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Educational Quality and Readability Improvement Efforts in Primary Public Schools in Egypt: A Process Analysis



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**EDUCATIONAL QUALITY AND
READABILITY IMPROVEMENT EFFORTS IN PRIMARY PUBLIC SCHOOLS IN
EGYPT: A PROCESS ANALYSIS**

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Working Paper No. 4

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Abstract

This paper aims at investigating the challenges of achieving educational quality in public primary schools in Egypt with a specific focus on readability issues. The study employed a qualitative approach to research, using semi-structured interviews. The findings of the research suggested that the main reasons affecting the efficiency of the educational quality efforts and thus readability proficiency include: (1) poor school resources including oversized classes and poor quality of teachers; (2) adopted readability curricula and assessments are not in use; (3) contradicting laws and regulations, such as the decree on automatic transfer of students; (4) lack of coordination between the different entities mandated with achieving educational quality, amongst others. The study recommended increasing public funding of the education sector to cover quality interventions from the state budget; enforcing the use of the readability curricula and the Early Grade Reading Assessment (EGRA) tools, as well as adopting pro-poor policies in disadvantaged communities.

Key words: Primary education; education quality; class size; teacher; literacy curricula; resources

1. Introduction

As a result of the review of the Millennium Development Goals (MDGs), educational quality was one of the issues that gained importance over the past decade. The MDGs review showcased a need to move from a quantitative education for all strategy to a focus on the quality dimensions in education. The newly adopted Sustainable Development Goals (SDGs) in 2015 responded to this need by focusing more on achieving educational quality without neglecting enrollments. Goal 4 of the SDGs addresses the inclusiveness and equitable access to educational quality. The targets of this goal also reassured the importance of access to a universal free education for both primary and secondary education (United Nations, n.d).

Reading and writing skills in public schools are a global challenge that are reported on in both developed and developing countries (Darling-Hammond, 2000; Ecalte et al, 2006; Jakob, 2007). In developed countries such as the United States and France, amongst others, reading and writing skills of primary students are a challenge especially in poor and minority districts.

There is an increased global attention to investigating the underlying causes affecting reading and writing skills, and thus student achievement rates. Factors affecting reading and writing skills in research include but are not limited to: (1) school resources such as infrastructure (Chudgar et al., 2015; Murillo and Román, 2011; Uline and Tschannen-Moran, 2008); (2) teachers' quality (Darling-Hammond, 2000; Hanoushek, 1991; Harris, 2011; Rockoff, 2004) ; and (3) class sizes (Alumalla, 2015; Ecalte et al., 2006; Finn and Achille, 1990; Krueger, 1999; Krueger and Whitman, 2001).

Achieving educational quality has been a major concern for most Middle East and North African (MENA) countries (Chapman and Miric, 2009). Chapman and Miric (2009) argued that, despite the various attempts to improve educational quality, reports still indicate a gap with respect to students' achievement rates. Mastering reading and writing skills in primary school is a pre-requisite for succeeding in subsequent years (Piper *et al.*, 2014, 2015; Scarborough *et al.*, 2009; Snow and Mathews, 2016). In Egypt, 35% or more students in public primary schools do not know how to read or write (OECD, 2015; Ministry of Education, 2014; UNDP and MoPMAR, 2015).

The objective of this research is to investigate the causes of the challenges associated with education in Egypt with a specific focus on reading and writing skills of public primary school students. Challenges of educational quality in Egypt are reported to be poor student achievement rates, dropout rates, as well as the lack of students' ability to read and write. The main purpose of this research is to understand the missing links between the educational quality efforts and the still existing challenges, such as mastering reading and writing skills amongst public primary school students. More specifically, the research aims at further investigating the educational quality enabling environmental inputs that affect mastering reading and writing skills in public primary schools in Egypt. In addition, and in order to respond to the main research objective, the research uses both desk based review methodology as well as in-depth interviews in

understanding the systemic challenges affecting reading and writing skills. Similarly, data of both primary and secondary sources were reviewed and results of in-depth interviews with key stakeholders were analyzed in order to identify the efforts and interventions led by state agencies to address the systemic challenges.

2. Methodological Considerations

This research adopted a qualitative research methodology. Primary and secondary sources were used to identify the main challenges encountering basic public primary schools in achieving educational quality. Empirical data was collected using in-depth interviews to further understand the implications of the current existing educational quality challenges and interventions. The geographic location selected for this research was Beni Suef governorate. Beni Suef is one of the governorates lagging behind with respect to the Human Development Indicators and was identified in housing the poorest villages in Egypt (Handoussa, 2010; ENID, 2015). Moreover, it is one of the governorates that received focus from international donors on educational quality interventions for the past two decades due to the poverty status of some of the villages (ENID, 2015). Interviews were conducted with representatives from the Ministry of Education at the national level and, in Beni Suef, interviews were conducted with representatives of Non-Governmental Organizations (NGO), school directors, school teachers and representatives from the National Authority for Quality Assurance and Accreditation of Education (NAQAAE). Primary and secondary sources were also used to analyze and validate data.

3. Global Educational Quality Challenges and Interventions

This study adopts the humanist approach in defining education quality. The reason for the selection of the humanist approach is that it focuses on the effectiveness of the education process and how it impacts students' achievement. In contrary to the economist approach in defining educational quality, it mainly focuses on the cost effectiveness of the education process. Thus, it was not selected, as this is not the focus of this study.

3.1 School Resources and Achieving Quality

There is increased attention to research the link between school resources and student achievement (Goe, 2007; Hanushek, 1991; Ng, 2015; Pieper *et al.*, 2014; Rockoff, 2007; Snow and Matthews, 2016).

The debate on whether school resources or the socio-economic background of students affect their achievement in public schools started with the report issued by Coleman in 1966 (Wong and Nicotera, 2004). Despite the fact that Coleman did not offer any policy recommendations, the report influenced the debate that socio-economic backgrounds of students affect their achievement level more than increasing school resources. Coleman's classic article concluded that despite the reality that minority schools suffer from less educational facilities, fewer quality teachers and less extra-curricular activities, when compared with majority students

who suffered from the same circumstances, the socio-economic backgrounds of these students had the greatest effect. Similarly to Coleman (1966), Hanushek (1971, 1999, 2005, and 2007) also argued that school resources have no influence on student achievement.

In contradiction to this assumption, several scholars (e.g. Chudgar *et al.* (2015); Greenwald *et al.* (1996); Krueger (1999; 2001); Murillo and Román (2011); Uline and Tschannen-Moran (2008) confirm a significant positive correlation between school resources and enhanced student achievement.

Murillo and Román (2011) argue that although no significant relation was found in research in developed countries between infrastructure and student achievement, these results differ in developing countries. They use the results of the Second Explanatory and Comparative Study (SERCE) conducted in Latin America between 2005 and 2009. The study results confirm a strong correlation between basic services, such as water, electricity and bathrooms and enhanced student achievement rates. Similarly, the availability of facilities such as sports grounds, labs, libraries and computer rooms showed a positive relationship to classroom learning.

A study from India by Chudgar *et al.* (2015) argued that schools in poor countries with extracurricular facilities and activities help enhance student achievement, especially in mathematics. They use data from one district that includes 190 villages to identify school resources that affect student achievement. One of the limitations of the study as identified by the authors was generating data from one locality which is not a representative sample. The study is however implemented in a poor region with disadvantaged students which might inform future larger scale studies. The study also argues that basic infrastructure services such as water, toilets and hygienic environments are important together with other variables in affecting student achievement.

3.2 Teachers Quality and their Relationship to Reading and Writing Skills

There is a growing consensus among educational scholars focused on reform that enhancing student achievement is attributed to teacher quality (Darling-Hammond, 2000; Harris, 2011; Hanoushek, 1991; Rockoff, 2004). A systematic review of the literature on how teacher quality is defined concluded that, like educational quality, teacher quality represents a framework which includes different variables (Darling-Hammond, 2000; Goe, 2007; Strong 2011).

Goe (2007) developed a framework that defines teacher quality based on his theoretical review of literature. He defines teacher quality as a process that includes: “Enabling: Teacher qualifications; Teacher characteristics. Processes: Teacher practices; Outcomes: Teacher effectiveness” (Goe, 2007, p.8). Teacher qualifications refer to their former education or certification. Teacher characteristics are their attitudes, race, gender and beliefs. Teacher practices include both in-and outside of class room practices including preparing

for classes, instructing techniques, managing in class students and the space of interaction with students. Teacher effectiveness is defined as the status of student achievement in comparison to the expected gain in achievement (ibid).

Darling-Hammond (2000) argues that teacher qualifications “background and expertise” affect student achievement rates, especially with respect to enhancing reading and mathematics skills in primary schools. Moreover, she argues that although there is a correlation between students’ socio-economic backgrounds and their achievement levels, these are not as significant as the teacher qualifications findings. Following the same school of thought, Rockoff (2004) determines that raising test scores in reading affects student achievement in later years. His findings are based on panel data sets from student test scores in various subjects that measure the student performance against different teachers. In addition, Rockoff (2004) also concluded that teachers’ former experience teaching the same subject affects students’ performance.

From a different standpoint, Harris (2011) argues that ongoing teacher training and development has a direct effect on teacher quality, and thus on student achievement, rather than their former studies or certifications. He uses detailed panel data from all public schools records in Florida for grades 3-10 in mathematics and reading between the school years 1999-2000 and 2004-2005. The study confirms a correlation between teacher experience “learning by doing” and student achievement. He argues that formal training or degrees do not affect student achievement, especially for primary school students.

Looking at similar studies on teacher qualifications and their effect on student achievement from Africa, Piper *et al.* (2014) confirm that teachers’ on the job training has a direct effect on improving reading skills of students in public primary schools in Kenya. Their findings are based on their evaluation of the Kenya Primary Math and Reading (PRIMR) Initiative after one year of program implementation. PRIMR was a research program implemented in 2012 in 1,384 schools. The program focused on improving English, Kiswahili, the mother tongue, and mathematics skills of children in first and second grades enrolled in public schools. The study randomly assigned treatment and control schools. Treatment schools used improved curriculum, open ended questions, instruction techniques, and 1:1 student to books ratios in comparison to 3:1 ratios in control schools. Adjusted text books were used and the program used stories in reading sessions that were relevant to the students from their local contexts. The mid-term evaluation by Piper *et al.*, (2014) confirmed an improvement in reading skills in treatment schools.

3.3 Class Sizes and Their Relation to Reading and Writing Skills

Finn and Achille (1990) debate that smaller class sizes in earlier grades have a direct result on improving student achievement in reading and mathematics skills. Moreover, they confirm the correlation to students’ performance in smaller class sizes in the following years. They use data from a large-scale controlled randomized experiment conducted in Tennessee, the United States of America, for four years starting from

1985. The experiment is known as the Student-Teacher Achievement Ratio (STAR) experiment and was one of the largest longitudinal cohort study.

Building on the STAR experiment results, Krueger and Whitman (2001) note that students who attended smaller class sizes in earlier grades maintain their enhanced student achievement level at high school. They analyze the effect of students who were subscribed to smaller classes to their test scores in high schools. The study concludes that attending small sized classes from earlier grades had a positive relationship on the same students' performance at later years. Similarly, Biddle and Berliner (2008) confirm that class size reductions have a direct positive effect on student achievements, especially for disadvantaged groups. Their study was based on a systematic review of the main class size reduction experiments findings conducted in the United States. These were the Tennessee STAR program, the Wisconsin's Student Achievement Guarantee in Education (SAGE) program and the California class size reduction program. They argue that the gains of smaller class size reductions are more effective in classes with less than 20 students.

Looking at similar studies from the region, in Saudi Arabia, Almulla (2015) conducted a mixed approach of a qualitative-quantitative study on the relationship between class sizes and student achievement. He argues that teachers in bigger size classes use the typical lecturing technique, while teachers in smaller size classes resort to group work and pairing. Moreover, according to him, teachers in smaller size classes tend to pose open ended questions that stimulate student thinking. In bigger classes they resort to close ended questions.

3.4 Programs Addressing Reading and Writing Skills

Developing age appropriate reading and writing skills is key for primary schools students to be able to succeed in following years (Snow & Matthews, 2016). Several scholars (e.g Piper *et al.* (2014, 2015); Scarborough *et al.* (2009); and Snow and Mathews (2016)) argue that students who face literacy skills challenges at early grades have more difficulties when they enter secondary school. Early grade reading and writing disabilities are linked to poverty and poor quality instruction skills (Piper *et al.*, 2015).

Curricular content together with teacher quality and in class instruction were found to be correlated to early grade reading and writing proficiency. These are some of the reasons behind dropout rates in the United States (NRP, 2002; Snow and Matthews, 2016). Snow and Mathews (2016) further argue that the current curriculum in the United States mostly focuses on improving a set of constraints skills. Constraints skills are identifying the letters of the alphabet or common spelling rules. Snow and Mathews (2016) point out that these are basic skills that can be easily learnt. They discuss that in order for students to succeed in subsequent years, a requirement in developing curriculum that works towards improving the unconstrained skills must be undertaken. Unconstrained skills are vocabulary and subject knowledge (Ibid).

In a study developed to identify the effectiveness of literacy interventions on students at risk with reading and writing skills, Vaughn *et al.* (2003) offered supplementary reading classes to 24 students for intervals ranging from 10 weeks to 30 weeks. Out of the 24 students, 23 maintained their reading fluency scores in regular classrooms. The results of the study argued that introducing supplementary reading classes are effective. This study however did not discuss the factors affecting learning disabilities of those students and mainly offers a solution to deal with early grade reading and writing disabilities.

In Kenya, the final evaluation study of PRIMR program in 2015 concludes that the program has proven to be effective with respect to enhancing reading and writing skills (Piper *et al.*, 2015). One of the interventions of the program was introducing an adjusted literacy curriculum in treatment schools, in addition to training the teachers and reducing the student to book ratios. The final evaluation concluded that in comparison to the baseline conducted at the beginning of the program, students have showed enhanced literacy skills. It is, however, yet unknown to what extent these gains were maintained.

4. The Case of Egypt

Education in Egypt is acknowledged to be a right for all citizens, as stated in the constitution. In 1990, Egypt ratified the Convention on the Rights of the Child issued by the United Nations Office of the High Commissioner for Human Rights. The convention demands for universal access to education. In addition, Article 28 specifies that signatories agree to make public primary education compulsory and free to all (ONHCR). To date, the 2014 Egyptian Constitution (Article 19) requires free education as the right of every citizen. Article 19 of the 2014 Constitution increases the age of compulsory education to 12 years and to include free education up to high school. “Education is compulsory until the end of the secondary stage or its equivalent” and “the State shall provide free education in the various stages in the State's educational institutions according to the Law” (Egyptian Constitution, 2014, p.10).

Abdalla (2008) and Louvelak (2012) argue that demographic factors along with urban migration were one of the main reasons affecting the increased demand on primary school enrollment. In 1986, nearly half (43.9%) of Egypt’s population lived in urban areas, largely in the cities of Cairo and Alexandria, which affected the schools’ quality in urban areas (Louvelack, 2012). With the increase of population and the demand on public schools, the government was unable to continue to meet educational quality amongst other public services (Ibid). For the school year 2014/2015, net enrollment rates in primary education was 91% percent (Ministry of Education, 2015). ¹

¹ Net enrollment rates is defined as: “The number of children of official primary school age who are enrolled in primary education as a percentage of the total children of the official school age population” (UNESCO, 1997, p.1).

The efforts of government agencies has essentially been to increase enrollment rates and to attain those students in order to reach global enrollment rates. Less attention was given to other educational dimensions, such as educational quality (Coachran 1986; El Baradei, 2015). In 2015, the quality of primary education in the World Competiveness Report was scored at 2.1 out of 7. This ranks primary educational quality in Egypt at 141 out of 144 participating countries (World Competiveness Report, 2015) which highlights the deteriorated quality of public schooling in Egypt.

In many cases, as a result of the low quality of education, students repeat years because they either don't attend school or fail their exams (El Baradei, 2015; Ministry of Education, 2014), which represents a burden to the annual budget. Moreover, although basic primary education is considered free, due to the low quality of education, families see the need to substitute formal education by seeking private tutoring (El Baradei, 2015).

4.1 Challenges Pertaining to Educational Quality Enabling Inputs in Egypt

4.1.1 The Demand on Teacher Quality

The government has adopted a continuous teacher development and ongoing training strategy (UNESCO and Ministry of Education, 2015). The importance of focusing on teacher training and development is a result of hiring teachers that still hold medium qualifications (Ibid). Almost 30% of pre-university teachers do not hold educational qualifications (Ministry of Education, 2014). The quality of trainings has been criticized by teachers, especially that available budgets are not sufficient to cover the costs and are left for local resources (Ibid).

Furthermore, Abdel Fattah (2015) argues that the newly introduced law 155/2007 on the teachers' cadre has resulted in hiring high-qualified teachers only when required. The Ministry of Education had stopped hiring teachers for a period of time, and as an attempt of decentralizing the system it transferred this responsibility to school management, Board of Trustees (BoT), and teachers (OECD, 2015; Abdel Fattah, 2015). As a result, social workers are not dedicated to their original work and are instead teaching in order to fill the teacher shortage gap (Abdel Fattah, 2015).

4.1.2 Class Sizes in Public Primary Schools

The General Authority for Educational Buildings (GAEB) issues guidelines and oversees all schools' building and maintenance. Their guidelines indicate that current class sizes should not accommodate more than 35 students (GAEB, 2017).

In 2012, the student to teacher ratio varied from as low as 16.2 in Damietta to 46.7 in 6th of October City (CAPMAS, 2012). In 2016, the Central Agency for Public Mobilization and Statistics (CAPMAS)

“Egypt in numbers statistics” also reported a class density of 44.2 (CAMPAS, 2016). Hunt *et al.*, (2010) indicate a higher class density rate than those reported by both the Ministry of Education and CAPMAS reaching up to 60. As a result, 4.45% of schools operate in more shifts (UNESCO and Ministry of Education, 2015). In addition, class densities are also affected by the shortage of teachers, with some schools resorting to merging classes as a result of the lack of teachers (Abdel Fattah, 2015).

4.1.3 Early Grade Literacy Curriculum

Primary school curriculum has been criticized for not promoting creativity and only focusing on memorizing using traditional teaching methods in the form of lecturing (Louvelak, 2012; Ministry of Education, 2014; OECD, 2015; UNESCO and Ministry of Education, 2015). The curriculum is not interactive, despite the attempts to introduce more in class activities, and textbooks are the main source of information for students who focus on memorizing the content to pass exams (Ministry of Education, 2014). It is not designed to reflect the reality of local contexts, which makes it difficult for students to fully comprehend the situation (Abdel Fattah, 2015).

Teachers are usually not invited to the debate on enhancing the curriculum, which affects their ownership and willingness to adopt and implement it (UNESCO and Ministry of Education of Education, 2015). The 2014 Survey of Young people in Egypt found that “While 40.4% of students report teachers “always” only want students to memorize, just 10.5% report that the teachers always encourage students to form their own point of view, and only 9.5% report that the teachers always encourage students to express their opinions” (Roushdy *et al.*, 2015, p.7).

4.2 Educational Quality Improvement Interventions

Recognizing the importance of educational quality and following the national and international development trends, the Ministry of Education in Egypt vision states that it “seeks to promote the pre-University education system to achieve greater access and absorption, through a high- education quality system, aiming at building the Egyptian citizen in accordance with the civilization and human values using a participatory, decentralized system that depends on active and productive community participation” (Ministry of Education, website accessed February 15, 2017).

Addressing educational quality challenges has gained interest since the development of the Ministry of Education Strategy of 2000-2015, followed by the new strategy 2014-2030 (Ministry of Education, 2000, 2014). Analyzing both strategies, accessibility and quality of education have been the main dimensions in developing program interventions. Attention has been given to enhancing the quality of teaching and teachers, and some initiatives have focused on enhancing school governance mechanisms. According to the 2014-2030 pre-university strategy, the main challenges to achieve higher quality education in Egypt include the

deteriorating status of education quality in primary schools, lack of technologies in primary schools, weak reading, writing and mathematics skills from first through third graders of primary schools, class sizes, and lack of qualified teachers, amongst other challenges. The focus of the new strategy is on achieving an equality to the educational opportunity by adopting pro-poor policies.

Correspondingly, the Egypt 2030 Strategic Development Strategy is in alignment with the Pre-University 2014-2030 Strategy where achieving quality education is at the heart of the Education and Training pillar. Furthermore, the SDS 2030 aims at enhancing Egypt's educational quality rank to reach 30 instead of the current rank of 140 (SDS Egypt, 2030).

The strategies referenced key interventions to address quality education challenges such as (1) The National Authority for Quality Assurance and Accreditation of Education, responsible for assessing and accrediting schools for education quality; (2) the Professional Academy for Teachers; Training and Quality Units; and Teacher's First Initiative, responsible for addressing the issue of teacher quality and accreditation of teachers; (3) the General Authority for Education Building, responsible for addressing school infrastructure and class sizes; (4) the Center for Curriculum and Instructional Materials Development and Readability Units, responsible for addressing readability curricula. Despite these many interventions aiming at enhancing education quality, these entities or interventions were found to only have been effected when funding existed to support their efforts.

5. Discussion of the Findings

The entry point of this research argues that there are many interventions that already addressed these challenges. Thus the study worked towards understanding why these challenges still exist. The importance of this study is that it offers new dimensions for policy makers when designing interventions that seek to address educational quality challenges. The literature review section argued that in order to achieve quality education and enhance student achievement, including reading and writing proficiency, governments and policy makers need to give attention the following:

- 1- Reduction of class sizes as some of the literature recommends 20 students per class and others recommend a class size of 25 (Alumalla, 2015; Ecalle *et al.* , 2006; Finn and Achille, 1990; Krueger 1999; Krueger and Whitman, 2001);
- 2- Offering ongoing training and development opportunities for teachers (Darling-Hammond, 2000; Hanoushek, 1991; Harris, 2011; Rockoff, 2004);
- 3- Enhancing the school environment's basic services, such as water and access to toilets (Chudgar *et al.*, 2015; Murillo & Román, 2011; Uline & Tschannen-Moran,2008); and

- 4- Adopting literacy curricula that merge both phonetics and alphabet instruction techniques, as well as offering more readability classes for students at risk (Piper *et al*, 2015; Snow and Mathews, 2016; Vaughn *et al.*, 2003).

Moreover, attention was given to the quality of primary stage education with a specific focus on the mother tongue and mathematics as pertinent steps to succeed in successive years.

The analysis of data concluded that state agencies are aware of the dimensions of the challenges of obtaining quality education and have taken steps towards addressing those challenges. The main argument here is that the interventions adopted by the government were a result of donor interventions. The analysis of primary and secondary sources as well as empirical data concludes that most of the interventions adopted by the state were not sustainable post projects ends. The establishment of many of the educational quality bodies including the National Authority for Accreditation of Education, the Professional Teacher Academy, the Center for Curriculum and Instructional Materials Development and Readability Units were results of ongoing development projects at the time they were established. The respondents argued that effectiveness of these institutions has deteriorated since the funding for these projects has ended.

The governments' approach towards enhancing quality education has been focused on enhancing the quality of teachers. Several bodies were established to address this issue. The main concern here is that with the multiple entities responsible to develop training materials and train teachers, it is not clear how coordination between the different entities takes place. An example of entities responsible for training teachers are the Professional Teachers Academy, the Quality Assurance and Accreditation Departments, the Training and Quality units at the school level as well as the Readability units at the local level. Teachers and school directors indicated a lack of coordination between the entities, which resulted in receiving the same training topics several times.

Giving attention and resources to conducting on-the-job training is more important than offering traditional training and capacity building opportunities. Budget allocations need to be identified to offer on-the-job training opportunities and traditional training when needed. The engagement of Arabic language instructors and readability unit instructors in the training process and on-the-job mentoring approaches is key to the success of trainings that aim at enhancing readability outcomes of students. Additionally, linking student achievement to teacher promotion and salary increases, while using accurate assessment tools, is a solution to overcome the challenge of poor in-class instruction techniques. Poor in-class instruction is a result of teachers focusing on private tutoring to increase their income.

Reducing class sizes to meet the 35 class student sizes as instructed by the GAEB is an important step to enhance student achievement. A 35-student class size is still more than the 20-25 ratio recommended globally. Reducing class sizes does not necessarily require building more classes nor schools.

The results of the empirical study as well as the review of primary and secondary sources both confirm there is a miss-distribution of resources. There is a need to align the annual plans with the national census, or at least adopt pro-poor policies. This is an important step to avoid building schools in under-crowded areas and instead channel these funds to areas with overcrowded schools.

A cross-cutting dimension affecting educational quality is the funding of education quality programs, especially the funding that is allocated for public resources. The Government of Egypt adopted policies that aimed at reducing class sizes; hiring more teachers and enhancing teacher instruction skills, as well as developing teaching kits to support interaction instruction methods. These interventions were found to have been sustained only during donor funded projects and have not continued or have deteriorated quality wise post-project end.

To date, the government funding practices are geared towards an equal distribution of funds policy, rather than a pro-poor policy that targets poor communities with additional resources. As a result, poor school quality with low students' achievement rates and high dropout will remain the same unless the ministry maps them out as part of the pro-poor policies. Though the Pre-University Education Strategy of 2014-2030 sets an objective of giving more focus to marginalized and poor communities, this has not been translated into action plans.

The Ministry of Education needs to revisit the amounts required to be paid for quality accreditation. The amount to be paid for NAQAAE for primary schools to be accredited is twenty thousand Egyptian Pounds. The analysis of the findings indicated that although district level public education quality authorities have identified schools that are ready for accreditation, they received instructions to accredit fewer schools. This instruction was due to the lack of funding to apply for accreditation.

Laws and decrees regulating the education process need to be reviewed, especially those that are not enacted or enforced. An example of decrees that have had a negative impact on the educational quality is decree 313/2011. The decree allows students to automatically get promoted to the following year after failing a primary grade twice. Consequently, students reach up to sixth grade without attending school and without passing exams. Similarly, other laws and decrees need to be reviewed to identify the overlap of mandates between the different educational quality entities and to regulate the process of interaction between them.

The state needs to re-visit the decision issued by the former minister of education to replace the EGRA assessment tool with a piece of dictation. Respondents confirm that using a piece of dictation as an assessment tool to identify the level of reading and writing proficiency has resulted in higher proficiency rates results than the EGRA tool results used in the same schools with the same students.

Furthermore, ongoing reviews and edits of the readability curriculum need to be conducted while ensuring the inclusion of different relevant actors in the process. These include teachers who teach the curricula, Arabic language instructors who mentor teachers, as well as the Center for Curriculum and Instructional Materials Development. Their involvement is critical to ensure the ownership and usage of the curricula. Collected primary data evidence that teachers resort to the traditional teaching techniques that focus on the alphabet because they do not understand the new curricula nor the importance of abiding by it.

6. Conclusion and Recommendations

This study aimed at investigating the missing links between the educational quality interventions to better address educational quality challenges, including the existing one. Specific focus was given to reading and writing proficiency amongst students of public primary schools. Education quality challenges in Egypt were flagged out through various research, including by the Ministry of Education. The Ministry of Education with support from international donors have been working towards addressing these challenges. In investigating the education quality gap, sub-questions were introduced at aiming to respond to the main research questions. The sub-questions focused on mapping out existing education quality challenges; existing education quality interventions led by the Ministry of Education and the relevant public utility and how the Government of Egypt can enhance its efforts to close the gap exist in ensuring quality of education.

6.1 Recommendations

6.1.1 Education Quality Public Funds

It is recommended to increase education quality funding from public funds to ensure sustainability. Until this can be achieved, the plan to resort to private funding and donors can be used but has to have a clear phase out plan. Moreover, a pro-poor funding program needs to be introduced to ensure that existing poor quality schools can actually enhance their performance. The current education budget is set at 4% of the GDP with 82% of the budget spent on salaries (Ministry of Finance). The pre-university educational strategy identifies donors and the public-private partnership as additional resources to implement educational programs that focus on enhancing quality education and increasing accessibility of schooling. These types of interventions have proven to not be sustainable.

There are at least three different entities that provide either traditional training opportunities or on-the-job training for teachers. These entities do not have enough funds to conduct these trainings, and accordingly, they have become entities that house staff that are unable to perform their mandates as most of their budgets are spent to cover salaries.

Similarly, enough funds need to be allocated to ensure the accreditation of schools through NAQAAE. NAQAAE education quality assessments and accreditation are important steps towards enforcing

education quality. NAQAAE receives the accreditation amounts to cover their own expenses. This is a good approach to ensure their sustainability. The amounts might be worth revisiting to check if they can be reduced to ensure a smoother accreditation process.

6.1.2 Readability Curricula

It is important to go back to using the EGRA readability assessment tool that supports assessing reading and writing proficiency. Readability challenges have been identified as one of the main outcomes of the poor education quality by the Ministry of Education itself. Interventions including establishing a new literacy curricula for primary school and new testing measures were not sustained. Currently, an EGRA assessment tool has been replaced by the Ministry of Education with a dictation piece. As a result, teachers are inclined to drop the interactive learning techniques. The new assessment tool might result in the resurface of readability challenges in the coming period.

Similarly, and in order to continue implementing the interactive curricula, teachers, especially Arabic Language instruction teachers, have to be involved in the design of the curricula to ensure their buy-in. Arabic instructors are the ones offering mentoring to Arabic teachers on the curricula. They need to understand and have the ability to implement interactive methodologies in order to ensure Arabic teachers also abide by the curricula.

6.1.3 Laws and Decrees Hindering Education Quality

A review of all laws and decrees that affect educational quality needs to be conducted to ensure these laws do not contradict each other. Moreover, a study on the effect of decree 313/2011 on reducing drop-out rates needs to be conducted. It is argued that the decree affected education quality negatively in comparison to the achievements in reducing drop-out rates. Teachers confirmed that they do not have any authority over students because students know they will pass the year anyway. Similarly, there is a need to enforce Ministerial Decree 592/1998 on prohibiting private lessons by the education staff. Clear sanctions for teachers who offer private lessons need to be identified. Currently, the decree only stipulates disciplinary sanctions without mentioning what they are exactly.

A revision of the mandates of the different entities responsible for educational quality needs to be conducted. Ensuring a division of tasks between the different entities and ensuring coordination between them is an important step towards ensuring their efficiency.

6.1.4 Education Quality Needs Assessment Plans

It is crucial for the government to identify the status of education quality in schools and develop a plan to address education quality challenges. Additional attention needs to be given to schools that are

located in poor communities. Having a needs assessment plan for schools in marginalized communities can support the adoption of pro-poor funding policies recommended earlier in this section.

6.2 Limitations to Conducting the Research

Although this research used empirical data from Beni Suef, future research can be employed to validate the findings from other governorates. Cross-referencing the findings with other governorates will be of value for future research to make a stronger argument about the findings. In addition, for the purposes of this research, parents' feedback was not collected. Future research can involve interviews with parents and schools BoTs to include their feedback. Similarly, one of the recurring trends that was not assessed in this study was the aid effectiveness or sustainability of projects post-project end. This can be left for future research to document to what extent these interventions were successful when donor funding was non-existent.

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