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Special Education for Productive Community Participation in Developing Countries: Kenya's Situation

By Mary W. Kiarie

Abstract
Disability advocacy voices the world over emphasize the need to guarantee and safeguard the human rights of individuals with disabilities who are a major component of countries and communities. With the necessary supports and services, most people with disabilities can be productive members of their communities in many developed and developing countries (Powers, 2008) and in countries where this is not the case, productivity for this population hinges on the extent to which they are empowered through education and other services in ways that target the realization of the adult outcomes of equal opportunity, full participation, economic self-sufficiency, and independent living (Charlton, 2000). Using a review of existing literature, this paper proposes appropriate education with transition programming and curriculum as a path to increasing the community participation, economic productivity, and self-sufficiency of individuals with disabilities in developing countries like Kenya. The author highlights key components of an appropriate customized education program and explores potential work and income generating options and opportunities for this population. Though much remains to be done in this regard, the author generously concludes with a statement of government effort towards increasing the productivity of people with disabilities in Kenya.

Key words: special education Kenya, students with disabilities, transition curriculum, life skills, individualized education.

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Introduction

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, Hassan, Ya'acob, Gill, Awol-Mohdi 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 potentially keeps students up to date on the necessary skills for the workforce (Patrinos, 2016) and allows 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 they can, live as independently as they prefer, 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 insights from a multiplicity of areas, such as their communities, the government, and stakeholders, among others, if it is to yield productive community participation. Effective and appropriate education for students with disabilities in developing countries needs to be guided by specialized curricular that is collaboratively developed by multidisciplinary professionals, parents, teachers, and where possible, the student themselves. Minimal semblances of these components exist in programing for students with disabilities in developing countries.

Rationale for Specialized Curricular Plans

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

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students who do not have disabilities in the general education classroom, extra-curricular and other non-academic activities, and the aids and supports needed.

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, Gong Chen, Zhenjie Wang, Chao Guo, Xiaoying Zheng 2017; Semba de Pee, Sun, Sari, Akhter, & Bloem 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. It is futile to claim a genuine attempt to provide a relevant and appropriate education to a child with a disability without adequate participation of the parent as an equal partner both on record and in practice (Noe, McCaffrey, Meager, Kinney, & Pribbe, 2011; Lo, 2012)

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, Schreur, & Batya, 2010; & Sakiz & Woods, 2015; Vas, Wilson, Falkmer, Sim, Scot, Cordier, & Falkmer, 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).

Participation in inclusive settings raises the issue of the items, pieces of equipment, or software that are used to maintain, and increase or improve the capabilities of individuals with disabilities to perform tasks in the myriad ways proven by research (e.g., McCleskey, Rosenberg, & Westling, 2012; Adebisi & Longpole, 2015; Berry & Ignash, 2003; Borg, Lindstrom & Larsson, 2009; Cosbey & Johnston, 2006; Gardner, 2008; Gronlund, Lim & Larsson, 2010; Mechling, 2007; Mechling & O'Brien, 2010). A customized program of education for a student with a disability that is geared towards increasing their productivity and community participation must include a determination of the type (s) and the extent to which the student requires assistive technology to maximize their opportunity for an education and community participation. It must also include environmental modifications 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,

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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, Fox, & Carter, 2015).

Need for financial resources in the field of special education cannot be overstated as a key element of disability education for productive community participation (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 disability education that is geared towards productive community participation brings up "return on investment" for both stakeholders and policymakers. Clearly, 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, 2015).

Life Skills, Transition Planning, and the Transition Curriculum

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, Carter, Molfenter, 2010; Shogren & Plottner, 2012; Carteer, Brock, & Trainor, 2014; Modell & Valdez, 2010; Certo & Luekling, 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, Blanchard, & Wehmeyer, 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).

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Transition programming creates a functional curriculum that supports and facilitates the development of skills for proficient functioning in the various facets of adult living for life outside of school (Evans & Fredericks, 1991; Henderson & Slattery, 2011). Assessment along with the development of goals and objectives for a transitioning 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, Wagner, Cameto & Knockey, 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.

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 (Lombardi, Izzo, & Rifenbark, 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 where they learn skills for carpentry, tailoring, knitting, and gardening (Ng'ang'a, 2013; Kenyan Bureau of Statistics, 2009) is a testament that Kenya 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.

Vocational rehabilitation programs increase the economic productivity of individuals with disabilities (Ayodo, 1997; Sereta, Amimo, Ouma, & Ondimu, 2016). Hence, improving the effectiveness and efficiency of vocational rehabilitation services is key to disability education for productive community participation (Sereta, Amimo, Ouma, & Ondimu, 2016). Kenya's Vocational Rehabilitation Division of the National Rehabilitation 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 after graduation from the courses, lacks practical support for graduates to ensure their productivity, and caters mainly to those injured at work. Additionally, in spite of the regulation that individuals with disabilities ages 16-45 are eligible for services most of the centers cater to people who sustain disability as adults rather than young adults with disabilities 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 (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).

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Work options for individuals with disabilities and implications for developing countries

With adequate support and instruction, people with disabilities can function successfully in integrated vocational settings (Brown, Shiraga, & Kessler, 2006; Carter, Austin, & Trainor, 2012; Callahan, Griffin, & Hammis, 2011) even in developing countries like Kenya. Other than economic productivity through self-employment and apprenticeships, the continuum of work options for individuals with disabilities ranges from most to least restrictive. 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 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, Mank, Grossi, Rogan, 2007; Dloulhy & 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 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

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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, Parsons, & Green, 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 advocates (e.g., Brown et al., 2006).

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 Unites 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). 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 upto 25 % from their total taxable amount, and her stipulation that employer facility modifications for the benefit of employees with disabilities qualify for tax deductables 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

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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 show the effort of the government to enhance the participation and productivity of persons with disabilities in their communities (RoK, 2010). In spite of the high levels of unemployment in developing countries (Omolo, 2013; Hope, 2012; Mugo, Oranga, & Singal, 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 by people with disabilities in developing countries can be created in this environment.

Conclusion

An individualized educational plan for a student with a disability along with the necessary personnel and assistive technology services and programs for the student's transition into the adult world of economic productivity offer the best opportunity for productive participation as an adult. Life skills, vocational skills, self-employment, and job skills with an eye to 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 work activity centers. The extent of involvement depends on the nature and severity of the disability and governments' belief in the right and potential of individuals with disabilities to participate productively in their communities and therefore their willingness and ability to invest in services for this population.

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