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THE PUBLIC POLICY HUB

The Inclusion Of Children With Disabilities In Early Childhood Education

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2018

The opinions expressed in this paper are those of the authors and or editors and do not reflect UNICEF or AUC policies or views. They are published to stimulate further dialogue on issues affecting children in Egypt in an attempt to expose young graduates to practical policy solutions.

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List of Acronyms

CAPMAS	Central Agency for Public Mobilization and Statistics
CRC	Convention on the Rights of the Child
CRPD	Convention on the Rights of Persons with Disabilities
CWDs	Children with Disabilities
ECD	Early Childhood Development
ECE	Early Childhood Education
MoE	Ministry of Education
MoHE	Ministry of Higher Education
MoH	Ministry of Health
MoSS	Ministry of Social Solidarity
NCDA	National Council for Disability Affairs
NCCM	National Council for Childhood and Motherhood
NGOs	Non-Governmental Organizations
RTI	Response to Intervention
ToT	Training of Trainers
UN	United Nations
PWDs	Persons with Disabilities
WB	World Bank
WHO	World Health Organization

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Executive Summary:

Inclusion of Children with Disabilities (CWDs) in education, especially in early childhood education/programs is an important step towards supporting the rights of all children, regardless of their differences and their abilities, and leads to their active participation and inclusion within their communities. Inclusion of CWDs in comprehensively designed early childhood programs can alter the child's developmental trajectory, and has other associated social, human rights and economic benefits. However, in the context of developing countries and low-middle income countries, mainstreaming inclusion in education faces many challenges. These relate to the need for a comprehensive, coordinated system including an enabling policy framework, institutional readiness, awareness, infrastructure accommodation, tailored curricula, awareness and attitudinal change, availability of disaggregated data, and a skilled, knowledgeable workforce.

Problem:

Egypt experiences many of the challenges facing other developing countries in responding to the needs of persons with disabilities (PWDs). However, there have been positive milestones achieved in recent years. For example, Egypt has witnessed several developments in the policy framework-granting PWDs and CWDs their rights to full inclusion in education and the society at large. However, there is a gap between inclusive educational rights outlined in the international treaties Egypt has ratified and the new law on the rights of PWDs (Law no.10, 2018), and the current context. Amongst these challenges are perceptions/attitudes of teachers towards the inclusion of CWDs, capacity building of in-service calibers, and the preparation of new cohorts of teachers in pre-service teacher training universities. Furthermore, there are other problems pertaining to the lack of resource rooms with trained special education needs teachers, coordination between different government bodies, and the absence of data on CWDs under the age of five years old, and data disaggregated by age. Due to the complexity of the issue and the requirement of several interventions to create a successful inclusive model, this policy paper offers a multi-pronged approach to recommendations.

Recommendations:

Recommendations are divided into two categories to address the intricacy of the issue. The first category referred to as 'core recommendations', addresses focusing on an entry point for mainstreaming inclusion, in this case human capacity building, especially in-service teacher training. This entry point was chosen based on the importance of teachers as key agents of change in education. Ensuring that qualified, professionally trained and skilled teachers are available is a recipe for a successful and sustainable inclusive early childhood education model. Three core recommendations emerge to address this gap:

1. Awareness raising and attitudinal change: For inclusive education to succeed, it is critical that teachers, principals, students, and other stakeholders maintain positive attitudes/perceptions and correct knowledge on the inclusion of CWDs. Stakeholders must be convinced of the benefits inclusive education brings to all children. In order to obtain such social support, behavioral and attitudinal change communication must be utilized through different channels such as mass media, workshops, and community based awareness.

2. Investing in in-service teacher training: Investing in creating key teachers from the existing calibers nationwide and utilizing the cascading model to disseminate the message can lead to a cost effective, less logistically complicated and sustainable model. This would lead to the creation of skilled, knowledgeable and competent calibers that would eventually work on knowledge and skill transfer to other relevant personnel operating in the new inclusive system.

3. Recognizing the need for curriculum development in pre-service teacher training universities: Ensuring that the new generation of teachers enter the work force with the necessary knowledge and appropriate skill mix is crucial for the sustainability and strengthening of the system. Therefore, working on pre-service training in specialized universities is of utmost importance to create a generation of teachers who are equipped to lead such an initiative in their work as nursery teachers

The second category referred to as ‘complementary recommendations’, briefly addresses working on different gaps and challenges to create a comprehensive, efficient, sustainable, and inclusive model in Egypt with each element reinforcing the other, as follows;

1. Creating resource rooms with Special Education Needs trained teachers in all-inclusive nurseries: The placement of resource rooms with qualified and trained teachers is indispensable when including children with disabilities. This ensures that children with disabilities receive the necessary support for their full inclusion.

2. Coordination between different stakeholders to ‘craft’ efficient policies with well-coordinated implementation mechanisms: strengthening the coordination mechanisms between relevant stakeholders is necessary in order to work closely on the ‘crafting’ of integrated, evidence-based policies; in order to ease the transition to the inclusive model, identify gaps from a holistic approach, avoid the duplication of efforts and create efficient channels of communication.

3. The availability of data disaggregated by age and data for CWDs under the age of five: existing data needs further improvement to inform policy making in the area of early childhood education and interventions programming.

Section I-Background:

Global Context:

The issue of disability is one of the most crucial issues affecting nations and their development across the world. Recognizing the needs of persons with disabilities (PWDs) and providing them with their basic needs and equal rights in the society is the most important step to allow for their full inclusion in society. According to the World Bank and the WHO (2011), more than one billion people live with some form of disability, which equates to approximately 15% of the world population, 80% of which are found in developing countries. Among these figures, around 110 (2.2%) million to 190 (3.8%) million adults have very significant difficulties in functioning. Currently, there is no reliable nor representative data globally based on actual measurements of the number of children with disabilities (CWDs). Existing data on CWDs varies considerably due to a number of reasons such as, differences in the definitions of disability, the absence of registries in low-middle income countries, poor access to clinical and diagnostic services, and under reporting of disability due to cultural reasons (WHO, 2012)

In developing countries, PWDs suffer from the lack of inclusion and poor services. According to the Integrated Programme to Promote the Rights of Persons with Disabilities in Egypt report (2010), an estimate of 96-97% of PWDs living in developing countries do not have access to rehabilitation services and suffer from exclusion. One of the important areas where persons with disabilities are excluded is education. Although inclusive education “has been internationally recognized as a philosophy for attaining equity, justice and quality education for all children, especially those who have been traditionally excluded from mainstream education for reasons of disability, ethnicity, gender or other characteristics”, many developing countries fall short of achieving this goal (Marin, 2014). Factors such as, perceptions of PWDs, lack of awareness, limited resources, available funding, administrative and policy level support, institutional readiness, and trained personnel pose challenges for progress in developing countries (Nguyet & Ha, 2010).

International Conventions:

The UN Convention on the Rights of the Child (CRC), adopted in 1989, outlines the civil, political, economic, social, health and cultural rights of children. There were specific references to the rights of children with disabilities in the treaty such as non-discrimination, the rights of CWDs to education and the right to quality education. Article 2 addresses non-discrimination, regardless of race, color, sex language, religion, political or other opinion, property, disability and birth. Article 23 ensures the rights of CWDs to access education, while recognizing their need for special care and assistance. In addition, Articles 28/29 highlight the rights of CWDs to quality education to develop the child’s personality, talents, mental and physical abilities, and develop respect for the child’s own cultural and national values (CRC, 1989).

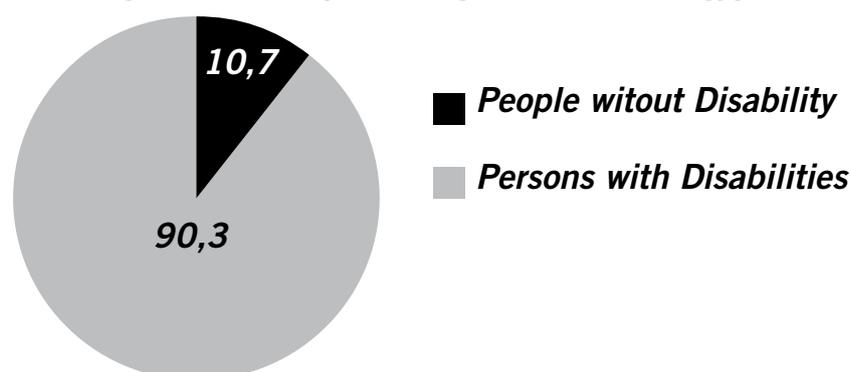
Another major human rights treaty is the United Nations Convention on the Rights of Persons with Disabilities (CRPD), which was adopted in 2006. It stipulates that persons with all types of disabilities must enjoy all fundamental freedoms and human rights. In specific, Article 24 highlights the rights of all children with disabilities and young people to “access an inclusive, quality, free, primary and secondary education on an equal basis with others in the communities in which they live in” (CRPD,2006). It further emphasizes “the reasonable accommodation of the individual’s requirements”, and that support should be provided “within the general education system, to facilitate their effective education” (CRPD, 2006). “The CRC and the CRPD are mutually reinforcing and together provide a framework for a growing synergy between key human rights instruments” (WHO, 2012).

National Context:

The situation in Egypt is similar to other developing countries regarding obstacles to inclusion in education. However, policies, definitions of disabilities and data in Egypt have witnessed positive milestones in recent years. Egypt has passed a new law in 2018 on the rights of PWDs. The executive regulations of the new law on the rights of PWDs , explicitly cover the definitions of disabilities, the degrees of disabilities, as well as the criterion for acceptance and inclusion within the mainstream educational system (Personal Communication, 2018).

The 2017 Egypt Census provides data on percentages of PWDs five years of age and above, according to the type of disability and severity, gender, and geographical location for PWDs. The census highlights that PWDs comprise 10.7% of the population. Nevertheless, there are currently no statistics on children below the age five years and the published results are not disaggregated according to age groups (Central Agency for Public Mobilization and Statistics-CAPMAS, 2017).

Figure 1: Total percentage of PWDs in Egypt



Source: CAPMAS, 2017

Concerning the inclusion of CWDs in education, although Egypt has signed and ratified the (CRPD) in 2008, and the CRC in 1990, in addition to passing a comprehensive law on the rights of PWDs alongside several Ministerial decrees, CWDs remain excluded from the mainstream education system (Personal Communication, 2018).

National Policies:

The situation of PWDs in Egypt remained ignored, stagnant and similar to many developing countries for a long period of time until recently. Egypt has operated under the Egyptian Social Rehabilitation law number 39 of 1975, amended in 1982 that stipulated the rights of PWDs until 2018 (El Refaei, 2016). However, advocates said the law was mere ink on paper and did not really ensure equal rights and inclusion. Therefore, after the 2011 revolution, PWDs voiced their frustration regarding their demands for equal rights as stipulated in international conventions (El Refaei, 2016). In response to the rising demands voiced by PWDs, the National Council for Disability Affairs (NCDA) was established. The NCDA “is the designate focal point within the Egyptian government for matters relating to the implementation of the present UN CRPD and is responsible to give due consideration to the establishment or designation of a coordination mechanism within the Egyptian government to facilitate related action in different sectors and at different levels” (NCDA, n.d). The NCDA and disability advocates have lobbied to have their rights mentioned in the constitution. As a result, Egypt has witnessed for the first time nine clauses in the 2014 Constitution referring to PWDs. The most prominent of which is Article 81 that states:

“The State shall guarantee the health, economic, social, cultural, entertainment, sporting and educational rights of persons with disabilities, strive to provide them with job opportunities, allocate a percentage of job opportunities to them, and adapt public facilities and their surrounding environment to their special needs. The State shall also ensure their exercise of all political rights and integration with other citizens in compliance with the principles of equality, justice and equal opportunities” (Constitution of the Arab Republic of Egypt, 2014).

Egypt’s constitution, passed in 2014, is considered a major shift in the rights granted to PWDs in Egypt. Article 53 of the constitution prohibits discrimination against PWDs, while Article 81 obliges the state to commit to the economic, social, cultural, political, educational, and health rights of PWDs. It also stipulates the state’s commitment to provide better public space utilities for them. Article 81 of the constitution is considered the first inclusive article ever mentioned in the history of Egypt’s constitutions, guaranteeing the equal rights of PWDs. However, more efforts were needed to guarantee their equal rights on the ground, therefore different stakeholders and in specific MoSS, NCDA, NGOs, disability advocates and representatives from the parliament have contributed to the issuance of the first law on the Rights of Persons with Disabilities (Law no.10 for 2018). On February 2018, President Abdel-Fattah Al Sissi ratified the law, after it was passed by the Parliament. MoSS in collaboration with partners have finalized the bi-laws, and the cabinet has approved it on the 1st of November, 2018 (Al Youm Al Sabei, 2018).

“The Law on the Rights of Persons with Disabilities is the first legislation affecting people with disabilities to be put into effect in Egypt since the “Rehabilitation of Disabled Persons Act” (Shalabi, 2018). The law has 58 articles in eight chapters covering health and medical rights, their right to education, vocational

training and employment, and the State's commitment towards securing the rights of PWDs. The new law reveals many positive reforms regarding educational rights. For the first time, there is a comprehensive law requiring educational institutions to adopt inclusive policies to support PWDs. Articles 10-17 of the law address the rights of PWDs to be included in educational institutions, ensure equal opportunities and prohibits institutions from rejecting applications on grounds of disability.

There were also several ministerial decrees issued by the Ministry of Education before Law no.10, 2018. Article 9 of the Education Law number 138/1981, refers to the establishment of 'special education' schools mandated for CWDs, that are separate from mainstream schools (NCERD, 2008). However, "following Egypt's endorsement of the CRPD (2007), the Egyptian Ministry of Education (MoE) issued a Ministerial Decree in 2009, updated in 2015, mandating the admission of students with mild disabilities in public and private schools that are configured and prepared to receive those students" (Parnell, 2017).

In 2017, MoE issued Ministerial Decree No. 252 of August 2017 on the admission of students with minor disabilities to public education schools. The decision stipulates that the inclusion of students with mild disabilities should be implemented in regular classes in government public education schools, private schools, community schools, official language schools, and schools that teach special curricula in all pre-university and kindergarten levels (Badawy, 2017). Furthermore, the decision affirms that students with disabilities who meet the criterion are entitled to inclusion into the nearest school from their place of residence, preferably in a school with a resource room. In addition, the decree highlighted that only 10 % of the total number of students are CWDs, with a maximum of four students, with the same type of disability (Badawy, 2017). Finally, yet importantly, President Abdel-Fattah Al Sisi declared the year 2018 as the year for "disability" which motivated many of the changes.

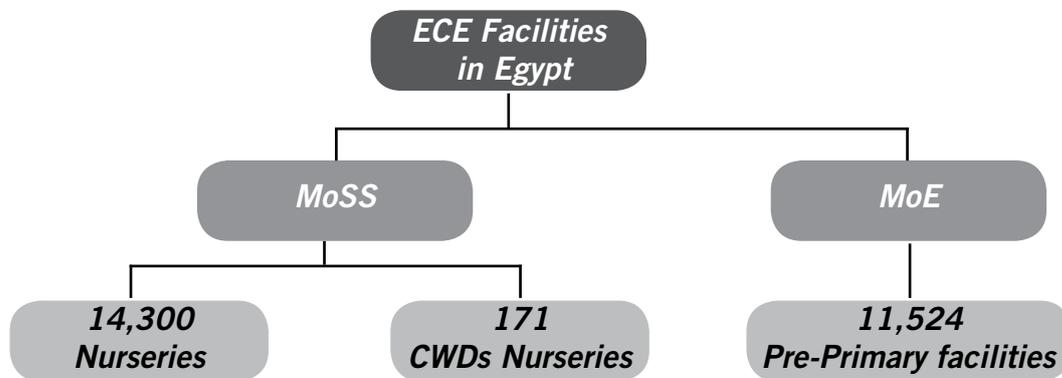
Scope:

Inclusive education includes all educational facilities from early childhood nurseries to universities (Dash, 2006). Since the whole scope cannot be covered in one policy paper, this paper focuses on transitioning to inclusion in early childhood education facilities.

Early childhood Education (ECE) is also known as nursery education. It is a branch of education theory, which relates to the teaching of young children (formally and informally) up until the age of eight years old, which is the most rapid phase of growth and development (NCERD, 2015). The main development domains in ECE are physical, cognitive, social, emotional, and language development (WHO, 2012). In Egypt, ECE landscape is divided accordingly; nurseries fall under the supervision of the Ministry of Social Solidarity; two departments are mandated with nurseries in MoSS, the Motherhood and Childhood Department that is responsible for 14,300 nurseries and the General Administration for Rehabilitation of persons with disabilities that is responsible for 171 nurseries

for children with disabilities. The MoSS nurseries are mostly run by NGOs, and often charge nominal fees, and receive annual subsidies from MoSS. In addition, the Ministry of Education supervises 11,524 pre-primary facilities (Ministry of Education Yearly Statistical book, 2017/2018).

Figure 2: ECE landscape in Egypt



Why focus on inclusion in early childhood education?

The issue of early childhood interventions for children with disabilities and the process of inclusion at an early age are crucial issues that, if addressed with urgency, can yield positive outcomes for the lives of all children, and the community at large. Choosing early childhood facilities as a starting point for interventions is based on rigorous scientific evidence and multi-country experiences that highlight the importance of intervening with disability at an early stage to create an enabling environment for the children to exercise their full potential (Irwin, Siddiqi & Hertzman, 2007). The early interventions rationale emphasizes that, “children’s earliest experiences play a critical role in brain development” (In brief: The Science of Early Childhood Development, 2008). Child development in this period is dynamic and it is crucial because experiences during early childhood can influence outcomes across the entire course of an individual’s life. In this phase, “Skills emerge in a number of linked domains: sensory-motor, cognitive, communication and social-emotional, and language development” (Irwin, Siddiqi & Hertzman, 2007). Development in each domain proceeds through a series of milestones or steps and typically involves mastering simple skills before more complex skills can be learned” (WHO, 2012).

For children who experience disability, it is a time of utmost importance to ensure access to interventions that can help them reach their full potential and prepare them for inclusion in schools and society. The timely provision of an optimal nurturing and learning environment can alter the child’s longer-term developmental trajectory, and reduce secondary health and psychosocial complications (The Royal Australian College of Physicians, 2013).

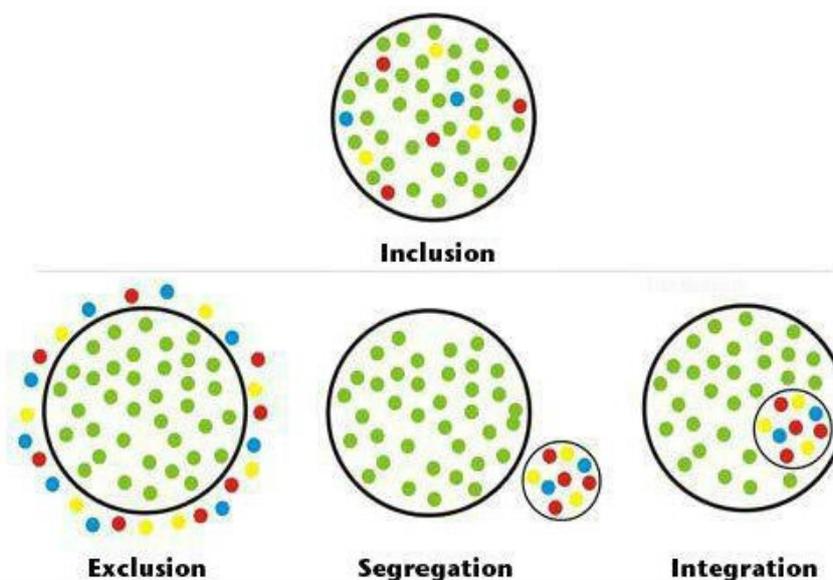
Apart from research evidence, there is a human rights dimension to the issue, according to the CRC and the CRPD, children with disabilities have the right to develop “to the maximum extent possible”, and to be included in mainstream educational facilities (CRC, 1989). Both conventions recognize the significance

of focusing on the influence of the environment rather than the child's impairment as a cause of exclusion and under-development. Furthermore, CWDs have the right to equal opportunities in all aspects of life like other children such as education, play, leisure, cultural activities, access to information, etc... to enable them to reach their full potential.

Despite the fact that CWDs are more vulnerable to developmental risks, they are overlooked in programme design and specific services that ensure their development and proper interventions as per their needs (WHO, 2012). Many CWDs require additional specialized services, such as rehabilitation (physiotherapy, pre-orientation mobility, speech therapy, etc.) to assist them in maximizing their potential. While Egypt is on its journey to enhance services provided to persons with disabilities, particularly children through a variety of different programs and facilities; there is an insufficient number of service providers (Shenouda, 2009). Not to mention the vast majority of the existing service providing personnel lack the skills required and adequate knowledge on disability, early interventions, rehabilitation, and inclusive education (Personal Communication, 2018).

Inclusive educational facilities have both an economic as well as a social rationale. In terms of the economic argument, children with disabilities who receive early childhood care interventions according to their developmental needs are more likely to be included in the society as healthy and productive members (Heckman, 1999).

Figure 3: Inclusion compared to other models of education



Source: <https://www.special-education-degree.net/what-are-inclusive-special-education-programs/>

This potentially reduces future costs of education, medical care and other social spending by the government (Heckman, 2006). In addition, well-articulated and designed ECD programmes for CWDs can provide caregivers (parents) with

more time to engage in productive work and enable young children to attend programs that aid them in reaching their full potential (Banks & Polack, 2014). With regards to the social advantage, including children at an early age would potentially contribute to a generation of children who are aware of differently abled children and would nurture the attitude of accepting differences, which in turn could encourage 'greater acceptance of diversity and the formation of more tolerant, equitable and cohesive societies' (Rohwerder, 2015).

Section II-Problem Statement:

There has been increasing interest in inclusive education and Egypt has accomplished a milestone in terms of the policies relating to PWDs and, in specific, the rights pertaining to inclusion in mainstream educational facilities. However, the current context demonstrates a gap between what policies aim to achieve and the feasibility of operationalizing them. Inclusion needs preparation and cannot be translated as an ipso facto. Preparations vary from one context to the other, and one important point of grounding and implementing these policies is preparing calibers (Stubbs, 2008). Teachers must understand what inclusion is and have their capacities built to work in an inclusive setting. There is no blueprint for "doing inclusive education; it is a dynamic, organic, cultural and context-specific process", that does not rely on importing solutions from other cultures without contextualizing them (Stubbs, 2008).

In general, there is lack of knowledgeable, aware, well-trained and skilled calibers, working in the field of disabilities in Egypt (Shenouda, 2008). This problem is even more evident in the area of early childhood programs for CWDs who require special education needs interventions along with other interventions. There are gaps regarding the capacities of specialists working with CWDs, which affects the quality of the services provided (Ghoneim, 2014). Although this problem is evident in the rehabilitation sector, it can gravely affect the inclusion process for several reasons; inclusion for CWDs requires specialized interventions on behalf of the educational facility, where teachers are trained and understand how to identify, intervene or accommodate children with disabilities or Special Education Needs (SEN). Furthermore, teachers need to have in-depth knowledge of the different stages of child development in order to understand when a child experiences a delay or difficulty, so they can either advise parents to under-go an assessment, refer them to a specialist or work with different teaching strategies (Beveridge, 1999).

Data collected from research and field visits demonstrates that teachers and school staff lack skills needed to implement inclusive strategies (Abdelhameed, 2010; El Zouhairi, 2014). It is to the extent that due to the lack of proper knowledge and training, some environments are hostile to CWDs, and could turn into abusive environments where the child's needs are neither met nor protected, and would segregate the child within the classroom (Personal Communication, 2018). Accordingly, there are three main gaps in the area of capacity building, namely; the perceptions/attitudes of teachers and the community from where

they emerge regarding the inclusion of CWDs; the absence of regular in-service teacher training to address the ever changing needs of students due to the centralization, cost, complex logistics and lack of training sustainability; and the curricula in pre-service teacher training universities lacks in-depth modules required to prepare teachers to work in inclusive settings (Emam and Mohamed, 2011; El Zouhairy & Rizo, 2016). In addition, there are other problems that may hinder the creation of a sustainable inclusive system such as; the lack of equipped resource rooms with trained special education needs teachers; the need to strengthen coordination between different governmental agencies to create coordinated implementation mechanisms; and the lack of data disaggregated by age and data on CWDs under the age of five years old. Therefore, this policy paper's core focus is proposing interventions that influence the development of mainstream early childhood facilities and assists significantly in the reinforcement of human capital creating skilled, knowledgeable and competent calibers nationwide. Furthermore, the paper touches upon other identified problems to ensure a sustainable, well-orchestrated ECE inclusive system.

Section III-Recommendations:

Researching the status of early childhood education facilities in Egypt and the feasibility of inclusion from a multi-pronged approach resulted in the identification of several gaps that could hinder the mainstreaming of inclusion and needs to be addressed to create a sustainable and efficient system.

As a result of the intricacy of the issue we have divided the recommendations into two categories. The first category referred to as 'core recommendations', addresses focusing on an entry point for mainstreaming inclusion, in this case human capacity building. The second category referred to as 'complementary recommendations', briefly addresses working on some of the existing gaps and challenges to create a comprehensive, efficient and sustainable inclusive model in Egypt.

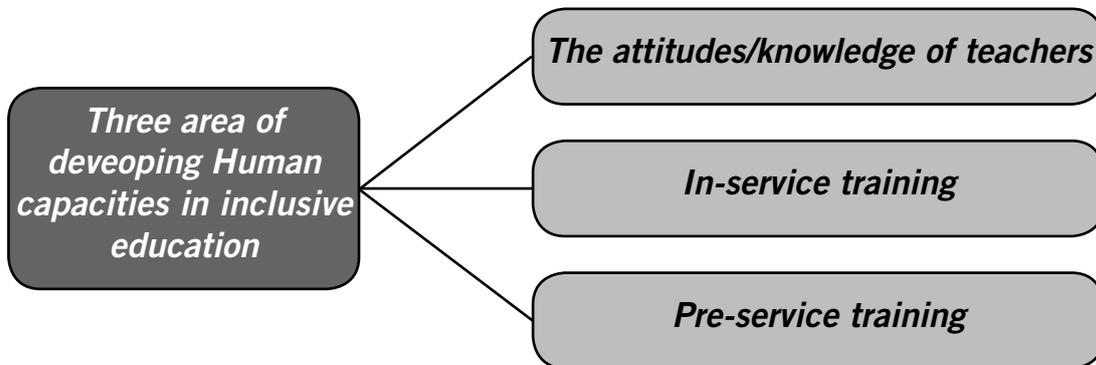
Core Recommendations:

Stemming from best practices and expert opinions, the value of the human element is indispensable in any intervention; thus, we have chosen to focus the core of our recommendations on investment in human capacity building as a priority, with detailed emphasis on in-service teacher training (Acedo, 2011). "Ensuring that qualified, professionally trained, motivated, and well-supported teachers are available for all learners is essential for addressing today's key education challenges in poor and rich countries" (Nguyet & Ha, 2010). Hence, the recommendations suggested are based on best practices from developing countries and lower-middle income countries such as Vietnam, India, and Nepal on how to create a work force that can best support the objectives of inclusion.

Three main areas must be considered when developing human capacities in an inclusion setting: the attitudes/knowledge of teachers and the communities from which they emerge on inclusion, in-service training to improve the capacity

of teachers already working in the field, and pre-service training programs to help ensure that future generations of teachers enter the profession with the necessary skills and knowledge (Nguyet & Ha, 2010).

Figure 4: Main areas of Human Capacity Building



1. Awareness Raising and attitudinal change:

For inclusive education to succeed, it is critical that teachers, principals, students, and other stakeholders maintain positive attitudes/perceptions and correct knowledge on the inclusion of children with disabilities. Stakeholders must be convinced of the benefits inclusive education brings to all children.

Even though inclusive education is mandated by law and reinforced by international conventions, it will not possibly succeed without the buy-in and the enthusiastic support of practitioners and relevant stakeholders.

In order to obtain such social support and behavioral change, communication must be utilized, which is neither quick nor easy (Gaad, 2011) However, there are a number of ways to accomplish that change in Egypt.

One important channel is organizing training workshops for educators and key community members on the philosophy of inclusion on how beneficial it is to all children. Another awareness channel is integrating the benefits of inclusive education and some modules into schools and teacher training universities and colleges to create a generation that is well-aware of the issue and its importance (Nguyet & Ha, 2010).

Media campaigns through the different audio and visual channels have an impact on a large number of people at once and are able to initiate dialogue around the topic. On the other hand, we cannot ignore the impact of community-based awareness through advocates from the community, such as religious leaders and social workers in schools and local communities (Kayode & Thanny, 2013).

Currently MoSS has over 2000 social workers and the Ministry of Health has around 14,000 health workers, in addition to different NGOs that can work on spreading the message by reaching out to different layers of the community. Capitalizing on grass roots community awareness can possibly lead to less resistance and more support by local communities. Awareness is key to the realization of such change. Without raising awareness amongst different relevant

stakeholders, most important of which are teachers and the community, progress will be hard to achieve (Hassanein, 2015).

2. Investing in in-service teacher training:

In an ideal world with limitless resources, each and every teacher should be trained and certified at the hands of an expert to be able to provide the necessary support for CWDs to fully participate. In countries with abundant resources and strong logistical support, this is achieved through classroom teachers who are fully supported “by specialist teachers whose only job is to provide special support to both classroom teachers and students with disabilities. They collaborate with regular school staff to provide technical counseling in lesson planning and provide direct support to students and teachers as well” (Nguyet & Ha, 2010). However, in developing countries and middle-low income countries like Egypt, it is challenging to have this model in place in the meantime, due to high cost, complicated logistics and the absence of a sufficient number of experts and well-trained personnel to deliver such training (Emam & Mohamed, 2011). Accordingly, it is important to work on local adaptations to devise more feasible solutions to providing support to classroom teachers and CWDs.

In the context of budgetary constraints and centralization of training, achieving this goal would not be feasible. In-service training in Egypt is expensive, logistically complicated and centralized as it entails teachers traveling to other governorates to receive training modules (Personal Communication, 2018). When taking into account that each teacher would require an average of 6-9 training modules for an average of 10 days each, including travel expenses, per diems, meals, transportation, accommodation, training venues, and other associated costs, an estimated average cost for training per teacher per module can cost up to 3000 EGP (Personal Communication, 2018). The average number of teachers per nursery varies, and is estimated at around three to five teachers per nursery⁽¹⁾. Initial calculations based on averages show that the budget for training all teachers would be costly, the process would be logistically complicated, and would be difficult to sustain, which could eventually create an obstacle to creating qualified calibers. Therefore, we are suggesting a cost-effective and sustainable solution based on a cascading model of training. The cascade model is the process through which the ‘training messages flow down from experts and specialists through several layers of personnel and eventually to the teachers’ (Dove, 1986).

How to implement the model?

The MoSS supervises 171 nurseries for CWDs; we have chosen these nurseries as an entry point for our suggested interventions. Our intervention is based on investing in the calibers currently working in these nurseries. We plan to build on these calibers by investing heavily in their training to serve as key teachers, or in other words, the nucleus of the cascading model.

⁽¹⁾The number is based on average calculations.

The teachers in CWDs' nurseries already work with CWDs, they are aware of the context-as they are part of the community-, the local challenges, and the needs of their communities. In addition, they are located in proximity to the regular nurseries. This would not only allow for increasing efficiency and impact of trainings, but it would also guarantee sustainability of the process, ensuring long-term social return on investment (Andrews, Housego, & Thomas, 1990).

Furthermore, by training staff working with CWDs, we are creating centers of excellence in service delivery, and the quality of services offered to CWDs who require severe interventions with major accommodations that could not be offered in inclusive nurseries, such as speech therapy. By strengthening these services through capacity building, we are creating qualified calibers that have knowledge and skills to provide services, and have the understanding of the special interventions required for each case. Therefore, building on the existing human resources aims to fast track the process of having new professionals in the field who can, in a shorter-time, serve as trainers and coaches for teachers in regular nurseries in their surrounding areas.

Accordingly, training all the staff working in the nurseries for CWDs at the hands of experts would be considered a more feasible alternative than training all the staff working in all ECE facilities nationwide. The average number of workers in nurseries for CWDs is around 855 teachers as opposed to over 40,000 ECE teachers in mainstream facilities.

Accordingly, investing heavily in this sector to create key teachers would be more feasible, due to the cost and logistics, as opposed to the aggregate number of teachers. The term 'key teacher' in this context is used to refer to the groups of teachers from nurseries for CWDs who will receive sufficient training on different topics relating to CWDs and inclusive education; then they will be trained to be trainers (ToT) in the subject matter (Nguyet & Ha, 2010). They would act as the core human resource for the implementation of inclusive nurseries. Once trained, they will be assigned to a group of three to four neighboring mainstream ECE facilities, which they will visit on a rotational basis.

The development of a network of key teachers in each governorate is cost effective, sustainable and less logistically complicated because they are already part of the system, they have experience with CWDs, and they are in the same governorates, which will massively reduce training costs and create a sustainable mode of training delivery.

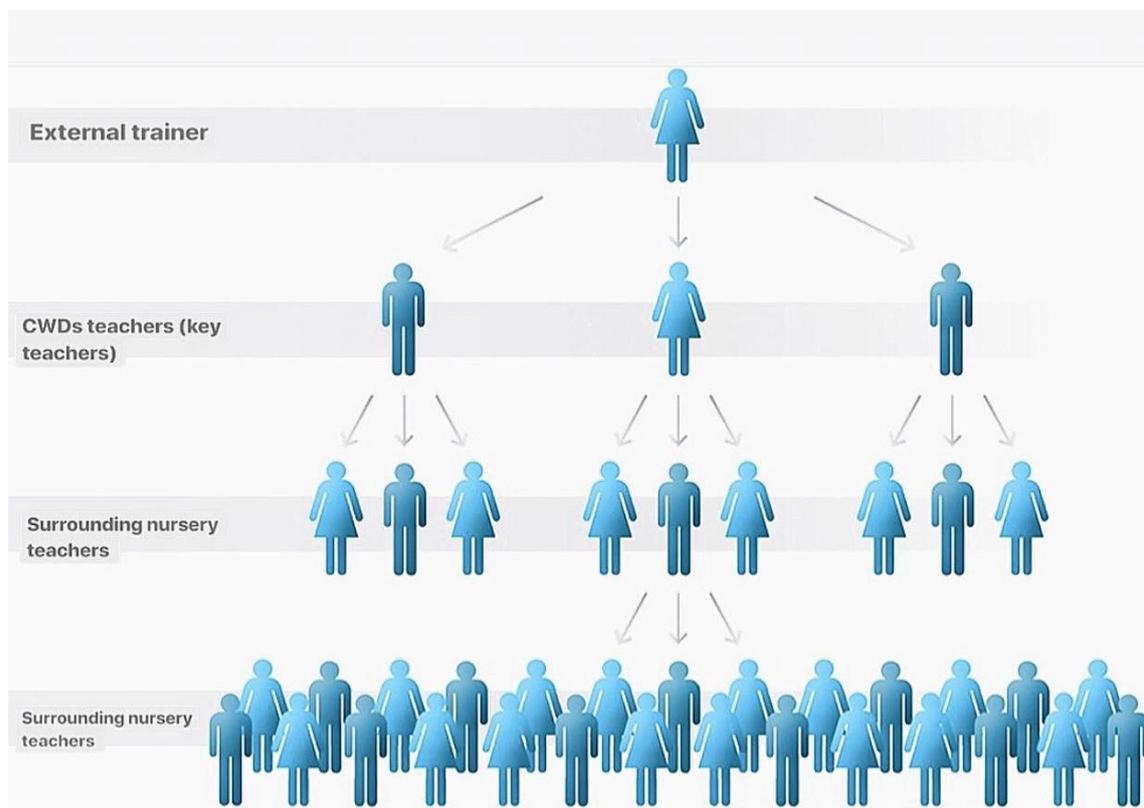
The support of key teachers will be important in the areas of capacity building, planning and monitoring and reporting. In the area of capacity building, the key teachers will replicate the trainings received from external experts in their assigned nurseries, which would create a platform that is cost effective and sustainable for knowledge transfer and experience sharing (McDevitt, D., 1998). Furthermore, key teachers will assist in planning in terms of helping in developing intervention plans and mainstream nursery teachers can capitalize on their experiences in creating individualized education plans. Regarding

monitoring and reporting, key teachers will conduct regular field visits to their assigned nurseries to monitor the implementation of inclusive education and interventions as well as track the progress of CWDs, observe lessons, and provide feedback for teachers. In addition, they would write regular reports summarizing the results of the visits, which would be sent to the responsible authority, in this case, the MoSS directorate in coordination with the MoE directorate, with attached recommendations on improving the learning outcomes of CWDs in the inclusive system. Thus, our recommendation is to create a local base of teacher trainers to lead the process of change, skill and knowledge transfer.

The Cascading model illustrated:

The nurseries for CWDs will serve as the nucleus of the cascading model for supporting inclusion in all nurseries eventually, so after the first tier of surrounding nurseries is well-trained, the circle will become bigger and more surrounding nurseries will be trained and so on as shown in (Figure 5).

Figure 5: Demonstration of the Cascading Model in Teacher Training



University of Cape Town, Lung Institute, Knowledge Translation Unit, The Practical Approach to Care Kit (PACK), Source: <https://knowledgetranslation.co.za/pack/>

Accordingly, this rationale focuses on creating a best fit that is implemented and tested on a small, controllable sample - versus the aggregate number of ECE facilities – which acts as a beacon that influences the development of mainstream educational facilities and assists significantly in the development and the reinforcement of human capital, creating skilled, knowledgeable and

competent calibers. Such caliber would serve later on through a cascading model in building the capacities of, as well as knowledge and skill transfer, to other relevant personnel in the system.

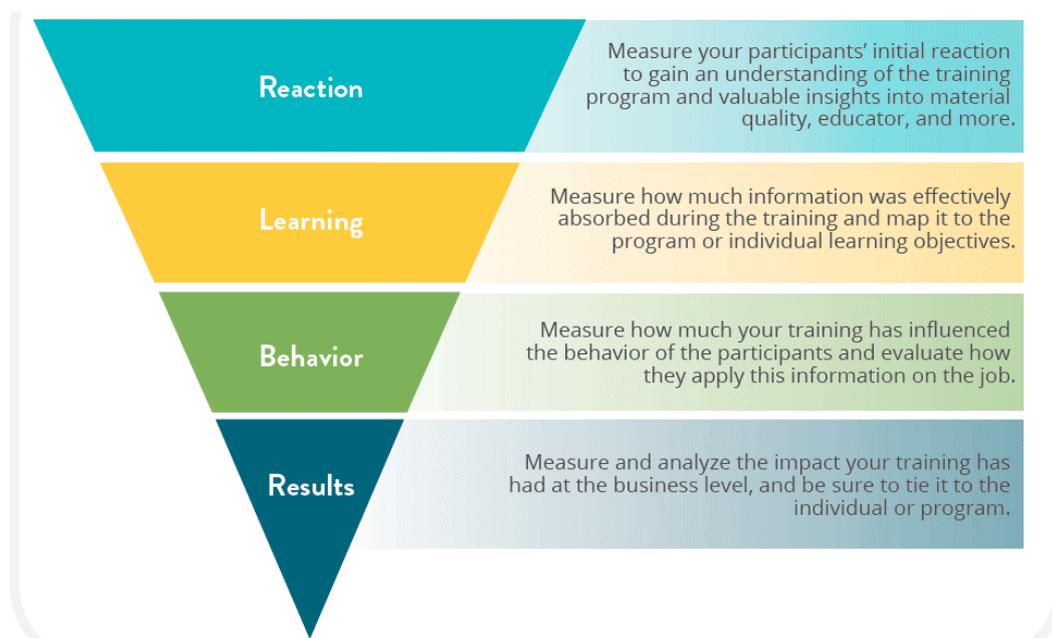
Creating incentives for key teachers:

One must acknowledge that the tasks of key teachers are many, and that they can face difficulties in their additional tasks alongside their regular work. Therefore, one way of incentivizing key teachers to carry out their multiple tasks would be providing a small allowance for each monitoring trip (Nguyet & Ha, 2010). Another strategy for incentives could be through creative ways to reward the key teachers for their time and effort. This can take place through the NGOs or the ECE facility where the teachers work, where gratitude is shown through non-financial incentives such as a certificate of recognition, which can strengthen the teacher’s profile and may lead to promotion.

Monitoring and evaluation of training:

In order to ensure maximum outcome of training activities, the MoSS is to assign a team that would be responsible for liaising with teams in different directorates to measure training impact using the Kirkpatrick’s model of evaluation expressed in four levels (figure 6), reaction, learning, behavior and results (Kurk, 2016). Assessing the satisfaction levels of trainees, their learning experience through summative and formative assessments, their behavior change through observation and other tools, and assessing training results against desired outcomes set prior to training programs is important. It would create a platform to continuously monitor the training process and constantly adjust the training activities to suit the overall learning objectives, and ignite the desired change (Kirkpatrick, 2009; Kirkpatrick, 2007).

Figure 6: The Kirckpatrick Model



Source: <https://educationaltechnology.net/kirkpatrick-model-four-levels-learning-evaluation/>

Limitations of the Cascading model:

The Cascading model has many advantages, especially in training teachers in developing countries due to its cost effectiveness, sustainability and quick delivery of training. Nevertheless, it is often criticized for the distorted delivery of messages, because the message goes through ‘long-distanced one-way processes (Department of Education and Science, 1988). However, based on a case study conducted on in-service training in Nepal using the cascading model of a three-layer approach comprised of key experts, ToT, dissemination, key ideas were transferred and reached the target audience (SuZuki, 2008). “Although some of the practice was not delivered as intended, the core concepts survived in the long journey throughout the layers” (SuZuki, 2008). To overcome this limitation, the adoption of the Kirkpatrick model suggested it can aid in tracking the training and making the necessary adjustments when needed to avoid the distortion of messages.

3. Recognizing the need for curriculum development in pre-service teacher training Universities:

Although course work in Egyptian teacher-training universities and colleges may touch upon the concept of inclusive education, calibers are not prepared to work in such a setting (El Zouhairy & Rizo, 2016). When acknowledging the fact that current graduates of special education departments are not yet qualified to lead inclusion initiatives, we believe that working on pre-service training in specialized universities is of utmost importance to create a generation of teachers who are equipped to lead such initiatives in their work as nursery teachers. The development of in-depth teacher-training modules in inclusive education must be included in the curriculum of teacher training universities. Therefore, modifying the existing curriculum is very important. Since the focus of this paper is on Early Childhood Education, it is very important in the pre-service curriculum to have modules tackling the philosophy of inclusion, response to intervention (RTI), different teaching strategies and accommodations, and knowledge regarding how to identify CWDs or developmental delays from an early age (El Ashry, 2009). This would in turn allow teachers to provide students with the educational support needed and creates a qualified caliber, which would eventually strengthen the system at large. “As key agents of quality inclusive instruction and essential mediators of social inclusion and participation, both special and general education teachers must be supported in terms of high-quality, initial and ongoing training and professional development” (Parnell, 2017).

Complementary Recommendations:

1. Creating resource rooms with Special Education Needs trained teachers in all-inclusive nurseries:

What are Resource Rooms?

“The Resource Room is not just a place, but also a placement” (Watson, 2018). The resource room is a separate setting, either a classroom or a smaller designated

area, where an individualized education plan (IEP), or a special education program is delivered for a child with special education needs in an individualized setting or a small group. “It is part of the placement process and is considered necessary for children who are easily distracted in the general education setting, especially when new information is being introduced” (Watson, 2018). This form of support is often called resource, withdrawal or pullout. In this setting, the withdrawal of the child takes place as part of the day, and sometimes in the regular classroom with accommodations to ensure that the child is receiving the necessary support and at the same time the inclusion model is still in place. The time spent in the resource room varies according to age and needs, however, it should not be more than the time spent in the regular class to ensure that the child is properly included with his/her peers (Personal Communication, 2018).

Advantages of resource rooms:

One of the advantages of resource rooms is the concept of “Peers”. Terzi (2010) states that “Inclusion is not a matter of where you are geographically, but where you feel you belong”, this sheds light on the importance of resource rooms and support teachers, as children who are not only of the same age but also of the same interest can spend time and receive necessary interventions.

Not only shared interests will result in better sense of belonging, and, therefore, better results for inclusive education, but also for CWDs and SENs who require intensive interventions will benefit more from being pulled-out regularly in a resource room for some of their time in mainstream nurseries and at the same time be included with their peers (Terzi, 2010).

The teacher’s role in the resource rooms:

Teachers in the resource rooms have a crucial, yet, challenging role as they need to design all instruction to meet the needs of students to maximize their learning potential. SEN teachers need to work closely with the child’s regular classroom teacher to ensure the IEP is working in place and with the child’s parents to ensure that all the support needed away from the nursery is provided (McNamara, 1989). In addition, the teacher needs to be aware and in coordination with other professionals and para-professionals to ensure that the child receives extra-specialized support when needed. Therefore, in the long-run, the placement of resource rooms in all inclusive nurseries and building the capacities of teachers and their training are crucial in order to ensure that children with SENs receive the necessary support and that their inclusion is supported and contributes to increasing their potential.

2. Coordination between different stakeholders to craft efficient policies with well-coordinated implementation mechanisms

The main government stakeholders concerned with the education of CWDs and SENs are the Ministries of Education, Health, Social Solidarity, Higher Education, the National Council for Motherhood and Childhood, and the National Council for Disability Affairs. One major gap is the lack of strong coordination between

stakeholders, whereas their cooperation is of utmost importance to provide a comprehensive service (Personal Communication, 2018).

MoSS serves almost 60% of PWDs in Egypt, and it supervises almost 14,300 nurseries of ECE facilities and another 171 nurseries for CWDs, so it is a major stakeholder in this net (El Refaie, 2016). The MoE supervises 11,524 pre-primary facilities, and will be the main stakeholder during early school years, and the rest of the pre-university education journey. The Ministry of Higher Education should cooperate with both MoSS and MoE in identifying the gaps in specialties in order to develop the curriculum for teacher training universities, and other related universities to cater towards creating calibers who are able to respond to the needs of the sector.

The MoH is responsible for the medical aspect, whether in terms of prevention, diagnosis, functional tests, medical assistance, or providing doctors. Furthermore, medical caravans and campaigns should be carried out regularly for the early detection of certain disabilities, amongst which is visual impairment. The National Council for Motherhood and Childhood “is entrusted with policymaking, planning, coordinating, monitoring and the evaluation of activities in the areas of protection and development of children and mothers.” (NCCM, n.d).

Therefore, we recommend the strengthening of the coordination mechanisms between the different stakeholders in order to work closely on constructing integrated policies, and evidence based strategies, to identify gaps from a holistic approach, avoid the duplication of efforts, and create efficient communication. This would eventually ease the transition to a comprehensive, well-functioning inclusive model.

3. Data disaggregated by age and data on CWDs under the age of five:

The status of data on PWDs has drastically improved in recent years, especially in the 2017 Egypt Population Census by CAPMAS. However, there is still room for further improvement to inform policy making in the area of Early Childhood interventions and education. Data on CWDs under the age five years old needs to be covered and outlined. The recent development in policies regarding agreed upon definitions of disabilities is promising, as it defines the criterion based on how the data would/should be collected. Therefore, we recommend that the CAPMAS in the upcoming population survey -in coordination with relevant stakeholders-, to work on surveying and availing data on CWDs under the age of five years old and to disaggregate the data on PWDs according to age groups. This would eventually assist in the ‘crafting’ of evidence informed policy making and better programming in the field of early childhood interventions and inclusion of CWDs (Community Research and Development Information Service, 2017).

Conclusion:

In conclusion, Egypt has achieved positive developments relating to the inclusion of CWDs in education, however; Egypt still has a long way to go to ensure the mainstreaming of an inclusive education system beginning from early childhood years to different levels of education. This policy paper stresses the importance of investing in the human capital working in ECE as a cornerstone to launch a new system with calibers that hold positive attitudes towards CWDs and inclusion; and have the necessary qualifications to create a strong cohort of teachers to lead the way into a new sustainable, comprehensive inclusive system. This is due to the importance of human capacity as the nucleus of success. The quality of an inclusive education system can exceed neither the quality of its teachers nor the quality of its teaching (EFA Global Monitoring Report, 2015). Furthermore, many areas would require in-depth planning to create a strong system. All the components of a successful inclusive ECE model could not be possibly addressed in one policy paper; therefore, areas such as operationalizing a strong coordination mechanism between different stakeholders, more in-depth data, infrastructure accommodations, institutional readiness and curriculum development would require more policy papers to address each issue rigorously to identify different operational models for each of these areas.

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