–95% actual participation of the school-aged population, cannot be attained by 2015 without including children with disabilities. Making logical projections for 2015, we perceive Ghana seems to be very close to the critical threshold of 90–95%, and our theoretical prediction, susceptible to further empirical investigation, is that a progress in the goal of universal elementary education above the threshold of 90–95% cannot be achieved without including most exceptional learners. Nevertheless, the UNESCO neither has included a separate goal for students with disabilities, nor monitors the access of children with disabilities to educational system for Ghana or other Sub-Saharan African countries. This lack of data does not provide an opportunity for public accountability and improving performance (Anastasiou and Keller, 2011); two purposes that underlie most performance measurement systems (McDavid et al., 2013).

Despite the progress in SPEDC and in a few minor goals of the ESP 2003–2015, the major goal, the establishment of an inclusive system across Ghana seems to be far behind. Considering the data until 2013, the country is nowhere near achieving the target of an inclusive system. The coverage of inclusive services is very small, covering only 8000 students with mild to moderate disabilities in 34 out of 170 districts, as of 2001/12. Moreover, the lack of information on the quality of services (see MoE, 2010, 2012a,b) raises questions about the intensity and the extent of an individualized support.

7.2. Economic barriers

In our view, the main problem is the lack of funds for the implementation of educational plans. This hinders (a) the access of the students with disabilities to schools, (b) the establishment of an effective inclusive system, (c) the establishment of assessment centers, and (d) the training of teachers. Scholars (e.g., Anastasiou and Keller, 2011; Winzer and Mazurek, 2009) have noted a significant gap between the rhetoric of policy targets (e.g., national strategic plans, CRPD) and the reality of inclusion among developing countries. Anastasiou and Keller (2014) provided empirical evidence that this gap was partly attributed to economic hardships that made many states unable or unwilling to pursue their goals.

Furthermore, there is a great discrepancy between funding of education or other human services and funding of special and inclusive education. Despite the progress in economic growth and HDI including education (e.g., mean years of schooling) and health care over the last two decades (UNDP, 2013), compared to other Sub-Saharan countries, funding in special and inclusive education is discouraging. Between 2004 and 2011, the annual public expenditure on education as percentage of Gross Domestic Product (GDP) fluctuated between 5.2% and 8.1% (6.31% annual average). The same period, government spending on education fluctuated around 25% of the government budget (UIS, 2013). These shares are well above the average in Sub-Sahara Africa, and around the UNESCO target and African Union’s suggestion of 6% of GDP, demonstrating a clear commitment of the government to education (World Bank – AFTEd, 2010); however, very little financial support seemed to go to special and inclusive education. As reported by MoE (2012a,b), for the period 2004–2012 (see Table 7 and Fig. 2), the government allocated (on average) annually about 0.5% (between 0.4 and 0.7) of the budget to the special education sector. This small percentage raises the question as to whether inclusion is of high priority on the educational agenda of the government. To make matters worse, very little financial support (about 8.7 million Ghana cedi or about 4.3 million US\$) comes from outside sources, as of 2011, while donor funds are equal to zero (MoE, 2012a,b).

The funding of special education was volatile (see Table 7) in spite of the fact that the services for and the number of special education population were increasing. MoESS (2008) admitted; “With the budget of the Ministry already being stretched, priority is not given to special education” (p. 60). Table 7 shows that a substantial increase in expenditure on special education services, after controlling for inflation, has occurred only the last few fiscal years (2008, 2010, 2011). The Ministry’s understanding is that

Table 7
Trends in expenditure on special education subsector: 2003–2012.

Year	Nominal amount (in GHe) ^a	Inflation GDP deflator (annual %) ^b	The share of special education subsector as % of the total expenditure in education ^a
2003	1,647,700	28.70%	N/A
2004	2,317,616	14.35%	0.4
2005	2,944,695	14.96%	0.4
2006	3,835,600	80.75%	0.4
2007	3,894,322	16.28%	0.3
2008	10,662,566	20.20%	0.6
2009	7,493,238	16.62%	0.4
2010	17,214,633	16.48%	0.7
2011	19,149,996	12.96%	0.5
2012	21,717,157	15.19%	0.4

^a MoESS (2008) and MoE (2012a,b, 2013).

^b GDP deflator (annual %) refers to “the ratio of GDP in current local currency to GDP in constant local currency.” World Bank (2014), as of November 26, 2014. <http://data.worldbank.org/indicator/NY.GDP.DEFL.KD.ZG/countries>.

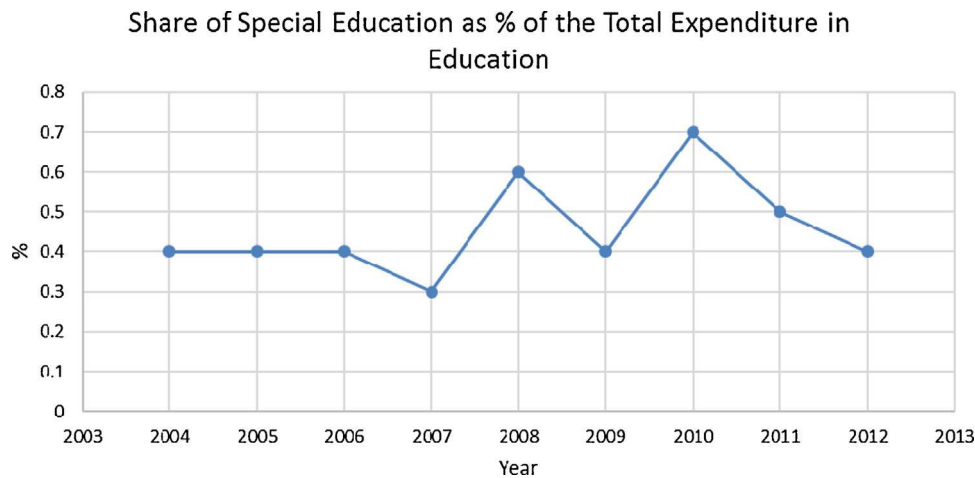


Fig. 2. Growth trends of expenditure in special education in Ghana.

spending the limited resources on general education students is better than spending it on students with disabilities who need intensive individualized services in order to make significant impact. The Special Education Division itself has openly criticized the structure of the budget in regard to the funding priorities of the Ministry (see MoESS, 2008, p. 60). The significant increase in expenditure on special education services over the last few fiscal years may relate to these critical voices, but also to the increased number of students in special and inclusive education.

Lack of funding relates to the lack of sufficient resources (Quist and Ntim, 2004). As a result, large class sizes (around 40 in elementary and junior high schools, around 64 in kindergarten as of 2011/12) hinder the provision of effective education for students with disabilities (MoE, 2012a,b; UIS, 2013). Furthermore, GES (2004) stated that students with disabilities, especially those with physical disabilities, find it difficult to have access to school buildings.

7.3. Cultural barriers

Gadagbui (2010) reported two other barriers: (a) parents of children without disabilities threatened to remove their children from the classrooms when students with disabilities attend regular classroom, and (b) some individuals refuse to associate with students with disabilities because of the belief that disabilities are caused by spirits. Ghana's Ministry of Education (MoESS, 2008) reported that teachers in mainstream schools pay less attention to children with disabilities compared to their peers. Obeng (2007) argued that this attitude is also due to the widespread belief of spirits in some communities (see also, Nukunya, 2003).

8. Conclusions

Disability and educational provision for students with disabilities are absent from the EFA goals that guide several Sub-Saharan countries' education strategic plans, despite being necessary if universal primary education, early childhood education, literacy, and gender equity in education are to be achieved. This kind of international "politics of silence" or "politics of vagueness" does not help developing countries to set clear goals for educating learners with disabilities (Anastasiou and Keller, 2011, 2014).

Ghana's strategic education plan and evaluation reports about inclusion reveal that there is considerable confusion in setting clear and measurable inclusive goals. Specifically, in the ESP 2003–2015 and the following evaluation reports (MoE, 2010, 2012a,b), there is no clear distinction among (a) the increase in access to

general education for students with disabilities, (b) inclusion-like policies helping students to be integrated into general education (e.g., general education teacher's sensitivity to special needs), and (c) clear inclusion policies embracing specific strategies, such as co-teaching, consultation services, and peer-assisted strategies. All these goals are more than desirable but, for monitoring purposes, they should be distinct from each other. The debate on the meaning of inclusion with broader or narrower definitions is an important theoretical issue, but this sometimes does not help developing countries to set and monitor clear and observable goals. Also, the older "integration system" story of Ghana shows that great ideas without specific goals can be easily susceptible to what is called "output distortions" in program evaluation literature; this occurs in situations where performance results are "adjusted" so that they line up with expectations (McDavid et al., 2013). In our view, it is encouraging that the UNICEF (2014) recently recognized the need "to define better goals to guarantee that progress can be measured and monitor progress toward the policies and laws in country" (http://www.unicef.org/media/media_71902.html). This could be an important strategic tool in the post 2015 human development agenda of Sub-Saharan African countries in order to overcome notable imbalances and develop appropriately their special and inclusive education.

Given the scarce resources of the country, the UNESCO and donor organizations could provide further financial and technical assistance to address barriers such as the lack of trained teachers and suitable infrastructure (MoESS, 2008). Otherwise, the human rights and constitutional rights to education will remain on paper for many children with disabilities. Finally, Ghana's case shows that Sub-Saharan countries need sustainable program evaluation projects to monitor the access of student with disabilities to general education, their transition to and participation rate in secondary education, and their transition from school to work.

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