

Globalization of Special Education for Economic Productivity and Community Participation in Kenya: Suggestions for Developing Countries

Kiarie, Mary W

Southern Connecticut Ste University

Received 09-12-2023

Revised 10-12-2023

Accepted 21-12-2023

Published 24-12-2023



Copyright : © 2023 The Authors. Published by Publisher. This is an open access article under the CC BY-NC-ND license (<https://creativecommons.org/licenses/by-nc-nd/4.0/>).

Abstract:

Globalization, a process with great potential for facilitating development in diverse aspects of life including education, entails access to ideas, knowledge, and information from worldwide interactions, collaboration, and shared resources. Like the typically developing child, a student with a disability in any country is entitled to and equally deserving of opportunities for learning skills and gaining abilities and competencies towards realizing their potential for a life that is both fulfilling and productive to their community. To this end, educational programs and activities informed by best practices targeting empowerment for the realization of equal opportunity, full participation, economic self-sufficiency, and independent living for such a student, internationally, are ideal. Although special education has come a long way in Kenya, there is evidence that current practice is fragmented with programs utilizing diverse practices. This article advocates globalization of special education in developing countries, that is, the increased use of best practices, ideas, knowledge, and information from other nations to create educational programs that facilitate the production of special education graduates better equipped for productive participation in communities. Using a review of existing literature, the author highlights research-based components of an appropriate education that increases chances for productivity by individuals with disabilities in developing countries and explores potential work and income generating options and opportunities for this population. A concluding statement of commendable government effort towards increasing inclusion of people with disabilities in gainful employment in Kenya is included.

Key words: Globalization in Kenya; special education Kenya, students with disabilities, transition curriculum, transition planning Kenya; life skills, individualized education, inclusion.

Introduction:

Globalization, for most, is a process to aspire to, to work towards. A globalized

organization or business operates internationally and, ideally, its international impact is reflected in its gains (Stromquist, 2002). The wider the scale of

operation the greater the impact and the success of the organization whether the goal be the sale of products, the dissemination of information or a combination of both. Others equate globalization with the planet-wide effect of the diverse environmental, economic, ideological, cultural, and political forces on the world population and the way people experience life in their various contexts (Sua´rez-Orozso, 2004; 2006; Spring, 2014 & Stromquist, 2006). The process of globalization is one of the infusion of world systems, cultures, and organizations with cross-national-borders ideas, perspectives, goods, services resources and practices (Spring, 2014). In this respect, a globalized economic or educational system, for example, evidences the influence or impact of globalization in its practices and material resources. Thus, as defined in this article, globalization describes the interdependence and interaction of the world population in diverse ways occasioned by the exchange of ideas, perspectives, and practices as is evidence in the different cultures and systems.

At the center of the process of globalization is the free interaction of information across national borders through the internet, the telephone, and people, facilitating the international exchange of goods, materials, resources and ideas. Globalization in the special education system in Kenya pertains to its infusion with and receptivity to ideas, goods and services, practices, procedures, perspectives and policies of special education from other nations. Literature on the concept of globalization points out both the negative and the positive consequences of the process (Spring, 2014; Stromquist & Monkman, 2000; Stromquist, 2002 & Sua´rez-Orozso, 2014). Fortunately, from all accounts, the interaction of the Kenya special education system with concepts, practices, perspectives, and procedures pertaining to the field coming from the outside world has positively impacted it, as attested by the continuing quality and quantity of special education services in the country. The continuing impact of globalization in the Kenya special education system is vital if the student with disabilities is to be educated for the

twenty-first century, realize their potential by achieving individually valued academic, social, and functional life outcomes, and be prepared for the adult world of work by developing the necessary skills, abilities, competencies, knowledge, and understanding. Participating in the globalization of the system by giving, receiving, and implementing valued perspectives and procedures in its practice of special education is vital if the student with disabilities in Kenya is to make meaningful progress toward achieving the overarching outcomes of equal opportunity, full participation, economic self-sufficiency, and independent living. By being globalized, that is, participating in the giving and receiving of the goods and services, resources and materials and the infusion of ideas, practices, procedures, and perspectives towards the same goals for the special education process across national borders, the Kenyan special education system continually builds its capacity to fulfil its goals of effectively educating the student with disabilities. From this perspective then globalization empowers, strengthens, and builds the special education system in Kenya for effective service. This article makes the case for one aspect of globalization in the special education field, educating the student with disabilities for productive participation in their communities.

The why of Education for the Student with a Disability:

The many activities for creating awareness of the benefits of education the world over, the increasing enrolment into schools of children and youth, and the emphasis of education in children’s rights documents (GOK, 2001) all attest to the importance accorded formal education. It is in formal educational institutions that the conceptual, adaptive, and practical skills with major implications for individual and national development, are learned (Venkatraja & Indira, 2011; Turkkahraman, 2012; Idris et al., 2012, & Zolfghari, 2015). An appropriate elementary education, for instance, inculcates the basic reading, writing, and mathematical skills that facilitate the application of all other acquired

knowledge and abilities in everyday tasks, avails opportunities for the development of future workplace skills, general interaction, collaboration, social, and adaptive behavior skills and prepares students for the future as productive members of their communities. Formal education opportunities initiate the process of acquisition of necessary skills for the workforce (Patrinós, 2016) and allow for the development of strength and resilience as students participate in the different relationships and activities.

Education for students with disabilities serves no less a purpose. Basic literacy and numeracy skills, creativity, innovation, collaboration, and productivity, along with the character skills of persistence and resilience are vital for students with disabilities if they are to exercise and benefit from their rights as full participants in their communities, be as economically self-sufficient as possible given each one's circumstances, live as independently as they prefer and are capable of, and have equal opportunities for work as those without disabilities (Vrasmas, 2014). However, unlike the typically developing population, education for students with disabilities requires much more. Knowledge, skills, insights, and expertise from a multiplicity of areas including general and special education teachers, related services providers, parents and communities, special education advocates, parent and professional organizations, the government, and other stakeholders, are necessary in a coordinated collaborative effort if special education is to yield productive community participation. Effective and appropriate education for students with disabilities in developing countries needs to be guided by individualized curricular that is collaboratively developed by multidisciplinary professionals, parents, teachers, and where possible, the student themselves. Minimal semblances of these components exist in programming for students with disabilities in developing countries.

Method:

A search from the databases JSTOR, google Scholar, PsycInfo, EBSCO, ABI/Inform Global, and Academic Search Premier was made to identify relevant studies for inclusion in this article. Search terms used were “special education and productivity”, “special education and economic productivity”, “special education and economic participation”, “special education and transition”, “special education, transition, and inclusion,” and “special education students and effective individualized education program.” Relevant information was drawn from both review articles and data-based studies. The 23 studies reviewed for this article were those from 2000 to 2018. Components identified in the literature as necessary for a special education program with the greatest potential for productive economic participation in communities by students with disabilities are discussed below.

Specialized curricular plans:

Briefly, a specialized educational curricular plan seeks to provide an education that is appropriate, tailored, and planned to meet the needs of a student with a disability. Such a plan takes into consideration a student's present levels of functioning in all areas of academic and functional skills performance, designs annual academic and functional goals for the student, identifies how progress toward the goals is to be measured and the special education, related services, supplementary aids, and supports necessary (Carpenter, 2012; Thomas & Wehnam, 2010). After determining the student's present level of performance, such curricular targets the next skills for learning and the methods and necessary programming required. To enable participation with peers and engagement with the general education curriculum, such a program considers, identifies, and documents the extent to which a student with a disability will participate with students who do not have disabilities in the general education classroom, extra-curricular and other non-academic activities, and the aids and supports needed. The written document, called the Individualized Educational Program, containing a student's appropriate educational plan and created by a team of

professionals with input from the students' parents, and the students themselves in some cases, is rarely utilized in developing countries (Kiarie, 2014). The resulting education provided to the student may not target their functional, academic, social, and other needs (Thomas & Wehman, 2010).

Parent Participation and Input:

Parents, barely included in programming for students with disabilities in developing countries, are the first teachers to their children hence an integral part of a specialized education curricular team (Ping He et al., 2017; Semba de Pee et al., 2008; Huq & Tasnim, 2008). Parents of children and youth with disabilities have their own goals, expectations for, insights and knowledge about their child's interests, abilities, strengths, and effective learning modalities that are vital for an appropriate customized education program with the aim for productive participation in their communities. Parents are also aware of and sometimes connected to community resources vital in educational programming for their children. It is futile to claim a genuine attempt to provide a relevant and appropriate education, for eventual productive participation in their communities, to a child with a disability without adequate participation of the parent as an equal partner both on record and in practice (Noe et al., 2011; Lo, 2012).

Inclusive Learning Activities in Classrooms:

Effort towards productive participation in their communities begins early for students with disabilities. Cooperative learning activities in inclusive settings avail ample opportunities for developing resilience and co-existence and learning both the academic and the many vital social interaction skills in practical, realistic, functional, and effective ways (Ozlem & Savaga, 2013; Eynat et al., 2010; Sakiz & Woods, 2015; Vas, et al., 2015 & Evins, 2015). While inclusion facilitates the development of skills for productive participation in their communities, ineffective or quasi-inclusion limits the opportunities for students with disabilities to develop and acquire skills and knowledge that would contribute to their becoming

productive participative members of their communities. Inclusive education is an opportunity for students with disabilities to both learn academic and other skills, familiarize themselves with and learn to work alongside those without disabilities, and develop resilience, a positive self-concept, and self-advocacy, skills that will stand them in good stead in productive participation in their communities (Vas, et al., 2015; Eynat, et. al., 2015). Currently, effective inclusive education in developing countries is limited by the same obstacles to special education in general in addition to barriers to physical access, the beliefs and attitudes of the majority stakeholders and community members, the value placed on the education of students with disabilities given the perceived poor return on investment in this venture, limited awareness of the potential of individuals with disabilities by the policy makers that comes from limited exposure in this area. These barriers are compounded by the limited resources to support education of students with disabilities due to financial constraints experienced in many sectors. This interferes with the willingness of countries to expend the necessary resources in this venture.

Utilizing Assistive Technology:

The importance of assistive technology devices and services for students with disabilities towards productive participation in their communities cannot be overstated. Defined as items, pieces of equipment, purchased or made in other ways, or software that are used to maintain and increase or improve the capabilities of individuals with disabilities to perform tasks, assistive technology, where necessary, is vital for the progress of the student with disabilities. Literature is replete with the many benefits of assistive technology for individuals with disabilities (e.g., McCleskey et al., 2012; Adebisi & Longpole, 2015; Berry & Ignash, 2003; Borg et al. 2009; Cosbey & Johnston, 2006; Gardner, 2008; Gronlund et al. 2010; Mechling, 2007; Mechling & O'Brien, 2010). A customized program of

education for a student with a disability that is geared towards productivity and community participation must include a determination of the type (s), if any, and the extent to which, assistive technology is required for the student with disabilities to maximize their opportunity for participation in education and community. Such a program must also include environmental modifications, if necessary, and consideration of ecological factors. Assistive technology devices enhance learning, mobility, communication, hearing and processing, visual capabilities, and performance of self-care tasks (Adebisi & Longpole, 2015; Berry & Ignash, 2003; Borg et al., 2009; Cosbey & Johnston, 2006; Gardner, 2008; Gronlund, et al., 2010; Mechling, 2007; Mechling & O'Brien, 2010). This technology enables students with disabilities to participate in the general education curriculum environment and in their communities (Gardner, 2008). Environmental modifications and manipulation of ecological factors in and around the classroom and in the community, usually lacking in inclusive settings in developing countries, increase classroom and community access and participation (Cosbey & Johnston, 2006). In this way, assistive technology devices increase confidence, competence and independence, all necessary characteristics on the journey of students with disabilities towards becoming productive participating members of their societies (Westling et al. 2015). Resources, material, human, and financial need to be expended towards local production and purchase of these devices for students who need them for the realization of their potential towards productive participation in their communities. Although the little research that exists in the area of assistive technology for students with disabilities in developing countries clearly shows its profound effectiveness (e.g., Adebisi, Liman, & Longpole, 2015; Andoh, 2012; Bisi, 2013; Nyagah, Wachiuri, & Imonje, 2017; Gronlund, Lim, & Larsson, 2010; Koweru, Omoke, & Orodho, 2015; Ng'etich, 2017; Oira, 2016), much is needed in this area (Borg, Lindstrom, & Larsson, 2009; Mwaijande, 2014). Koweru et al.,

(2015), for example, in his study, noted that many students who needed devices did not have it. In its own assessment of its capacity in the area of assistive technology devices for students with disabilities at the time of enacting the Kenya Special Needs Education policy framework, the country's Ministry of Education (MoE, 2009) noted that meeting the goal of provision of primary education for all students with disabilities is hindered by the high cost of special equipment and the lack of qualified personnel in the area of assistive technology (MoE, 2009). Work in this area in Kenya as in many other developing countries, is needed if students with disabilities are going to be well equipped for economically productive lives.

Funding Special Education:

The importance of financial resources in the field of special education as a key element in education for productive community participation in developing countries is vital (Kajilwa, 2016; Westling et al. 2015). Adequate financial resources have the potential to improve service delivery, put more related services providers into the field, and enable more children and youth with disabilities to receive necessary services and have a better quality of educational and other services (Collins, 2007). Funding for education that is geared towards productive community participation brings up concerns for "return on investment" for both stakeholders and policymakers. Students with mild disabilities can meet the expectations of the general education system and have a better shot at a better quality of life with greater chances for productive community participation, given supports and services. Students with more significant disabilities will still make progress in learning skills that are critical to their situations and contribute towards becoming more independent and not needing as much care from caregivers as they would without necessary interventions and services (Collins, 2007; Westling et al., 2015). Additionally, when students with more significant disabilities are able to perform some self-care and other skills on their own, they save others on time and resources by not requiring

as much care as they would if they did not have interventions for independence. These students free up their care givers for other tasks that contribute to the community (Browder & Spooner, 2011; Collins, 2007; Westling et al. 2015). The fact that inadequate funding for special education and related services is a concern even in developing countries (e.g., Blad, 2020) highlights the critical need in this area.

Life Skills, Transition Planning, and the Transition Curriculum:

It is at the middle and high school level and according to each student's circumstances, that what are termed "the transition curriculum" and "the transition process and planning" are implemented. Defined as a coordinated set of preparatory activities based on a student's individual needs, interests and preferences, that promote successful movement from school to such post-school activities as post-secondary education, vocational training, employment, adult services, independent living, and community participation, transition services target productive functioning out in the community where individuals live. Productive, participative adult lives of students with disabilities cannot be anticipated without instruction in life skills, customized transition planning, and a transition curriculum that incorporates self-determination to the extent appropriate (Al-Zboon & Smadi, 2014; Sheppard & Unsworth, 2014). Transition planning activities are carried out in anticipation of a student's eventual completion of formal schooling (Sweeden et al. 2010; Shogren & Plottner, 2012; Carter et al., 2014; Modell & Valdez, 2010; Certo & Lueking, 2010). Such programs include an explicit plan for a student's life after school that includes their vocational and employment skills training and placement, residential options and necessities, leisure activity options, any income and medical support necessary, transportation needs, long term support and care as an adult (Agran et al., 2000), postsecondary education options, counselling on self-advocacy, and self-management in a home and with regard to money (Wehman, 2012).

Life skills instruction equips students with relevant skills in line with their circumstances, culture, beliefs, and geographic location to facilitate productivity, full participation in everyday life, and a good quality of life (Bouck, 2010). A focus on instruction in skills for knowing how to be safe, take care of basic personal hygiene, interact with others, and cook meals, among others, is crucial if students with disabilities are to become productive fully participating members of their communities. Life skills instruction, crucial for older students, can begin as early as possible (Agran et al., 2000). Life skills training programs must be as diverse as the countries and communities in which they occur and be as culturally sensitive to the local norms, customs, beliefs, and practices, as possible to be relevant to the target populations.

The Transition Plan and Process:

Transition programming creates a functional curriculum and activities that support and facilitate the development of skills for proficient functioning in the various facets of adult living for life outside of school for the student with disabilities (Evans & Fredericks, 1991; Henderson & Slattery, 2011). Assessment for transition planning along with the development of goals and objectives for a middle through high school student is conducted while the student is still in school and has as its focus the development of independent living, vocational, social, and communication skills. Although research indicates that most persons with disabilities live with their parents or other family members (Newman et al., 2009), transition planning considers a student's ideal adult residential option and necessary skills. Skills for contribution to the family life such as assistance with meal preparation, home environment maintenance, laundry, and self-care skills are prime candidates for inclusion in a transition curriculum of a student with disabilities. Money skills and skills for communicating ones needs, at the very least, and socially interacting with others in appropriate ways, are just as important for students with disabilities as they are for those without. Such skills can be taught through modelling and role

plays. It is the practice in African cultures as it is in Native American ones, for individuals with disabilities to be completely integrated in their families and communities alongside their typically developing peers. Such individuals are viewed as people functioning at their particular levels of abilities, useful members of their communities, not as people who have disabilities (Gargiulo & Bouck, 2021). Adult life planning for these students would have to take these factors into consideration.

Some aspects of adult life planning in some cultures such as the African and Native American cultures in developing countries may come easier especially in the rural and sub-urban areas, to the student with disabilities. These include social connections, residential living, and employment. The nature of life in these communities yields such supports to its members.

Job Site Training:

On-site job training and apprenticeships for the development of both general work skills and skills for specific jobs are a necessary component in a transition curriculum for students with disabilities in developing countries (Lombardi, Izzo, & Rifembark, 2016; Wehmeyer & Palmer, 2003). Attaching more self-employment and job skills-training programs to existing special education schools contributes to preparing more students for productivity as adults. The existence of a few programs for youth with disabilities in Kenya where they learn skills for carpentry, tailoring, knitting, and gardening (Ng'ang'a, 2013; Kenyan Bureau of Statistics, 2009) is a testament that the country is moving in the right direction with regard to skills training for youth with disabilities. The need to pump up these very few potentially income-producing programs where youth with disabilities can acquire necessary work-related skills before they complete school cannot be overstated. This way, youth with disabilities can speed up development of job skills and increase their chances for becoming participating contributing members of their communities. This component may not be a challenge in mainly agricultural communities in developing countries

since individuals with disabilities are easily absorbed in the labor force, each working according to their abilities in the joint economic activities that might be mainly the family farm. Such individuals participate each according to their abilities, in the tasks of sowing (planting), weeding, harvesting, storing, herding, among others, that are prevalent in rural and sub-urban areas.

Vocational Rehabilitation:

Vocational rehabilitation programs increase the economic productivity of individuals with disabilities (Ayodo, 1997; Sereta et al., 2016). Hence, improving the effectiveness and efficiency of vocational rehabilitation services is key to disability education for productive community participation (Sereta et al., 2016). Kenya's Vocational Rehabilitation Division of the National Rehabilitation Program, for example, runs a number of centers in rural areas along with the Nairobi Industrial Center where persons with disabilities are taught metal work, leather work, tailoring, printing, agriculture, jewelry, textile manufacture, traditional crafts, studies in commerce, carpentry, telephone operations, and computer skills (Collins, 2017). This program lacks follow-up and monitoring of students' performance after graduation from the courses, lacks practical support for graduates to ensure their productivity, and caters mainly to individuals injured at work. Additionally, in spite of the regulation that individuals with disabilities ages 16-45 are eligible for these services, most of the centers cater to people who sustain disability as adults rather than young adults with disabilities in or graduating from school. More links are necessary between vocational rehabilitation centers and services geared towards productive work options for individuals with disabilities and special education schools and institutions in developing countries (Muthomi, 2016). Such links ensure transition programming with an eye to the labor market to better prepare and equip students for the work force and productive participation in their communities (Oyoo, 2017). In some cases, formal rehabilitation programs may not be necessary given the type of economic activities targeted.

Work Options and Implications for Developing Countries:

With adequate support and instruction, people with disabilities can function successfully in integrated vocational settings (Brown et al., 2006; Carter et al., 2012; Callahan et al., 2011) in their respective countries both developed and developing ones. Other than economic productivity through self-employment and apprenticeships common in developing countries, the continuum of work options for individuals with disabilities ranges from most to least restrictive.

Supported Employment:

Under integrated or competitive employment, a person with a disability utilizes all assistive devices, services, and accommodation necessary to be in the workforce under much the same conditions as any other employee. Under supported employment, such a person may receive assistance in job location, benefit from minor adjustments to routines or equipment, be trained by a supporting agency in advance, and possibly have a process in place for monitoring their progress and satisfaction. Their work conditions may or may not be the same as those of other employees in terms of job description, wages or salary, and work hours. Supported employment for individuals with disabilities can take the forms of person-centered approaches, job coaches, job crews, and job enclaves (Siporin & Lysack, 2004). Job crews and enclaves for people with disabilities are small groups of individuals, usually 2-4, at a work site for a competitive employer under his supervision or a designee of the same. A job enclave of a competitive employer can, for instance, engage in lawn care activities, assembly tasks, and janitorial duties. A job coach can support a person with a disability to obtain and maintain employment while a person-centered approach to employment seeks to maximize on the strengths of a job seeker with a disability (Siporin & Lysack, 2004). A person with a disability hired through a person-centered approach might have job roles, tasks, and activities that are designed specifically to fit his/her capabilities and not like those of other workers.

Depending on the terms of agreement and other factors, a supported employee's wages or salary might be vastly different from those of their counterparts without disabilities (Wehman, 2011).

Sheltered Workshops:

Sheltered workshops provide work options for people who might never, because of their diagnosis, disability, or other factor, be ready for a job in the larger community (Migliore et al. 2007; Dlouhy & Mitchell, 2015; Sommerstein, 2015). Operating as a business in order to provide work for clients, sheltered workshops engage in contracting, prime manufacturing, and salvage and reclamation business deals. Contracts with businesses through contractors or contract procurement persons might involve assembling, packaging, and mailing a company's products as tasks for the employees. While prime manufacturing involves designing, producing and marketing products through reclamation and salvage, a workshop purchases or collects salvageable material, performs the salvage or reclamation operation, and then sells the reclaimed products. Depending on the needs of the individuals, sheltered workshops can focus on prerequisite work and work-related skills necessary for competitive employment, provide evaluation and training for community-based employment or provide long-term employment for people with disabilities. For those under training, some type of payment may be provided while for long term employees, payment is provided though way below minimum wage requirement and dependent on how fast one works or how many pieces one completes, hence the term "piece-work" (Cimera, 2011; Migliore, 2007).

Day Activity Centers:

Day activity centers are least inclusive, least economically productive, and can be utilized by individuals newly injured in a job and need rest or those with complex multiple disabilities and/or severe intellectual disabilities that require a high level of intrusive and intensive around the clock supervision that preclude them from performing productive tasks (Putten & Vlaskamp, 2011; Rusch

& Braddock, 2004). Other candidates for this program are individuals with disabilities and their families who may not see employment as a realistic goal (Reid & Parsons, 2016). These programs are segregated programs for individuals with disabilities where participants report in the morning and engage in some work-related, learning, or fun activities. Some activity centers focus on helping people with a disability to lead a fulfilled and enjoyable life and providing some relief to parents or care givers who have responsibility for fulltime care of their relatives. With this focus, these government or government-sponsored organizations provide fun activities such as arts and crafts, and sports (Parsons & Reid, 2016). Other programs focus on teaching many skills such as nutrition, health, and cooking, development of social and personal care skills, community access skills, literacy and numeracy skills, communication skills, prevocational, vocational, and income generating skills. Although day activity centers are not necessarily work-oriented, these programs help individuals with disabilities to develop various kinds of skills that increase their levels of independence and improve their quality of life (Parsons & Rollyson, 2004; Reid et al., 2001). Personal independence in any area can contribute to communities by decreasing the intensity and level of support these individuals require from others. The many benefits associated with day activity programs such as improved confidence, improved self-esteem, and improved social interaction skills, outweigh the alleged isolation of individuals in these programs as claimed by some professionals (e.g., Brown et al., 2006).

Motivators for Employers of People with Disabilities:

Tax rebates, incentives, and other practices are in place to promote employment of people with disabilities in some developed countries (Hamersma, 2003, 2008; Blundell & Meghir, 2001; U.S General Accounting Office, 2001; U.S. General Accounting Office, 2002). In the United States, for example, government incentives for hiring individuals with disabilities include state tax

credit programs, special employer incentives, on the job training, and Work Opportunity Tax Credit (WOTC) extension for hiring veterans with disabilities, and Disabled Access Credit (DAC) for both architectural and transportation barrier removal and support for modifications and accommodations on behalf of employees with disabilities (Blundell & Meghir, 2001). These are aimed at encouraging the hiring of individuals with disabilities and supporting modifications and accommodations designed to enhance the accessibility of the workplace and productivity of workers with disabilities (Hamersma, 2003, 2008; Blundell & Meghir, 2001; U.S General Accounting Office, 2001; U.S General Accounting Office, 2002).

Kenya government's effort towards incentives for employment of people with disabilities which include exemption from tax on funds from their jobs, exemption from import duty, and exemption from value added tax (VAT) on imports and materials for the needs of those with disabilities (RoK, 2010) are commendable. Additionally, the government's requirement that at least 5% of jobs in the private and public sectors be reserved for people with disabilities, that employers of individuals with disabilities be allowed a deductible of up to 25 % from their total taxable amount, and her stipulation that employer facility modifications for the benefit of employees with disabilities qualify for tax deductibles that are equal to fifty percent (50%) of the incurred costs, all support people with disabilities. Other benefits for the economic productivity of those with disabilities include grants for self-development and priority consideration to government tenders. Though minimal, sometimes underused due to lack of awareness of their existence, and only reaching a minority of the work-eligible sector of persons with disabilities, the existence of these programs shows the effort of the government to enhance the participation and productivity of persons with disabilities in their communities (RoK, 2010). Despite the high levels of unemployment in developing countries (Omolo, 2013; Hope, 2012; Mugo et al., 2010) which leave little motivation for

developing the productive capacity and potential of those with disabilities, some level of empowerment for this population is evident in the government policies and legislation in developing countries. Both Kenya's Persons with Disabilities Act (2003) and the country's constitution (2010) forbid discrimination of persons with disabilities in the hiring practices which increases their chances for productive participation in their communities. Opportunities for the economic productivity by way of self-employment and apprenticeships, supported or unsupported employment, sheltered workshops, and day activity centers for people with disabilities in developing countries demonstrate a nations value for her most vulnerable population.

Conclusion:

Globalizing special education by incorporating the many practices, procedures, and concepts such as the individualized educational plan for a student with a disability is as critical as providing the necessary personnel and assistive technology services and programs for the end goal of economic productivity and productive participation in their communities as adults. Life skills, vocational skills, self-employment, and job skills with an eye on the labor market, are an integral part of such a program. These facilitate productive economic participation via family-business involvement, self-employment, competitive employment, supported employment, sheltered workshops or the self-development work activity centers. The extent of one's involvement depends on the circumstances of each individual and the nature and severity of their disability. It also depends on the governments' belief in the right and potential of individuals with disabilities to participate productively in their communities and their capacity and her willingness to invest in services for this population.

References:

1. Adebisi, O.R., Liman, A.N., & Longpole, K.P. (2015). Using assistive technology in teaching children with learning disabilities in the 21st century. *Journal of Education and Practice*, 6(24), 14-20.

2. Agran, M., Blanchard, C., & Wehmeyer, M.L. (2000). Promoting transition goals and self-determination through student self-directed learning: The self-directed learning model of instruction. *Education and Training in Mental Retardation and Developmental Disabilities*, 35 (4), 351-364.
3. Al-Zboon, E., & Smadi, J. (2015). Self-determination of women with disabilities. *European Journal of Special Needs Education*, 30(3), 412-421.
4. Ayodo, T.M. (1990). *The Vocational Rehabilitation program in Kenya: An examination of its effectiveness as an agency providing training and employment for disabled persons*. A thesis submitted in fulfillment of the requirement for the degree of Doctor of Philosophy in the department of educational administration, planning, and curriculum development in the faculty of education at Kenyatta University.
5. Berry, B., & Ignash, S. (2003). Assistive technology: Providing independence for individuals with disabilities. *Rehabilitative Nursing*, 28(1), 6-14.
6. Blad, E. (2020). Why the feds still fall short on Special Education funding. *Educationweek*.
7. Blundell, R., & Meghir, C. (2001). Active labor market policy vs. employment tax credits: Lessons from recent UK reforms. *Swedish Economic Policy Review*, 8, 239-266.
8. Borg, J., Lindstrom, A., & Larsson, S. (2009). Assistive technology in developing countries: National and international responsibilities to implement the convention on the rights of persons with disabilities. *Lancet*, 374(28), 1863-1865.
9. Bouck, E.C. (2010). Reports of life skills training for students with intellectual disabilities in and out of school. *Journal of Intellectual Disabilities*, 54, (12), 1093-1103.

10. Brown, L., Shiraga, B., & Kessler, K. (2006). The quest for ordinary lives: The integrated post school functioning of 50 workers with significant disabilities. *Research and Practice for Persons with Severe Disabilities, 31*(2), 93-121.
11. Browder, D.M., & Spooner, F. (2011). *Teaching students with moderate and severe disabilities*. The Guilford Press.
12. Callahan, M., Griffin, C., & Hammis, D. (2011). Twenty years of employment for persons with significant disabilities: A retrospective. *Journal of Vocational Rehabilitation, 35*, 163-172.
13. Carpenter, B. (2012). Curriculum and achievement planning for transition. *International Journal of Adolescence and Youth, 6* (3), 261-271.
14. Carter, E.W., Austin, D., & Trainor, A.A. (2012). Predictors of postschool employment outcomes for young adults with severe disabilities. *Journal of Disability Policy Studies, 23*, 50-63.
15. Carter, E.W., Brock, M.E., & Trainor, A.A. (2014). Transition assessment and planning for youth with severe intellectual and developmental disabilities. *The Journal of Special Education, 47*, 245-255.
16. Certo, N.J., & Luekling, R.G.(2010). Transition and employment: reflections from a 40 year perspective. *Journal of Vocational Rehabilitation, 37*, 157-161
17. Cimera, R.E. (2012). The economics of supported employment: What new data tells us. *Journal of Vocational Rehabilitation, 37*, 109-117.
18. Charlton, J. (2000). *Nothing about us without us: Disability oppression and empowerment*. University of California Press.
19. Collins, B. (2007). *Moderate and severe disabilities: A foundational approach*. Pearson
20. Cosby, J.E., & Johnston, S. (2006). Using a single-switch voice output communication aid to increase social access for children with severe disabilities in inclusive classrooms. *Research and Practice for Persons with Severe Disabilities, 31*, 144-156.
21. Dlouhy, S., & Mitchell, P. (2015). *Upcycling sheltered workshops: A revolutionary approach to transforming workshops into creative spaces*. Swallow Press.
22. Evans, V & Fredericks, B. (1991). Functional curriculum. *Journal of Developmental and Physical Disabilities, 3*(4), 409-416.
23. Evins, A.E. (2015). *The effects of classrooms on students with and without developmental disabilities: Teachers' perspectives on the social, emotional, and behavioral development of all students in inclusion classrooms*. Doctoral papers and Masters projects. University of Denver. Retrieved from https://digitalcommons.du.edu/cgi/viewcontent.cgi?article=1030&context=capstone_masters
24. Eynat, G., Schreur, N., & Batya, E. (2010). Inclusion of children with disabilities Teachers' attitudes and requirements for environmental accommodations. *International Journal of Special Education, 25*, 2, 89-99.
25. Foreman, P. (2009). *Education of students with an intellectual disability: Research and practice*. Information age publishing Inc.
26. Foley, A.R., & Masingila, J.O. (2015). The use of mobile devices as assistive technology in resource limited environments: Access for learners with visual impairments in Kenya. *Disability and Rehabilitation Assistive Technology, 10*(4), 1-8.
27. Gardner, T.J. (2008). Speech Recognition for Students with Disabilities in Writing. *Physical Disabilities: Education and Related Services, 26*(2), 43-53.

28. Gargiulo, R.M., & Bouck, E.C. (2021). *Special education in contemporary society (7th edition). An introduction to exceptionality*. SAGE Publishing.
29. Government of Kenya (GoK) (2001). Children's Act. Government printer.
30. Gronlund, A., Lim, N., & Larsson, H. (2010). Effective use of assistive technologies for inclusive education in developing countries: Issues and challenges from two case studies. *International Journal of Education and Development Using Information and Communication*, 6 (4), 5-26.
31. Hamersma, S. (2008). The effects of an employer subsidy on employment outcomes: a study of the work opportunity and Welfare-to-work Tax credits. *Journal of Policy Analysis and management*, 27(3), 498-520.
32. Hamersma, S. (2003). The work opportunity and welfare-to-work tax credits: Participation rates among eligible workers. *National Tax Journal*, 56, 725-738.
33. Henderson, G., & slattery, P. (2011). Curriculum in a time of transition. *Journal of Curriculum and Pedagogy*, 6 (2), 1-5.
34. Hope, R. K. (2012). Engaging the youth in Kenya: Empowerment, education, and employment. *International Journal of Adolescence and Youth*, 17(4), 221-236.
35. Huq M.N., & Tasnim T. (2008). Maternal Education and Child Healthcare in Bangladesh. *Maternal & Child Health Journal*, 12(1):43-51.
36. Idris, F., Hassan, Z., Ya'acob, A., Gill, S. K., Awol-Mohdi. N.A. (2012). The role of education in shaping youth's national identity. *Procedia-Social and Behavioral Sciences*, 59, 443-450.
37. International Labor Organization (2004). Employment of people with disabilities: Kenya country profile. Retrieved from http://www.ilo.org/wcmsp5/groups/public/---ed_emp/---ifp_skills/documents/publication/wcms_107837.pdf
38. Kajilwa, G. (2016). Kenya to spend shillings 900 million on special education. *The Standard*, August 29, 2016, p.5.
39. Kenya Bureau of statistics (2009). *Disability employment*. Government printer.
40. Kiarie, M. W. (2014). Educating students with physical disabilities in Kenya: Progress and Promises. *International Journal of Educational Studies*, 1 (2), 7-10.
41. Lo, I. (2012). Demystifying the IEP process for diverse parents of parents with disabilities. *Teaching Exceptional Parents*, 44(3), 14-20.
42. Lombardi, R.A., Izzo, M.V., & Rifenbark, G.G. (2016). The impact of an online transition curriculum on secondary student reading. *Career Development and Transition for Exceptional Individuals*, 40 (1), 15-24.
43. Male, A. (2002). *Technology for inclusion: Meeting the needs of all students* (5th ed): Pearson
44. McLesky, J., Rosenberg, M.S., & Westling, D. L (2012). *Inclusion: Effective practices for all students* (2nd ed.). Pearson.
45. Mechling, L. G. (2007). Assistive technology as a self-management tool for prompting students with intellectual disabilities to initiate and complete daily tasks: A literature review. *Education and Training in Developmental Disabilities*, 42, 252-269.
46. Mechling, L G., & O'Brien, E. (2010). Computer-based video instruction to teach students with intellectual disabilities to use public bus transportation. *Education and Training in Autism and Developmental Disabilities*, 45, 230-241.
47. Migliore, A. (2007). *Sheltered workshops and individual employment: Perspectives of consumers, families, and staff members*. VDM Verlag Dr. Muller.

48. Migliore, A., Mank, D., Grossi, T., Rogan, P. (2007). Integrated employment or sheltered workshops: Preferences of adults with intellectual disabilities, their families, and staff. *Journal of Vocational Rehabilitation*, 26(1), 5-19.
49. Modell, S.J. & Valdez, L.A. (2002). Beyond bowling: Transition planning for students with disabilities. *Teaching Exceptional Children* 34(6), 46-52.
50. Monk, J., & Wee, J. (2008). Factors shaping attitudes towards physical disability and availability of rehabilitative support systems for disabled persons in rural Kenya. *Asian Pacific Disability Rehabilitation Journal*, 19(1), 93-113.
51. Mugo, J.K., Oranga, J., & Singal, N. (2010). *Testing youth transitions in Kenya: Are young people with disabilities falling through the cracks? Working Paper No.34*. Department for international development of the Research Consortium on Educational Outcomes and Poverty, University of Cambridge.
52. Muthoni, R.J. (2016). Analysis of predictors of behavior change among children at risk in juvenile rehabilitation centers in Nairobi county, Kenya. *Journal of Education and Practice*, 7(30), 96-103.
53. Newman, I., Wagner, M., Cameto, R., & Knokey, A. (2011). *The post-high school outcomes of youth with disabilities upto 4 years after high school: A report of findings from the National Longitudinal Transition Study-2(NLST-2)*. Menlo Park, CA: SRI international.
54. Noe, M., McCaffery, M., Meager, R., Kinney, T., Pribbe, S. (2011). *IEP workshop building teacher-parent partnerships*. Attainment Company, Inc.
55. Omolo, J. (2013). Employment challenges in Kenya. *African Journal of Economic Review*, 1(1), 18-32.
56. Opuku, M.P., Mprah, W.K., Dogbe, J.A., Moitui, J.N. & Badu, E. (2016). Access to employment in Kenya: The voices of persons with disabilities. *International Journal of Disability and Human Development*, 16 (1), 1-10.
57. Orly, H. (2015). *Parental involvement in the IEP for Israeli students with disabilities*. Lamp Lambert publishing.
58. Oyoo, C.O. (2017). *Factors affecting provision of vocational rehabilitation and job placement services for learners with intellectual disabilities in Nyanza region, Kenya*. MA thesis presented in partial fulfillment of the degree, Master of Science at Maseno University.
59. Ozturk, I. (2001). The role of education in economic development: A theoretical perspective. *Journal of Rural Development and Administration*, 33. (1), 39-47.
60. Patrinos, H.A. (2016). *Why education matters for economic development. Education for global development*. A blog about the power of investing in people. The world bank.
61. Parsons, M., & Rollyson, J.H. (2004). Improving day-treatment centers for adults with severe disabilities: A norm-referenced application of outcome management. *Journal of Applied Behavior Analysis*, 37(3), 365-377.
62. Powers, T. (2008). *Recognizing ability: The skills and productivity of persons with disability. Literature review*. Working paper number 3: International Labor Organization.
63. Persons with Disabilities Act (2003). The National Council for Persons with Disabilities. Retrieved from file:///C:/Users/kiariem1/Downloads/PersonswithDisabilitiesAct.pdf .
64. Ping He, P., Chen, G., Wang, Z., Guo C., & Zheng, X. (2017). The role of parental education in child disability in China from 1987 to 2006. PloSONE. <https://doi.org/10.1371/journal.pone.0186623>.
65. Putten, V.A., & Vlaskamp, C. (2011). Day services for people with profound

- intellectual and multiple disabilities: An analysis of thematically organized activities. *Journal of Policy and Practice in Intellectual Disabilities*, 8(1), 10-17.
66. Reid, D.H., & Parsons, M. (2016). *Quality activities in center-based programs for adults with autism*. Academic Press.
67. Reid, D.H., Parsons, M.B., & Green, C. W. (2001). Evaluating the functional utility of congregate day treatment activities for adults with severe disabilities. *American Journal on Mental Retardation*, 106, 460-469.
68. Republic of Kenya (RoK). (2010). *Public Service Commission Code of Practice on Mainstreaming Disability*. Government printer.
69. Rusch, F. B., Braddock, D. (2004). Adult day programs versus supported employment (1998-2000). Spending and services practices of mental retardation and developmental disabilities state agencies: *Research and Practice for Persons with severe disabilities* 29, 237-242.
70. Sakiz, H., & Woods, C. (2015). Achieving inclusion of students with disabilities in Turkey: Current challenges and future prospects. *International Journal of Inclusive Education*, 19, (1), 21-35.
71. Sereta, B.N., Amimo, F.A., Ouma, P., & Ondimu, T.O. (2016). An assessment of the effectiveness of drug rehabilitation programs in Kisii county, Kenya. *Journal of Health Education Research and Development*, 4, 165-172.
72. Semba R.D., de Pee S., Sun K., Sari M., Akhter, N., Bloem, M.W. (2008). Effect of parental formal education on risk of child stunting in Indonesia and Bangladesh: a cross-sectional study. *The Lancet*, 371 (9609), 322-8.
73. Sheppard, L., & Unsworth, C. (2010). Developing skills in everyday activities and self-determination in adolescents with intellectual and developmental disabilities. *Remedial and Special Education*, 32 (5), 393-401.
74. Shogren, K., & Plotner, A. (2012). Transition planning for students with intellectual disability, autism, or other disabilities: Data from the National Longitudinal Transition Study-2. *Intellectual and Developmental Disabilities*, 50, 16-30.
75. Siporin, S., & Lysack, C. (2004). Quality of life and supported employment: A case study of three women with developmental disabilities. *American Journal of Occupational Therapy*, 58, 455-465.
76. Sommerstein, D. (2015). Advocates fight to keep sheltered workshops for workers with disabilities. North country public radio. Retrieved from: <https://www.npr.org/2015/04/14/395287097/advocates-fight-to-keep-sheltered-workshops-for-disabled-workers> on 1/01/2018.
77. Spring J. (2014). *Globalization of education: An introduction (2nd ed.)*. Routledge.
78. Spring, J. (2006). *Pedagogies of Globalization: The rise of the educational security state*. Routledge.
79. Stromquist, N. P., & Monkman, K. (2000). *Globalization and Education*. Rowman & Littlefield publishers.
80. Stromquist, N.P. (2002). *Education in a globalized world: The Connectivity of Economic Power, Technology, and Knowledge*. Routledge.
81. Sua´rez-Orozso, M.M. (2004). *Globalization: Culture and Education in the new Millenium*. University of California Press.
82. Sua´rez-Orozso, M.M. (2007). *Learning in the global era: International perspectives on globalization and education*. University of California Press.
83. Swedeen, B., Carter, E.W., Molfenter, N. (2010). Getting everyone involved: identifying transition opportunities for

- youth with severe disabilities. *Teaching Exceptional*, 43,2, 38-49.
84. Thomass, C. A & Welman P. (2010). *Getting the most out of IEPs: An educator's guide to the student-directed approach*. Brookes Publishing.
85. Turkkahraman, (2012). The role of education in societal development. *Journal of educational and instructional studies in the world*, 2, 4. Retrieved from <http://www.wjeis.org/FileUpload/ds217232/File/04.turkkahraman.pdf> on 01/08/2018.
86. U.S. General Accounting Office (2001). *Work Opportunity Tax Credit. Employers do not appear to dismiss employees to increase tax credits*. Report to the Chairman, Subcommittee on Oversight, Committee on Ways and means. House of representatives: Washington, DC.
87. U.S. General Accounting Office (2002). *Business tax incentives: Incentives to employ workers with disabilities receive limited use and have an uncertain impact*. Report to Congressional committees. Washington, D.C: U.S General Accounting Office.
88. Vas, S., Wilson, N., Falkmer, M., Sim, A., Scot, M., Cordier, R. & Falkmer, T. (2015). Factors associated with primary school teachers' attitudes towards the inclusion of students with disabilities. *PloSONE*, 10(8). Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4552744/>
89. Venkatraja, B. & Indira, M. (2011). Role of education in social development: An empirical analysis. *Mahdya Pradesh Journal of Social Sciences*, 16, (1), 1-10.
90. Vrasmas, T. (2014). Curriculum for children with disabilities in inclusive education: A literature review. *Procedia-Social and Behavioral Sciences*, 127, 336-341.
91. Wehman, P. (2011). *Essentials of transition planning*. Baltimore, MD: Paul H. Brookes.
92. Wehman, P. (2012). *Life beyond the classroom: Transition strategies for young people with disabilities* (5th ed). Brookes Publishing.
93. Wehmeyer, M.L., & Palmer, S.B. (2003). Adult outcomes for students with cognitive disabilities three years after high school: The impact of self-determination. *Education and Training in Developmental Disabilities*, 38, 131-144.
94. Zolfaghari, A. (2015). The necessity and importance of education for social and cultural development of societies in developing countries. *Cumhuriyet Science Journal*, 36, (3), 3380-3386.