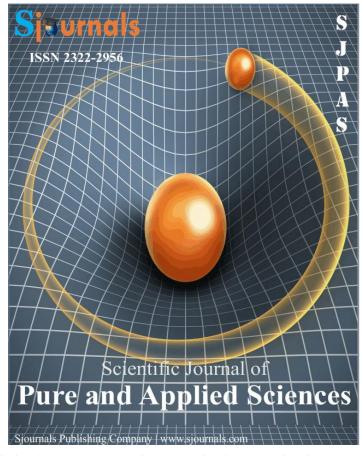
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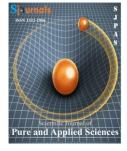
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Review article

The dynamics of the cost and funding of inclusive education in developing countries

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ABSTRACT

This paper sought to analyse the dynamics involved in the cost and funding of inclusive education in developing and/or poor countries. The paper explores the cost-effectiveness of inclusive education by analyzing its measurability and sustainability. The literature that was reviewed reveals that the cost of inclusive education is less expensive and more sustainable than that of the traditional system in which general and special education are programmed and financed separately. The paper concludes that while it was difficult to find literature on the measurement of the cost of inclusive education in developing countries, it can be deduced from literature on middle-income and developing countries that inclusive education can cost up to 41% less than that of the traditional parallel system. However, this can only be achievable if developing and/or poor countries embrace the central principles of inclusion and adopt best practices in these regards. Further research is certainly required on cost-effectiveness of inclusive education and the possibility of coming up with a model for calculating the real opportunity cost of foregoing the traditional more exclusive parallel systems often practiced in developing countries.

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1. Introduction

There is so much controversy surrounding the cost of inclusive education particularly in developing countries. Many educational stakeholders are asking whether it is more cost-effective adopting inclusive education than maintaining the traditional parallel system of education or not. A lot of discourses are still raging on today about this subject. Literature indicates that many people actually think that inclusive education is costlier but this is not true. The thrust of this paper is therefore to establish the valid truth about the real cost of inclusive education and to explore conditions and practices that could promote the cost-effectiveness of including all learners with special needs in mainstream schools in developing and/or poor countries. In this context, the economic measures of the cost of inclusive education are explored and the principles and best practices of inclusion as means for exploiting the cost-effectiveness of inclusion are examined. Conclusions are drawn on the bases of studies that allude to the cost-effectiveness, measurability and sustainability of the cost of inclusion that were mainly conducted in middle income and developed countries. Some of the findings of these studies are transcended to the situation in developing countries owing to the paucity of literature in the latter countries.

2. The cost-effectiveness of inclusive education

As already highlighted in the introduction, the cost effectiveness of inclusive education has been widely debated in literature and among education stakeholders, mainly academics. Literature is however not definite in terms of the real cost but suggestions are that inclusive education is less expensive than the parallel education system. Within this global context, the Salamanca Statement of 1994 and a growing body of research assert that inclusive education is not only cost-efficient, but also cost-effective, and that "equity is the way to excellence" (Pjil and Dyson, 2015). Interestingly, the parallel education system is dominant in all developing or poor countries. However, Mulligan and Gooding (2009) rightfully argue that there are important economic consequences associated with the exclusion or inclusion of people with disabilities. This assertion suggests that one cannot just make a conclusion about the cost of inclusion without making an in-depth synthesis of the dynamic factors involved. Consequently, this paper interrogates the cost effectiveness of inclusive education by comparing against the cost of parallel or exclusive education systems. It should be clear from the outset that creating and implementing inclusive education inevitably requires financial and other resource inputs. Whatever conclusion will ultimately be drawn in this paper as to whether implementing inclusive education is cost-effective or not, there are fundamental costs that cannot be avoided. Open Society Foundation (2015) notes that, after all, inclusive practices were never designed to be cost-cutting measures and therefore governments should be prepared to invest substantial resources at the outset. The resources needed at the outset of inclusive education relate to training and professional development of teachers, infrastructural provision and adaptation, purchase of learning material and assistive equipment as well as curriculum adaptation and accommodation. This could pose obvious challenges of resources in poor or developing countries.

Unlike parallel or exclusive educational practices which have occasional costs, inclusive practices have onceoff major costs. Overtime, therefore inclusive practices become a cost-effective option. Banks and Pollack (2015) note that, failure to make effort toward implementing inclusive education is arguably even costlier than implementing it. Exclusive educational practices generate costs for individuals, families, society and the country at large. Some of these costs include loss of work or employment opportunities, transport expense, boarding fees and homecare services. Additionally, countries lose large sums of money by having to fund general and special education separately. According to TASH (2014) many communities and countries have found that they save money through inclusive models than having to fund transportation, overhead and other non-instructional costs that go with segregative models. These costs have implications for subsequent lifetime earning potential of persons with disabilities, their families, communities and countries at large. Literature is replete with studies showing that there is systematic association between disability and poverty. There is equally broad evidence that persons with disabilities are more likely to live in poverty than their non-disabled counterparts (Banks and Pollack, 2014; WHO and World Bank, 2011). A study reported by Posarac and Vick (2013) proved that in 11 out of 15 developing countries studied, households with a member with a disability lived in poverty. This can partly be due to marginalisation historically emanating from exclusive educational practices. In the long run, failure to implement inclusive education promotes a cycle of poverty making exclusive practices even costlier for particularly developing countries. In effect, exclusion of learners with disabilities from mainstream education ultimately results

in lower employment and earning potential making individuals and families vulnerable to poverty (Banks and Pollack, 2015). This has potential for limiting national growth and the gross domestic product (GDP).

DFDI (2000) confirms that, in the ultimate, exclusive practices often lead to losses in national productivity and human potential. This is because in the absence of inclusive education many persons with disabilities are likely to be denied education and to therefore fail to find employment. This situation pushes them deeper into poverty. The net result is increased government expenditure in form of social security grants. For example, a study in Uganda revealed that per-capita was 14-22% lower yet poverty was 15-44% higher for households with a disabled bread winner and the poverty gap ranged between 20 and 63% (Hoogeveen, 2005). Therefore, Palmer (2011) concludes from these findings that households with a disabled bread winner are not only likely to be poor but the degree of poverty is high. These analyses partly confirm that since inclusive education is aligned to the education for all agenda, adopting it improves the employability of persons with disabilities (Wapling, 2016) and therefore becomes a cost cutting measure in the long term. Perhaps the challenge has been failure to measure the exact cost of inclusive education versus that of parallel or exclusive education systems.

3. Measuring the cost of inclusion

The cost of inclusive education is best viewed as a cost benefit- analysis. TASH (2014) reports that when the benefits of inclusive practices are balanced against the negative effects of segregative or parallel education practices, the cost- benefit ratio clearly favours inclusive practices. While there have been no fiscal analyses showing that inclusive practices are more expensive than the exclusive practices, the actual cost of inclusive practices, if well implemented, is reported to be lower than it is often perceived to be (WHO, 2011; TASH, 2014). According to Open Society Foundation (2015), inclusive practices eliminate redundancy and the high cost associated with parallel exclusive practices resulting in cost-effectiveness and efficient use of funds. However, measuring the cost of inclusive practices has been characterized by methodological challenges. As such, attempts that have been made to quantify the cost of inclusive practices have not been comprehensively reviewed. However, there are studies (World Bank, 2008; Lamichhane, 2013; Liao and Zhao, 2013) that have successfully tried to quantify the cost-benefit of inclusive education over exclusive or parallel systems.

While there is paucity of the studies that have attempted to measure the cost of inclusive education in developing countries, reflecting on studies that have been conducted in middle-income and developed countries give clear indicators of the obtaining situation. In Bangladesh, reductions in wage earnings to lower levels among people with disabilities and their care givers as a result of exclusive educational practices were expected to cost the economy US54 million per annum (World Bank, 2008). According to the study, significant savings of 20% of this figure would have accrued if inclusive education was adopted. Unfortunately, there is paucity of data confirming the cost-effectiveness of inclusive education in developing countries. Similarly, in Nepal, inclusive education was estimated to generate wage returns of 20% per annum (Lamichhane, 2013). In China, it was estimated that each additional year of schooling for people with disabilities as a function of inclusive practices lead to a wage increase of 5% for rural and 8% for urban areas (Liao and Zhao, 2013). In one district of California, results of a study showed that inclusive education costs were an average of 13.5% lower than those of special class placement (Halvorsen et al., 1996). Significant differences were found in areas such as space and personnel costs in which case special class costs were 22.8% and 31% higher respectively. In a latter study conducted in California, Tennessee and Washington by Odom et al. (2002), it emerged that the average instructional costs of inclusive education were 11% less than that of the traditional parallel model. Overall, the cost of inclusive education was found to be 41% less than the traditional more segregative special education. However, there is also the question of how sustainable the cost of inclusion is.

4. Sustainability of the cost of inclusive practices

As earlier stated, the cost of inclusive practices is best viewed as a cost- benefit analysis. Thus adoption of inclusive education is premised on the opportunity cost of foregoing a parallel special education programme and the extent to which funding inclusive education could be sustained. According to Parekh (2013), although implementing inclusive education requires a sustained fiscal commitment, literature points out that, on the whole, it is a less expensive system to maintain. Porter (2001) also earlier argued that, if properly implemented, inclusive practices are less expensive to operate than special education services and therefore more sustainable. Similarly,

despite the fact that the cost of inclusive education is difficult to ascertain, there is a general understanding that inclusive systems cost less and are more sustainable than special education models (Barret, 2014; WHO and World Bank, 2011; Mitchell, 2010; UNESCO, 2009). This however does not entail cutting funding for inclusive practices. Instead, cost savings naturally occur in administration, staffing, management and transport costs (Parekh, 2013). Nevertheless, it is hereby re- emphasised that high quality inclusive practices require committed funding.

The funding of inclusive education appears expensive initially but progressively and ultimately becomes less and less expensive. Thus the cost of funding inclusive education gradually becomes more sustainable than that of segregated exclusive practices which increases with time. Peters (2003) posits that funding inclusive education is not only cost-efficient but cost-effective and therefore highly sustainable. However, efficiency and effectiveness demands clear policies that guide fiscal allocation and expenditure. Beyond policy implementation, developing countries should therefore come up with practical plans that match reality in terms of availability of resources and skills. In these regards, UN (2007) argues that, while inclusion is often misconceived as prohibitively expensive, impractical, and unsustainable and strictly a disability specific issue, using the little available resources and remaining focused on clear goals makes its cost more sustainable than the traditional segregative systems.

UNenable (2013) declares that even in times of fiscal restraint, inclusion is both politically and fiscally more sustainable than exclusive practices. This is because inclusion is intended to benefit all students including those with disabilities. Since inclusive education is a contemporary global practice, its funding can possibly be more easily accepted. In this way, inclusive education in developing countries is more likely to attract foreign funding to ensure sustainability. During economic crises like was experienced in Zimbabwe at the time of writing this paper, policy-makers have to review funding models, without necessarily cutting allocations for inclusive education as earlier highlighted. Fiscally, inclusive education is sustainable because its goal is to achieve optimal pedagogical results for every public dollar invested in education. Consequently, inclusive education is not perceived by taxpayers as an extra expense which cater primarily for special interests in the disability sector (Parekh, 2013). Thus the expense that goes with the implementation of inclusive education can be easily seen as a necessary cost that should be sustained by government. After all, the cost of inclusive education is a small fraction of the amount required to maintain a dual and distinct network of mainstream schools and special schools. This provides evidence to how sustainable the cost of inclusive education could be even for poor and developing economies. However, the sustainability of the cost of inclusive education is also pillared on the best practices in the implementation processes.

5. Best practices that result cost effective inclusive practices

UNESCO (1994), through the Salamanca Statement and Framework for Action on Special Needs Education declares that children with special needs must have access to mainstream schools with an inclusive orientation. These mainstream schools with an inclusive orientation are, according to UNESCO the most effective means of combating discriminatory attitudes, building welcoming and inclusive communities and achieving education for all. This ratification has been reaffirmed through the Incheon Declaration of 2015. It follows that mainstream schools are a cost-effective alternative towards achieving the education for all agenda. But this can only be possible when best practices are in force. Best practices in these regards are meant to result in full inclusion of learners with special needs. It has to be appreciated that best practices that give birth to cost-effective inclusive practices are generally those that are premised on principles of educational equity, clarity of purpose, realistic funding goals and expectations and are motivated towards achievement of education for all. For UNESCO (2005) the global agenda on education for all has in effect changed the approach to the education of children with special needs to firmly advocate for a cost-effective inclusive model that is not discriminatory (even financially) but serves the best interests of all learners.

Best practices in the implementation of inclusive education are necessarily based on fundamental principles that are tied to equality of educational opportunities. According to UNESCO (2017), one of the principles is that all children can learn given age appropriate regular classes, content and learning activities in their locality. Secondly, all children should receive appropriate educational programmes and curriculum relevant to individual needs despite that they have disabilities or not. The third principle is that all children can participate in co-curricular activities of their choice if given the right support while the forth is that all children benefit from cooperation and collaboration among home, school and community. This is however not an exhaustive account of the best practices but these are central to the ideal conceptualization of inclusive education.

In response to these principles of best practices for inclusive education which ultimately result in cost-effectiveness, there are factors or benchmarks that should be taken into consideration. These relate to school environment, philosophy of the school, curriculum reform and collaborative support service provision among others (Sibanda, 2015). These benchmarks for best practice may sound expensive but in the ultimate they are a cost cutting measure. This is because there will be little need for the more expensive parallel education system where special schools have an orthopedagogical role. The special schools will only service those children with severe to profound disabilities who may not be effectively handled in mainstream settings and will save as resource centers for the implementation and practice of inclusive education.

Consequently, for inclusive education to be successful, the school's social environment should be adapted and be such that teachers hold high expectations of children with special needs and provide these children with appropriate learning opportunities that allow for equal participation. The physical environment should also be accessible to all and a positive inclusive climate punctuated by equitable policies, programmes and practices should prevail (Brunswick Department of Education, 1994). An adapted physical environment entails rails for those with visual impairment, sound proof classrooms for those with hearing impairment and ramps and wide doors for those using wheel chairs for example. The initial cost of these developments maybe high but once established the developments will require less funding.

Tied to adaptation of the environment is change in the philosophy of the school. In other words, there should be a complete transformation of the philosophy of the mainstream schools. Fullan (1991) argues that inclusive education should be characterized by valuing of new philosophical beliefs, principles and concrete applications based on change of attitude toward children with disabilities. A new way of thinking consistent with inclusionary practices should be developed in the whole school community starting with the school leadership (Sibanda, 2015). For this inclusionary vision to work, attitudes towards inclusive education should change from negative to positive. Meanwhile, innovative ways of reforming the curriculum to a collective system that accommodates strengths and needs of all learners including those with special needs should be adopted. This entails use of differentiated instruction where specialist and mainstream teachers use creative approaches such as cooperative teaching, consultative teaching, supportive teaching and co-teaching to promote inclusive practices (Villa and Thousand, 2003). In these regards, Individual Educational Plans (IEPs) should be used as the core strategy and tool for teaching. Sibanda (2015) argues that to achieve this, the ordinary school curriculum needs to be transformed to accommodate the diversity of needs of all learners regardless of ability or disability. Sharma et al. (2015) in their summary of the benchmarks for best practice for inclusive education implore that they include sense of community membership; visionary leadership with a passion for inclusivity; changed roles, responsibilities and attitudes; flexibility of environment; research and continuous professional development.

All these efforts should be undertaken in a collaborative fashion. National Center on Educational Restructuring and Inclusion (1995) frames collaboration for inclusive practices as involving planning teams. Conceptually, these planning teams are the multi-disciplinary teams comprising specialist and mainstream teachers, parents, school psychologists, speech therapists, audiologists, social workers, ophthalmologists etc. Collaboration also entails scheduling of periods for specialist and mainstream teachers to work and teach together and to act as problem solvers and frontline researchers. In basic terms collaboration entails working in liaison with parents and all other stakeholders to ensure holistic support for all children including those with special needs.

6. Conclusion

From the aforesaid, this paper concludes that inclusive education is more cost-effective than the parallel system of having mainstream and special education. While it was difficult to find literature on the measurement of the cost of inclusive education in developing countries, it can be deduced from literature on middle-income and developing countries that inclusive education can cost up to 41% less than that of the traditional parallel system. In addition, the cost of inclusive education is more sustainable since savings will automatically accrue through consolidated staffing, resourcing, management and administration. This means that, save for specialist assistive devices, the same staff, resources, administration and management would cater for both the disabled and non-disabled learners. There would be no need for separate budgets, that is, one for general education and the other for special education. Even competition for funding among various educational reforms would be reduced. Inclusive education is only resource intensive at the onset but thereafter significant savings are made through consolidation of expenses. However, the paper further concludes that, for the cost-effectiveness of inclusive

education to be realized, governments and education systems should embrace the central principles of inclusion and adopt the benchmarks for best practices. Further research is required on cost-effectiveness of inclusive education and the possibility of coming up with a model for calculating the real opportunity cost of foregoing the traditional more exclusive parallel systems often practiced in developing countries.

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