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Active-Learning Pedagogies as a Reform Initiative: The Case of Egypt



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INTRODUCTION

This study examines active-learning pedagogies¹ as a key aspect of educational reform in Egypt as the country shifted its attention from a focus on quantity to quality. We trace this process, which also involved participation by international (multilateral, bilateral, nongovernmental) organizations, drawing upon our review of published research as well as official national and international documents. In addition, we report the findings from our analysis of qualitative and quantitative data, illuminating challenges, opportunities, and outcomes of efforts to implement active-learning pedagogies in government-run primary, preparatory, and secondary schools in Egypt.

We sketch the cultural, political, and economic context prior to discussing multilateral, bilateral, and national discourses of improving educational quality, giving particular attention to calls for transforming instruction from teacher-centered, knowledge transmission approaches to active-learning, student-centered approaches. We also describe international-organization-supported Ministry of Education initiatives to promote active-learning pedagogies, offering a more detailed portrait of the USAID-funded Educational Reform Program. Finally, we present quantitative classroom observation data and qualitative focus group interview data to assess the extent to which change has occurred in teachers' behavior in classrooms.

CULTURAL, POLITICAL, AND ECONOMIC CONTEXT OF EGYPT

The Arab Republic of Egypt today includes a territory of 1,001,450 square kilometers. Its population was estimated in July 2007 to be more than 80,300,000, most of whom are Arabs, with small minorities of Bedouins and Nubians. Muslims constitute 90% of the population, though there are some cultural/political differences among Muslim groups (Ramadan, 1986, Ibrahim, 1987; Voll, 1994). Approximately 6% of the population is Coptic Christian. There are also important cultural differences along rural/urban and social class dimensions. The vast majority of Egyptians live along the banks and in the delta region of the Nile River; thus, while its overall population density is not very high (73 people per square kilometer), Egypt's large cities (particularly Cairo to Alexandria) are densely populated. The governorates surrounding these two cities are considered to be "urban," while the other governorates are considered "rural."

¹ "Active-learning" (or what some have termed "progressive" or "student-centered") pedagogies constitute a model of teaching that highlights "minimal teacher lecturing or direct transmission of factual knowledge, multiple small group activities that engage students in discovery learning or problem solving, and frequent student questions and discussion" (Leu and Price-Rom 2006, p. 19). "Active-learning" pedagogies can be contrasted with "formal" or "direct instruction" approaches emphasizing teacher lecturing or direct transmission of factual knowledge (Cuban, 1984, p. 3; Spring, 2006, p. 6). There are two dimensions along which active-learning, student-centered pedagogies and teacher-centered, direct instruction pedagogies can be distinguished: behavioral and cognitive (see also Barrow et al., 2007; Ginsburg, 2006; Mayer, 2004). The behavioral dimension of active-learning pedagogies focuses on the degree to which instructional practices enable students to engage in verbal or physical behavior, learning by doing (a la John Dewey, but also Confucius, Socrates, and Pestalozzi), while the cognitive dimension highlights the degree to which teaching strategies enable students to engage in various forms/levels of thinking and construction of knowledge (a la Piaget and Vygotsky).

Although Egypt has a long history, dating back before the Pharaohs, its modern history is said to start in 1805, when Mohammed Ali assumed political leadership in Egypt, ending Napoleon's French occupation and re-establishing Ottoman Empire control (Williamson, 1987, pp. 61-62). Mohamed Ali's heirs comprised Egypt's royal family, even during the periods of British Occupation (1882-1922) and "semi-independence" (1922-52), but their reign and British rule were ended by the "free officers'" revolution in 1952. Currently, Egypt is a republic organized nationally as a bi-cameral system (People's Assembly and Shura Council), with increasing authority and responsibility in certain areas, including education, being given to governorates (*muhafazat*) and school communities – as well as, to a lesser extent, local/city authorities (*markaz*) – as part of decentralization initiatives. The members of the national legislative bodies are elected, recently through multi-party votes, though these bodies and the presidency continue to be dominated by the National Democratic Party. Mohammed Hosni Mubarak (1981-present) is the third person, in addition to Gamal Abdel Nasser (1952-1970) and Anwar Al-Sadat (1970-1981), to serve as president since the republic was established.

At the onset of Egypt's modern history, Mohammed Ali promoted agricultural and industrial development (Cochran, 1986, p. 4) and pursued "a high degree of 'economic independence' from the Ottoman Empire (Amin, 1995, p. 108). However, this strategy relied "increasingly on foreign loans ... [leading to] a position of dependency on Europe" (Williamson, 1987, pp. 64-66). And, eventually, it was this "deservedly-famous Egyptian debt ... which led to its occupation by Britain" in 1884 (Amin, 1995, p. 17). With the 1952 revolution, Egypt nationalized foreign assets and implemented central planning of its "Arab socialist of the Suez Canal cities" (Williamson, 1987, p. 117). When Sadat became president after Nasser's death in 1970, and particularly after Egypt's "successful counter-attack on Israel during the October [1973] war," Egypt shifted away from Arab Socialism and followed "a new ['Open Door Policy'] to encourage private capital investment and stronger links with the West" (Williamson, 1987, p. 117). While this policy, which was continued during the first decade of Mubarak's presidency (1981-1991), led to increased trade with and aid from the U.S. and other capitalist societies, it also dramatically expanded Egypt's inflation rate and foreign debt (Amin, 1995, 2000). During and after the "first" Gulf War in 1991, Egypt received debt forgiveness from Gulf countries, the U.S., and international agencies, but at the cost of having to implement a World Bank and International Monetary Fund-specified structural adjustment program (Amin, 1995, p. 19). And despite the program being "successful in reducing both internal and external imbalances, its impact on economic growth has been disappointing as [by 2005] it did not raise average growth rate back to the pre-1991 levels" (UNDP and INP, 2005, p. 86).

EDUCATIONAL REFORM DISCOURSES: QUANTITY, QUALITY, AN PEDAGOGY

In this section we will sketch the goals and rationales for educational reform in Egypt, articulated by the Egyptian government and international organizations, including: multilateral intergovernmental organizations (e.g., UNESCO, UNICEF, and World Bank), bilateral intergovernmental organizations (e.g., the Canadian International Development Agency and U.S. Agency for International Development), and international nongovernmental organizations (e.g., Academy for Educational Development, American Institute for Research, and CARE). We will examine a longer history of Egyptian dialogue and focus on the discourses of international organizations beginning in the 1970s.

Egyptian Discourse, Pre-1952

Egypt has a long and rich educational history, including not only the celebrated Pharaonic times but also the period after the founding of Al-Azhar University in 975, when Egypt was “the center of Islamic scholarship, education, and thought” (Cochran, 1986, p. 1). While there is a strong pedagogical tradition associated with Al-Azhar and other qur’anic schools, which emphasized rote learning and memorization (Boyle, 2006), it is important to note a competing tradition among Islamic scholars and educators. For example, Günther (2006, pp. 375-76; emphasis added) reports that al-Jahiz (776-868) promoted using “deductive reasoning” as well as “memorization” and that Abu Nasr al-Farabi (870-950) elaborated a view of “instruction ... as an interactive process that ... ensures that both teacher and student *participate actively* in the process ..., allow[ing] the instruction to be *student-centered*, since the aim is for the teacher to facilitate the student’s own voyage of discovery.”

When Mohamed Ali assumed political leadership of “modern” Egypt in 1805, he established a secular education system alongside the Islamic Al-Azhar system, though both systems seem to have been dominated by teacher-centered, knowledge-transmission pedagogies. Unfortunately, subsequent political leaders – Abbas Hilmi (1849-54) and Said (1854-63) – “contributed to the decline of ‘modern’ *secular* education by closing” schools (Cochran, 1986, p. 4; emphasis added). And although the education system began to serve a larger proportion of the population during the rule of Khedive Ismail (1863-79), this momentum was halted during the British Occupation period (1882-1922).

During the Egypt’s “semi-independence” (1922-52), “great advances took place in public education at all levels” (Cochran, 1986, p. 1). For instance, the 1923 Egyptian Constitution stated that education should be free and compulsory for children aged 6-12, and between 1920 and 1930 the percentage of the government budget devoted to education rose from 4 to 11 percent (Cochran, 1986, p. 23; Williamson, 1987, p. 107). Nevertheless, while the system experienced significant quantitative expansion, questions of quality and relevance remained. A study published in 1951, for instance, concluded that “teaching in the schools ... consisted mainly of inculcating abstract or factual information, *learned by rote* in the traditional way, without any attempt to relate it to the problems of Egyptian society” (Radwan, 1951; quoted in Erlich, 1989, p. 97; emphasis added).

Egyptian and International Organization Discourses: 1952-1990

Following the 1952 Revolution, the Egyptian government headed by Gamal Abdel Nasser launched his “education revolution, [which] involved eliminating fees and expanding access to education at all levels” (Williamson, 1987, pp. 118-19). As officially stated in the Constitution, adopted in 1971 after Nasser’s death but clearly reflecting his administration’s commitments, “Education is a right guaranteed by the State [Article 18]. ... Education in the State educational institutions shall be free of charge in their various stages [Article 20]” (Arab Republic of Egypt, 1971).

While Anwar Al-Sadat, who served as Egypt’s second president (1970-81), moved away from some of Nasser’s “Arab Socialist” policies and established closer relations with the U.S. and Western societies and international organizations, his administration continued to invest in education. Certainly, progress in expanding access to education was achieved during the Sadat

era as a result of Egyptian initiatives – with and without foreign assistance. For instance, the Ministry of Education published “A Working Paper on the Development and Modernization of Education in Egypt” (MOE, 1979), which “argued that intellectual, political, social and economic developments within Egypt and the world had created an urgent need to change and update Egyptian education. Among the specific concerns raised by the MOE regarding pre-secondary education were the following: ... *rote memorization* dominates the learning-teaching situation” (quoted from USAID, 1981, p. 5).

Although the U.S. government had engaged with the Nasser government during the 1950s and early 1960s, for example, by supporting participant training programs in the United States for at least 445 Egyptians, the U.S. had cut off aid to Egypt in 1965 because of the latter’s pro-Palestinian foreign policy in the mid-1960s (Amin, 1995, p. 5). However, because of Sadat’s “Open Door Policy” and because of Egypt’s success in the October 1973 war against Israel and subsequent moves toward a peace treaty, Egypt obtained financial support for education from Western sources, including the United States. For instance: “In 1978, a [USAID] project proposal for improving the efficiency and relevancy of primary and secondary education ... [involved programs] which would change the style of teaching from those consisting of *lecture-assign-study-recite* to those emphasizing *learning to think-solve problems-apply* to real-life situations” (Cochran, 1986, pp. 96-99; emphasis added).

When Mohammed Hosni Mubarak became president (1981-present), the Egyptian government continued to promote quantitative growth in education, including extending compulsory education from 6 to 9 years, thus including primary and preparatory levels within “basic education.” Mubarak’s government also deepened and extended its relations with the U.S. and other Western development aid agencies. For example, based on discussions begun in the latter part of the 1970s, Egypt signed off on an agreement with USAID/Egypt to launch the Basic Education Program (1981-1989). The program focused mainly on school construction and instructional materials acquisition, but did give some attention to supporting “the Egyptian government’s efforts to improve the relevance, efficiency and effectiveness of basic education; ... to increase access to basic educational opportunities; and improve the *quality of instruction*” (USAID, 1981, pp. 1-2; emphasis added). An indication of what constituted instructional quality is signaled in the first evaluation of this program:

We were ... interested in how the class was organized and taught, how much of the class period was devoted to whole group teaching as opposed to teaching in small groups or individual teaching; whether the teacher or the students did most of the talking; whether the students asked lots of questions, or rarely asked questions; and ... the degree to which the *students* were *active* or *passive*, and the degree to which they were *self-* or *teacher-directed*. (Creative Associates, 1984, p. 26; emphasis added)

Nevertheless, USAID/Egypt’s Basic Education Program gave relatively limited attention to pedagogy and teacher training, focusing less on issues of quality (including instructional methods) and more on expanding access to schooling and developing the central Ministry’s organizational structure.² However, the latter part of the 1980s witnessed greater international

² To illustrate, although in 1986 “the second amendment to the Basic Education Program identified “improvement of MOE training capacity” as one of the areas to provide technical assistance, a subsequent

discourse on educational quality. Notable in this regard are the meetings leading up to and including the “World Conference on Education for All (EFA): Meeting Basic Learning Needs,” jointly organized by UNDP, UNESCO, UNICEF, and the World Bank, in Jomtiem, Thailand, 5-9 March 1990. Part of Article 4: Focus on Learning of the *World Declaration on Education for All*, to which the Egyptian government is a signatory, states: “*Active and participatory approaches* are particularly valuable in assuring *learning* acquisition and allowing learners to reach their fullest potential” (Interagency Commission, 1990, p. 5; emphasis added).

Egyptian and International Organization Discourses, 1991-2000

In 1991, at the end of his first decade in office, Mubarak (1991; printed in MOE, 1992, p. 5; emphasis added) called attention to what he termed “the crisis in education ... In spite of the fact that education exhausts the resources of the national budget and individual families, the end-product still remains poor and inadequate. Education continues to suffer from a predominant focus on *quantity* rather than *quality*.” The following year, the Ministry of Education (1992, p. 43; emphasis added) explained the Egyptian government’s conception of improving educational quality: “Education should, therefore, change from an outdated mode of teaching dependent on *memorization and repetition* to a new form of instruction, which would include the student as an active participant in the educational experience and an *active partner* in the *learning process*.”³

Following the 1990 EFA declaration and in the context of Egyptian officials’ growing focus on issues of quality and pedagogy, UNICEF (in cooperation with the Canadian International Development Agency) launched the Community School project in 1992. According to the contract signed with the MOE, the “community schools would provide *innovative pedagogies* for quality education [especially for girls] that would focus on *active learning*, ... and brain-based learning that would awaken all the child’s intelligences, including his or her spiritual and emotional ones” (Zaalouk, 2004, p. xi, emphasis added; see also Farrell and Connelly, 1998, pp. 6-7; Sidhom and Al-Fustat, 2004, p. 26).

The World Bank also contributed to the pedagogical reform discourse in Egypt, when in cooperation with the European Union it supported the Ministry of Education in initiating the Education Enhancement Program in 1996. This project was focused in part on “improving the quality of student performance,” defined as “significantly increas[ing] students’ achievement of basic skills and help[ing] improve their critical thinking skills” (World Bank, 1996, p. 2). This would be accomplished by “improving the *quality of teaching* and learning” and introducing educators to “*new methods of teaching*” (World Bank, 1996, pp. 2 and 8; emphasis added). While the above-quoted Project Information Document is somewhat ambiguous about how teaching quality and new teaching methods were conceived, the report of the program evaluation (PPMU, 2006) conducted a decade later makes clear that the preferred outcome was associated with an active-learning, student-centered versus formal transmission, teacher-centered instruction approach. This can be seen by examining the following variables studied in the evaluation:

“USAID/MOE management decision deferred the initiation of a teacher training activity until the educational planning and curriculum efforts were successfully launched” (Creative Associates International, 1991, p. 33).

³ In the context of an increasingly violent struggle between the government and radical Islamists, the document continues: “Emphasis on rote learning and memorization has produced individuals who are easily programmed and vulnerable ... contributing to the prevalence of many social problems, such as drug dependency, extremism, and fanaticism” (MOE, 1992, p. 43).

- *Educational techniques* to meet the needs of low achievers ... for example giving them a large number of questions ...
- *Frontal teaching* represents the time the teacher, on average, spends on frontal teaching.
- *Group work* represents the time the teacher, on average, spends on group work. ...
- *Teacher classroom management* refers to ... giving pupils the opportunity to express their opinions, distributing roles and responsibilities among pupils, encouraging pupils to depend on themselves ...
- *Learning strategies* ... refers to the extent to which teachers divide pupils into “cooperative working” subgroups, take into consideration to develop pupils’ critical thinking, train pupils in problem solving ... (PPMU, 2006, pp. 48-49)

USAID/Egypt also contributed to the reform discourse through its proposed “Strategic Objective Agreement between the Arab Republic of Egypt and the United States of America for Girls’ Education.” As stated in the “amplified description” for this project, which was not implemented because the MOE was not satisfied with the degree of consultation in its design and with its limited focus on school construction: “The Parties to this agreement will ... address both formal and informal educational barriers to increased girls’ participation in quality basic education, [by training] ... teachers to apply the *interactive teaching methodologies* and encourage problem solving by learners. ... Technical assistance will support the development of: a multigrade system that will deliver a primary school curriculum suitable for the one-room class using *student-centered methodologies* and emphasizing problem-solving and analytic skills” (USAID/Egypt, 1996, p. 10; emphasis added).

And in its *Implementing Egypt’s Educational Reform Strategy, 1996*, the Egyptian Ministry of Education (1996, p. 22; emphasis added) elaborated its conception of educational quality, when discussing education being a “national security” issue: “The democratic framework also necessitated that students through all stages of the educational ladder be exposed to different types of learning tools and materials, and taught necessary democratic skills, such as debate, tolerance for other opinions, *critical analysis* and *thinking*, and the significance of *participating in decision making*. Practicing democracy and functioning in democratic systems is therefore one of the priorities for schools and educational institutions.”

Furthermore, in referring to the continuing “crisis in education,” Hussein Kamel Bahaa El Din, who served as Egypt’s Minister of Education from 1991 to 2004, reinforces the points made in the early 1990s: “[I]t is imperative for us to change from a familiar system that emphasized *rote memorization* and passive learning to a new system that emphasizes *active participation*, with the learner a significant partner in the process. ... Thus we should give special attention to [teacher] training, ... exposing them to new methods of instruction, new educational approaches, and new educational technologies” (Bahaa El Din, 1997, pp. 107 and 119; emphasis added).

The document for another World Bank (and European Union) loan project, the Secondary Education Enhancement Project, which was signed by the Egyptian government in 1999, reiterated the concern for “improving quality and opportunity.” The project supported technical assistance for “redesigning the curriculum ... [and] designing instructional materials and in-service training for teachers to enable them to deliver the new curriculum” (World Bank, 1999, p.

7). Training, through both center-based entities and school-based units, was to focus on teachers, introducing them to “*new methods of teaching*” (World Bank, 1999, p. 8; emphasis added).

Moreover, 10 years after the World Conference on Education for All, UNDP, UNESCO, UNICEF, and the World Bank co-sponsored the “World Education Forum on Education for All,” held 26-28 April 2000 in Dakar, Senegal, and attended by representatives from many governments from around the world, including Egypt. The Dakar Framework for Action, “Education for All: Meeting Our Collective Commitments,” which was ratified at this meeting states in part: “Governments and all other EFA partners must work together to ensure basic education of quality for all, regardless of gender, wealth, location, language or ethnic origin. Successful education programmes require [among other things]: ... well-trained teachers and *active learning techniques*” (UNESCO, 2000, p. 17; emphasis added). One of the government officials who addressed those attending this international gathering was Egyptian President Mubarak. In his speech he emphasized the need to focus on quality (framed in terms of “excellence”): “As the ninth decade of the last century witnessed determination that education is for all, the first decade of the twenty-first century must witness, with more determination and insistence, strenuous efforts to achieve a new vision, i.e., “Education for Excellence and Excellence for All” (Mubarak, 2000; published in MOE, 2002, p. 67).

In 2000, in the wake of the World Education Forum in Dakar, USAID/Egypt initiated the New Schools Program (NSP), which in many respects mirrored the ideas contained in this non-implemented “Strategic Objective for Basic Education” grant (see above). Based on USAID/Egypt’s request for proposals, CARE, the Education Development Center, World Education, and several local partners submitted the following as part of their NSP proposal, in reference to I.R.2.2 – Improved Teaching and Learning Practices in USAID-Supported Schools: “The CARE Team will develop an effective training program for teachers and school officials and a complementary set of materials to improve the quality of instruction in single-grade NSP schools. The content of the CARE Team’s training program and materials will emphasize *active, child-centered learning methodologies* that help students develop strong problem-solving skills, and that align with, and fully support, the MOE curriculum, and the NSP focus on reaching girls” (CARE et al., 1999, p. 13 and p. 16; emphasis added). Such reform pedagogies were also mentioned in the mid-term evaluation of NSP (Aguirre International, 2003; emphasis added): “To meet its goal of improving educational quality,” the New Schools Program provided “teachers with support for trying new ideas, ... [including:] *cooperative learning*, some forms of *active learning*” (p. x) and for changing ... their teaching practice from *traditional, rote learning* to one in which children are working together, *participating actively* in their own learning” (p. 18).

Egyptian and International Organization Discourses, 2001-2004

In March 2001, USAID committed to supporting the Alexandria Education Reform Pilot Project, designed to “improve the quality of education in the Governorate of Alexandria ... through [among other things] ... enhanced training of teachers and school administrators” (USAID/Egypt, 2001, p. 1).⁴ The “Concept Paper” for this project stated that “most teachers ... over-emphasize the skill of memorization. ... [and need to be] trained for using *alternative methods encouraging student interaction*” (USAID/Egypt, 2001, pp. 4-5; emphasis added). The Concept Paper also

⁴ On this date a “Memorandum of Intent” was signed by USAID/Egypt, the Ministry of Education (MOE), the Governorate of Alexandria, and the Alexandria Development Center.

identified the following among the indicators of “upgrading teaching skills:” a) “teachers implement skills learned in training and b) students demonstrate increased proficiency in problem solving skills” (USAID/Egypt, 2001, p. 12). In the “Status Report,” which was distributed half way through the second school year of the project, USAID/Egypt (2002, p. 8) calls positive attention to the training courses provided for teachers, including: Effective Teaching Methods, Student-Centered Methods, Advanced Student-Centered Training—U.S., and Supervising Student-Centered Classes.

The phrase President Mubarak used in his address to the 2000 Dakar EFA conference, “education for excellence and excellence for all,” is repeated in the MOE publication, *Mubarak and Education: Qualitative Development in the National Project of Education* (MOE, 2002, p. 6), calling this “a major national target that directs its march according to the criteria of total quality in education.” This MOE (2002; emphasis added) publication also identifies the following as two key elements of the “future vision of education in Egypt:”

- Achieving a Learning Community ... Moving forward from a culture of *memorization* and repetition to that of originality and creativity. ... Such a community is also marked by the individual’s *active role in the teaching/learning process*” (p. 140).
- Revolution in the Concepts and Methods of Education ... The student’s role is not that of a *passive receiver*, but of a *knowledge-producing researcher* and an innovative explorer of technology. These methods addressed all types of intelligence as well as the senses and emotions of learners.” (p. 148)

Also in 2002, the World Bank published its Sector Review of Education in Egypt. In discussing “challenges ahead,” the document reports: “While Egypt has embarked on an ambitious and comprehensive education reform program, it faces numerous challenges to attain its educational goals. Foremost among the challenges is to *improve the quality of schooling* ... to create the knowledge and *problem-solving skills* required to improve global competitiveness. [This can be achieved] by *changing teaching practices*, modernizing curricula, and creating the feedback loop between secondary and tertiary institutions and employers” (World Bank, 2002, p. ii; emphasis added).

USAID/Egypt participated in the reform discourse by commissioning a study leading to a “strategy proposal,” which informed the Mission’s “program descriptions” for the Education Reform Program (ERP). The study report (Aguirre International, 2002, pp. 11-12; emphasis added) sketched a number of cross-cutting themes, including: “Classroom Learning Environment. At present children in many Egyptian public schools are living in an environment that emphasizes *memorization and rote learning* of the exam-driven curriculum. ... There is little or no diversification of instruction to meet different student needs and learning styles, ... [let alone the use of] new methodologies that encourage and enable *students* to become *active, enthusiastic participants* in their own learning.”

USAID/Egypt’s growing and increasingly explicit enthusiasm for active-learning pedagogies is evident in its September 2003 “program descriptions” used to request applications for the Education Reform Program (2004-2009). In these two documents USAID/Egypt stressed that “[q]uality improvements are required to ensure that universal enrollment is accompanied by the acquisition of critical-thinking skills. ... Extensive training is required for tens of thousands of

Egyptian educators to adopt *modern methodologies* and promote *active learning* to guide children to acquire essential information and skills for life” (USAID/Egypt, 2003a, p. 4; USAID/Egypt, 2003b, p. 7; emphasis added). And in one of the documents, USAID/Egypt (2003b, pp. 19-20; emphasis added) goes on to discuss two of the sub-intermediate results expected to be achieved by the work of the “Classrooms and Schools” component of the Education Reform Program: 2.4) “teachers receive pre-service education and in-service training in *learner-focused teaching* and assessment methods,” and 3.1) “students engage in *participatory learning*, critical thinking and problem-solving.” Additionally, USAID/Egypt comments that “[s]chool administrators/principals are not familiar with effective instructional leadership concepts and practices” (USAID/Egypt, 2003a, p. 4; USAID/Egypt, 2003b, p. 8) and states that ERP/EQUIP1 “shall be responsible for school administrators assuming instructional/ educational leadership roles within their schools ... [and] shall also ensure that supervisors become supportive instructional leaders and not ‘inspectors’” (USAID/Egypt (2003a, p. 19).

A key document published by the Ministry of Education in 2003, following an intensive effort involving hundreds of educators, is the *National Standards of Education in Egypt* (MOE, 2003). According to the introduction to this volume, the standards development project proceeded “on a logical course inspired by the education policy, which the President announced in 1992, the objective of which was to achieve ‘education for all.’ ... Having succeeded in achieving this objective, ... the state is now inspired by the President’s vision which is represented in his call for a qualitative change in education ... This document contains standards and performance indicators in the following five domains: the effective school, the educator, educational management excellence, community participation, the curriculum and learning outcomes” (MOE, 2003, p. 4). The following are among the standards and indicators included in the domain of the educator related to the area of “learning strategies and classroom management:”

- First Standard: Utilizing educational strategies that meet student needs. [Indicators:] Teacher involves all students in diverse educational experiences suitable to their skills and talents. Uses different strategies to present concepts, introduce skills and explain the subject. Gives students *open-ended questions* and facilitates discussion to clarify and motivate the *student’s thinking*.
- Second Standard: Facilitating effective learning experiences. [Indicators:] Teacher provides independent and *cooperative learning* opportunities. Divides students into *groups* to promote *interaction* and learning. Encourages positive interaction and cooperation among students.
- Third Standard: Involving students in problem-solving, critical thinking and creativity ... (MOE, 2003, p. 75; emphasis added)

And in its September 2004 publication, *Reforming Pre-University Education Programs*, the MOE outlines its five main “pillars for reform,” including: “assuring education quality” and “training and improving teachers’ conditions” (MOE, 2004; quoted in El Baradei and El Baradei, 2004, p. 5). The meaning of this pillar is articulated in the Ministry of Education’s *National Plan for Education for All, 2002/2003-2015/2016*, which states that “to achieve ‘Education for Excellence and Excellence for All’ requires the achievement of a number of strategic goals ... [2] Effecting a qualitative leap in the educational system to arm Egyptians with the scientific capabilities and skills to allow them to compete in the labor market both locally and internationally. This requires the development of curricula, and systems of examinations, toward *active* and positive *learning*

and comprehensive evaluation ... [and] introducing advanced educational technology” (NCERD et al., 2004, p. 19; emphasis added).

ERP SUPPORT FOR PROMOTING ACTIVE-LEARNING PEDAGOGIES

As noted above, a variety of initiatives were undertaken by the Egyptian government to promote active-learning pedagogies. Some of these were independently undertaken, and others were pursued with financial and/or technical assistance from inter-governmental (multilateral or bilateral) agencies and/or international nongovernmental organizations. Here we will focus on the activities of the five-year, USAID-funded Education Reform Program (ERP),⁵ which was initiated in 2004 through cooperative agreements with two Educational Quality Improvement Program (EQUIP) consortia,⁶ led by the American Institutes for Research⁷ and the Academy of Educational Development.⁸ We will first describe ERP-supported efforts related to *teacher* professional development as well as relevant ERP-supported activities designed to build school administrators’ and supervisors’ capacities to guide/support teachers. As noted in the EQUIP1 proposal for ERP, one of the goals was to “train teachers and supervisors in active-learning, student-centered methodologies” (AIR et al., 2004, pp. 17-18). Then we will draw on qualitative data collected via focus group interviews as well as quantitative data obtained from standardized classroom observations to report on the impact of the ERP-supported reform efforts as well as the factors perceived to facilitate or impede change in classroom practices.

⁵ ERP was designed with a governorate-based approach, involving seven governorates in which officials at the time had expressed strong commitment to undertake reforms: Aswan, Alexandria, Bani Suef, Cairo, Fayoum, Minia, and Qena. Within each governorate ERP’s work, especially that undertaken by EQUIP1, was to focus on working with educators and community members associated with a “family of schools,” including all levels of formal and nonformal education (preschool, primary, preparatory, general/academic secondary, vocational/technical secondary, university-based teacher preparation, and adult). Complementing its decentralized focus on schooling and teacher education in the governorates, ERP (particularly EQUIP2) was also tasked with supporting policy dialogues at the national level, involving educators, government officials, and representatives of the private sector.

⁶ In 2003 USAID (in Washington, DC) funded three EQUIP Leader with Associates Awards. In negotiation with USAID missions in a range of “developing” countries, each EQUIP was to address a related set of concerns. “EQUIP1:” focuses on classroom- and school-level educational interventions that improve student learning and closely involve the local community; “EQUIP2: Developing Quality Education Systems at Local, Regional and Central Levels” targets policy and systems development, management, and education finance at the cross-community, district and national levels; and EQUIP3 highlights school-to-work transitions and the experiences of out-of-school youth.

⁷ The *EQUIP1 consortium* is headed by the American Institute for Research and includes the Academy for Educational Development (AED), Aga Khan Foundation, Cooperative for Assistance and Relief Everywhere (CARE), Discovery Channel Global Education Fund, Educational Development Center (EDC), Howard University, International Reading Association, The Joseph P. Kennedy, Jr., Foundation, Juarez & Associates, Inc., Michigan State University, Save the Children Fund, Sesame Workshop, University of Pittsburgh’s Institute for International Studies in Education, and World Education, Inc.

⁸ The *EQUIP2 consortium* is headed by the Academy for Educational Development (AED) and includes the Aga Khan Foundation, American Institutes for Research (AIR), Cooperative for Assistance and Relief Everywhere (CARE), East-West Center, Education Development Center, International Rescue Committee, Joseph P. Kennedy Jr. Foundation, Learning Communities Network, ORC Macro, Mississippi Consortium for International Development, Michigan State University, Research Triangle Institute, University of Minnesota, University of Pittsburgh’s Institute for International Studies in Education, and Women’s Commission for Refugee Women and Children.

ERP AND TEACHER PROFESSIONAL DEVELOPMENT

After a variety of meetings with national and governorate-level stakeholders, ERP organized a series of two-day “local district mapping” exercises in December 2004 in the seven focal governorates, during which “the [staff] ... documented the nature and extent of training resources and gathered data on staff training needs from educational officials and teachers” (EQUIP1/ERP, 2004, p. 5). Out of the mapping exercise, ERP developed a program of activities for teacher professional development, including the following ones during the January 2005 – March 2007 period, classified by the relevant domains in Egypt’s national standards “the educator” (MOE, 2003):

Teaching Strategies and Classroom Management:

- Critical Thinking and Active Learning (Primary, Preparatory, Secondary) workshops
- Critical Thinking and Active Learning in Math, Science, Arabic, Social Studies (Secondary) workshops ...
- Active Learning Kit (Primary)
- ASSESSMENT: Comprehensive Education Assessment (Primary, Grades 1-3) workshop series (El-Dib, 2007a, pp. 4-6)

In terms of strategies, ERP initially followed a *cascade model* of professional development, in which experts organized a trainer-of-trainers (TOT) workshop, designed to develop the knowledge and skills of a group of trainers, each of whom afterwards had the responsibility for training one or more groups of teachers. Subsequently, ERP employed a *refined cascade model*, in which project staff organized workshops with expert consultants to train staff of school-based training and evaluation units (SBTEUs), who then delivered such training to their colleagues in their own schools or in a *cluster* of schools. By July 2006 ERP further refined its approach to professional development (*TOT with supervised practice*), adding a step in which ERP staff/consultants supervised the initial practice of the school-based professional developers as they planned and implemented workshops for teachers in their schools or school clusters. In addition, ERP staff and consultants aimed to provide training for school administrators and supervisors that paralleled the themes and topics included in the workshops for teachers.

At times ERP also used a *direct training model*, in which staff and consultants conducted workshops directly for the teachers. This was the case when focusing on knowledge and skills related to implementing the “comprehensive education assessment [of students] system (CEAS), a continuous assessment approach which the MOE had recently mandated for the first three years of primary school” (ERP, 2005b and 2005c). The direct training model was employed because of ERP/EQUIP1 staff members’ view that the knowledge and skill content was too complicated for teachers to be able to learn and then, through a TOT model, effectively teach to peers.

After receiving a special request from the Minister of Education to provide more general help in training related to the implementation of a comprehensive education assessment system in the first three years of primary school, ERP pursued another approach to teacher professional development – *collaboration with multiple levels of the training system*. In this approach ERP staff (both EQUIP1 and EQUIP2) collaborated with MOE personnel to design a cascade TOT program, redesign workshop and classroom instructional materials, and implement professional development activities (ERP, 2006a

and 2006b). This approach represented a shift from ERP's operation.⁹ As the Teacher Professional Development Technical Advisor explains, her initial understanding was that EQUIP1 was "not to work directly with ... the [governorate and national levels of the] system. ... It was [our] job to inform [these higher levels of the system] about the models we piloted ... [so that that they could] figure out how ... to adopt them in the system." She notes, however, that over time "I began to approach the system. I met with [the director of the Central Directorate of In-Service Training] regarding jointly planning and delivering three workshops" (El-Dib, 2007b).

ERP and Instructional Leadership Development

The EQUIP1/ERP proposal notes that "teacher training will require follow-up through classroom support and a system of supervision and professional feedback mechanisms," and identifies as one of its core tasks: "Training instructional leaders (MOE supervisors, school principals/head teachers) in instructional supervision skills, linked to the MOE standards, including classroom observation and monitoring skills, mentoring and training skills, and teacher conference skills (i.e. giving feedback), etc." (AIR et al., 2004, pp. 9 and 11). To initiate their work in this area, ERP staff undertook a district mapping exercise (parallel to what was done for teacher professional development) and conducted a more in-depth needs assessment study. Based on the information obtained, ERP staff developed a work plan for a multi-level TOT training of school administrators and supervisors, which included:

- Preparing a cadre of trainers cadre at the national level
- Establishing a "cadre" training a team (composed of a supervisor, head teacher, school principal, and educational grade manager) in each governorate
- The "team" delivering the same training to selected groups of school administrators and supervisors in their respective governorates
- The "groups" carrying out training of school administrators in their respective schools, with supervisors monitoring these trainings¹⁰

Using this multi-level TOT approach, ERP staff/consultants organized training programs on educational leadership skills, strategies for activating school clusters, and standards-based classroom observation. Here we will focus on the latter two categories, which are most relevant to instructional leadership.

The idea of a *school cluster* as defined by ERP is "a group of [2-7] schools with the same education level (primary, preparatory or secondary) ... located close geographically ... [that] collaborate in planning and preparing training programs, but [with] each school implementing the

⁹ Up to this point EQUIP2/ERP staff had focused their technical assistance and training activities on helping MOE partners at the central and local levels to develop a *Framework for a Professional Development System* (ESS/ERP, 2005), develop standards for supervisors, and building the capacity of key personnel in the in-service training system design courses, conduct professional development workshops, and monitor/evaluate training activities. Thus, EQUIP2/ERP staff's involvement in relation to CEAS-related professional development represented a move toward collaborative planning and implementing of a specific teacher in-service education program.

¹⁰ Interview with Dr. Said Assaf, Director of EQ Division; Samir Shafik, EQ Technical Advisor; and Walid Yasin, EQ Technical Advisor, EQ office Head Quarter, 4 March 2007.

training” (EQ-ALD/ERP, 2006, pp. 6-7). ERP staff organized a variety of meetings and workshops to orient and prepare various MOE personnel in activating and using the cluster for organizing professional development programs and providing instructional supervision and support for teachers.

With regard to developing instructional leadership skills in standards-based classroom observation, ERP staff organized the following activities: a) a series of workshops with school administrators and supervisory system personnel to develop a refined classroom observation tool, and b) a series of workshops with school administrators and supervisors on classroom observation skills and using the classroom observation tool in evaluating, guiding, and supporting the professional development of teachers.

In addition, in the context of carrying out a longitudinal study of teacher and student classroom behavior (see details below), many supervisors in ERP’s seven focal governorates were trained in the use of the *Standards-Based Classroom Observation Protocol for Egypt (SCOPE)*. During March 2005, for example, 159 supervisors attended five-day workshops prior to conducting observations for the first phase of the study (SCOPE I) (ERP, 2005a). A year later (March 2006), 84 supervisors who had been involved in SCOPE I and 49 newly involved supervisors participated in a workshop focused on conducting classroom observation using the SCOPE. During the first two days the newly involved supervisors received:

an overview of the [study], the SCOPE, and their role as classroom observers. Participants were also engaged with experiential learning activities to introduce them to the principles of *active learning*, *student-centered teaching*, cooperative learning, and inquiry learning. ... Participants received training in two supervision techniques (global scanning and question tracking). Next, participants screened two videotapes (used during the SCOPE I training) showing footage of Egyptian teachers teaching actual students and content from the curriculum. ... Each rating activity was followed by polling participants for their ratings and engaging them with in-depth discussions by reference to the rating criteria in order to reach consensus on the associated ratings. ... The third [through fifth days] of training [included a focus on] ... activities designed to model student-centered inquiry learning, encourage problem solving, and engage learners’ higher order and critical thinking skills. (Abd-El-Khalick, 2006, pp. 6-7; emphasis added)

And in March 2007 a similar workshop was organized for 176 participants, including supervisors who would continue to serve as SCOPE data collectors and district- and governorate-level administrators (ERP, 2007).

IMPACT OF ERP-SUPPORTED ACTIVITIES ON TEACHERS’ CLASSROOM PRACTICES

In this section we present the findings from our analysis of quantitative and qualitative data, assessing the extent to which teachers’ classroom behavior moved (if at all) toward the use of active-learning pedagogies, as well as the factors that facilitated or impeded such pedagogical change.

Quantitative Data on Changes in Teachers' Classroom Practices

One source of evidence for examining the impact of ERP-supported activities on teachers' instructional behavior is quantitative in nature and comes from data collected during April in 2005, 2006, and 2007, using the SCOPE.¹¹ The SCOPE measures teacher enactment of reform-based teaching methods,¹² which are aligned with the "Educator Standards" in the *National Standards for Education in Egypt* (MOE, 2003). Ratings by supervisors, who were specially trained as observers, vary from 1 to 5:

[R]atings of "1" for teacher behaviors characterize instruction that is traditional; authoritative; *teacher-centered*; non-collaborative or cooperative; mostly chalk-and-talk ... [R]atings of "5" for teacher ... behaviors characterize classrooms in which instruction is reformed; participatory; *student-centered*; collaborative and cooperative; *active*; inquiry-based (Abd-El-Khalick, 2005, pp. 2-4; emphasis added)

Here we discuss the results in terms of gain scores on two of the teacher behavior scales¹³ (see associated observation items below):

- *Active-Learning Pedagogies – Behavioral Dimension (ALP-BD)*:
 4. Engages students in carefully structured cooperative learning experiences
 5. Implements instruction that targets the development of students' social and collaborative skills
 6. Actively ensures the participation of all students in learning activities irrespective of their sex, achievement level, special needs, giftedness and other differences
 7. Uses diverse instructional strategies to promote active student participation in learning
 9. Encourages students to have a voice in the learning environment

- *Active-Learning Pedagogies – Cognitive Dimension (ALP-CD)*:
 8. Effectively asks probing and open-ended questions that encourage thinking, and help students explicate their thinking
 12. Provides students with structured opportunities to reflect on their own learning
 15. Provides students with opportunities to practice higher order and

¹¹ In 2005, 2006, and 2007, respectively, 733, 727, and 803 teachers in ERP-supported schools were observed, while 319 and 344 teachers from other schools were observed in 2006 and 2007, respectively.

¹² ERP's quarterly report explains that "ERP uses reform-based methods as a term which includes instructional approaches which differ from "chalk and talk" lecture and memorization because they involve both teachers and students in more interactive instruction and learning. Examples of reform-based methods include inquiry-based teaching, learner-centered teaching, cooperative learning, and active learning. Reform-based methods can also support the development of students' problem-solving and critical thinking skills" (ERP, 2005a, pp. 29-30).

¹³ For a discussion of the distinction between behavioral and cognitive dimensions of active-learning pedagogies see Barrow et al. (2007), Ginsburg (2006), and Mayer (2004).

- critical thinking skills
 16. Provides students with opportunities to develop problem solving skills

Table 1 presents a summary of these gain scores. Note that between 2005 and 2006 as well as between 2006 and 2007 there is evidence of significant average gains. On average, teachers in ERP-supported schools made somewhat greater gains on the Behavioral Dimension scale (ranging from .28 to .48) than on the Cognitive Dimension scale (ranging from .18 to .36). While these changes in pedagogical approach are modest, given that these are five-point scales, they represent consistent moves toward implementing active-learning pedagogies to an extent greater than expected by chance. While recognizing the importance of this evidence of change in instructional practices, we should note that on average teachers started very close to the “traditional” style (i.e., a score of 1.0), and as of April 2007 had not moved even to the midpoint on the scale (i.e., 3.0).¹⁴

The impact of ERP-supported activities is further demonstrated if we compare the gain scores of teachers in ERP-supported schools with the comparison group of teachers who were working in other schools within the same governorates. As shown in Table 1, the gain scores (between 2006 and 2007) for teachers outside of ERP-supported schools are smaller for each school level on both scales, with the slight exception of preparatory school teachers on the Cognitive Dimension scale. The differences between teachers in ERP-supported schools and those in non-ERP-supported schools are somewhat larger on the Cognitive Dimension scale. Note also that while the gain scores for two of the three groups of teachers in non-ERP-supported schools are significant on the *Behavioral Dimension* scale, none of their gain scores are significant on the *Cognitive Dimension* scale. This means that teachers in ERP-supported schools made more progress toward implementing active-learning pedagogies, particularly with respect to promoting student involvement in critical thinking and reflection. Moreover, compared to teachers in ERP-supported schools, the comparison groups of teachers tended to start and remain closer to “traditional” modes of instruction.¹⁵

Table 1: Gain Scores for the Two Teacher Behavior Scales

ERP/Non-ERP CLASSROOM BY SCALE	GAIN SCORE BY LEVEL		
	Primary	Preparatory	Gen. Sec.
Teacher Behavior Scales			
<i>Active-Learning Pedagogies-Behavioral Dimension</i>			
ERP ALP-BD (2006-2005 scores)	0.48**	0.33**	0.39**

¹⁴ As presented in tables in the Appendix, on average teachers in ERP-supported schools were rated approximately 1.4 in 2005, 1.75 in 2006, and 2.05 in 2007 on the Active-Learning Pedagogy-*Behavioral Dimension* scale, while they were rated approximately 1.3 in 2005, 1.55 in 2006, and 1.85 in 2007 on the Active-Learning Pedagogy-*Cognitive Dimension* scale.

¹⁵ As presented in tables in the Appendix, on average teachers in ERP-supported schools were rated approximately 1.25 in 2006 and 1.4 in 2006 on the Active-Learning Pedagogy-*Behavioral Dimension* scale, while they were rated approximately 1.25 in 2006 and 1.3 in 2007 on the Active-Learning Pedagogy-*Cognitive Dimension* scale.

ERP ALP-BD (2007-2006 scores)	0.33**	0.28**	0.38**
Non-ERP ALP-BD (2007-2006 scores)	0.21**	0.08	0.19**
<i>Active-Learning Pedagogies-Cognitive Dimension</i>			
ERP ALP-CD (2006-2005 scores)	0.32**	0.18**	0.32**
ERP ALP-CD (2007-2006 scores)	0.23**	0.31**	0.36**
Non-ERP ALP-CD (2007-2006 scores)	0.05	0.11	0.05

** Significant at $p < 0.01$.

Qualitative Data on Teachers' Classroom Practices

Another source of evidence regarding how teachers' classroom behavior may have changed is qualitative in nature, and comes from data collected via focus group interviews with a) 39 teachers in ERP-supported schools, b) 37 teachers in other schools in focal governorates, c) 42 school-based training unit staff, and d) 39 local (district- and governorate-level) supervisors. During the focus group interviews, these educators from the seven governorates in which ERP was working were asked:

1. From your perspective, what, if any, changes have taken place in the way you (and/or others) teach ... compared to three years ago?
2. Would you say that you (and/or others) now use more often what some people have called "reform teaching methods" or "active-learning pedagogies"?

Teachers working in ERP-supported schools commented on how their teaching methods had changed over the past three years, noting that they moved from just lecturing to discussion and engaging in dialogue with students and using group work, role play, brain storming, and problem solving:

- I became more democratic in my teaching procedures; I gave the chance to students to have a point of view different from mine. (Aswan Teacher)
- My teaching has become student-centered; the student is no longer a receiver of information. (Fayoum Teacher)
- Active learning proved effective in teaching the concept of the rectangle in geometry. (Qena Teacher)

Nevertheless, most of these teachers commented that this change was not an easy process, and progress to date had been slow.

In contrast, *teachers working in other schools* reported that they had not experienced or observed much change in teaching methods being used over the previous three years. Furthermore, they generally stated that they did not know much about active-learning pedagogies or how to implement them:

- I know that it is about brainstorming, problem solving..., but I don't use it frequently. (Bani Suef Teacher)

- I have heard about it from my colleagues, but never really got to know about it. (Qena Teacher)

Importantly, most school-based training and evaluation unit (*SBTEU*) staff and local supervisors interviewed noted that they perceived how teachers, mainly those in ERP-supported schools, had begun to implement active-learning pedagogies:¹⁶

- [Teachers] are using the portfolio for curricular and extra-curricular activities. (Alexandria Supervisor)
- I apply cooperative learning, another colleague uses storytelling, a third likes to use problem solving, and a fourth uses educational corners. (Aswan SBTEU Staff)
- Teachers tend to ... divide students into groups and use a lot of activities. (Bani Suef Supervisor)
- My colleagues and I got the students to make a train whose cars represent the different types of infinitives in Arabic. (Minia SBTEU Staff)
- One student said to me 'you [and other teachers in this school now] are teaching me how to think.' (Qena SBTEU Staff)

Interviewees in these categories stated that the changes were more noticeable in primary schools than at the other stages, and that the movement, while noticeable, was generally not dramatic.

FACTORS FACILITATING MOVEMENT TOWARD USING ACTIVE-LEARNING PEDAGOGIES

In this section we continue to draw on the data collected via focus group interviews with these educators. We posed the following questions to stimulate discussion on this topic:

1. In your view, what has *helped* you to at least begin to implement “reform teaching methods” and “active-learning pedagogies” in your classroom?
2. Please describe the professional development activity (or activities) conducted by ERP that was/were *most helpful* to you in implementing “reform teaching methods” and “active-learning pedagogies.” Why were they helpful?

The *teachers in ERP-supported schools* interviewed identified several factors that contributed to their use of reform pedagogies: the general tendency towards change in their idara or local district (e.g., “*We were on the same wave of change with the Ministry*” [Alexandria Teacher]), overseas training in the US and the UK, in-country workshops and other professional development activities, follow-up on the part of the supervisors coupled with the change in supervisors’ attitude from that of a fault finder to that of an advisor, and the active participation of school and idara administrators in enabling people to attend trainings (e.g., “*My personal conviction and the help from the school are the true causes*” [Aswan Teacher]). Here we will focus on their views of in-service teacher education programs; we will discuss the changing role of administrators and supervisors in a subsequent section.

¹⁶ However, a few participants in these focus groups reported that they did not perceive much, if any, change in teachers’ classroom behavior. For instance, a supervisor from Minia governorate expressed: “In the French language, no change has taken place in the last 20 years – no active learning, nor even passive learning!”

A large majority of interviewed *teachers in ERP-supported schools* stated that the project-related professional development activities helped them (and their colleagues) to implement active-learning techniques in their classrooms. These teachers also pointed out that being trained in the new methodologies gave them the courage, the knowledge, and the skills to handle students' questions and individual differences:

- In fact, I knew the titles of the new methodologies before. Active learning, problem solving, cooperative learning, brainstorming, role play, and simulation, were not new [terms for me]. The crucial thing is that ERP training made me understand how to use them. (Alexandria Teacher)
- Through ERP training programs, I began to understand [differently] ... my role as a teacher. I even became more democratic in my class. (Aswan Teacher)
- ERP training was a big plus; they showed me knowledge and the techniques for implementing this knowledge. (Bani Suef Teacher)
- Active learning is one of ERP training programs that I benefited a lot from. It removed boredom from my classroom life, when I applied the knowledge and skills gained in the workshops. (Fayoum Teacher)
- [ERP-supported workshops] gave life to the old theoretical terminology we were exposed to when we were students at the faculty of education. (Minia Teacher)
- ERP made the still water move smoothly. (Qena Teacher)

While these interviewees were generally positive about ERP-supported professional development, they did offer some criticisms and suggestions for improvement.¹⁷ Interestingly, many of the criticisms focused on the amount and distribution of training, thus reinforcing the above-noted statements of the value of such activities:

- I think we need more computer training. (Bani Suef Teacher)
- Teachers of English, French, and social sciences were invited less often to training workshops (compared to teachers of math, sciences and Arabic). (Minia Teacher)
- Most of the training workshops concentrated on the primary stage teachers not the secondary. (Qena Teacher)

Having previously indicated that they had not begun to implement active-learning pedagogies, most *teachers from non-ERP-supported schools* could not identify factors that contributed to promoting such reform teaching methods. "We did not implement active learning in our classes" (Alexandria Teacher). Importantly, however, many of these teachers expressed a belief that ERP-supported professional development activities could have helped them to implement reform pedagogies, in that at least one of the participants in each focused group interview made a plea for ERP and the Ministry to include them in future trainings. For instance:

- We need training on methods of teaching our subjects. (Bani Suef Teacher)
- We need training on enrichment materials for teaching the subjects. (Minia Teacher)

¹⁷ For example, interviewees also expressed concerns about the scheduling of the workshops which sometimes occurred during exams or other busy times in the school schedule. "I wish to have all the training during the holiday" rather than during periods where we miss classes or have the pressure of exams (Alexandria Teacher).

- We need training on computers [and] internet ... (Qena Teacher)

SBTEU staff and *local supervisors* echoed the remarks of the teachers in ERP-supported schools (reported above) in noting that ERP-supported professional development activities contributed to teachers implementing active-learning pedagogies.¹⁸ To illustrate:

- The change in teacher's performance is the result of the intensive training programs they had with ERP in the school or across governorates, especially cooperative learning. (Alexandria Supervisor).
- Cooperative learning, for instance, is being actively used in Kom Ombo [District] primary schools more than in the preparatory schools and far more than in the secondary schools. (Aswan Supervisor)
- About 90% of teachers who attended ERP training have changed their classroom practices. (Bani Suef Supervisor)
- [My colleagues and] I began to see the value of being a teacher through the training. (Fayoum SBTEU Staff)
- One big change in my mathematics class is getting students to work in research groups, where they obtain the answer to a question through discussion and reasoning. (Minia SBTEU Staff)

Participants in the local supervisors' focus groups in particular stressed that the trainings were more effective when supervisors and teachers both received the same training (see further discussion below). Similar to the teachers interviewed from ERP-supported schools, participants in the SBTEU staff and supervisors focus group interviews offered criticism or recommendations concerning ERP-supported professional development activities. In part, such comments represented indirect praise of the activities, because they argued that teachers of other subjects (or teachers in other schools and idaras) should be able to attend:

- We wish that ERP would continue [trainings for] applying comprehensive evaluation for the primary grades 4-6 for all the subject matters. (Alexandria SBTEU Staff)
- In some classes students do not participate in ways that shows critical thinking, because their teachers have not been trained in using it. (Bani Suef Supervisor)
- Some subjects like English, French, philosophy were not covered in the training. Even social studies teachers were included only recently. (Minia SBTEU Staff)

Changes toward Implementing the Role of Instructional Supervision

As noted in several places above, teachers and other focus group participants drew attention to the important role played by school administrators and supervisors in efforts toward implementing active-learning and other reform pedagogies. Here we will address these issues in more detail,

¹⁸ Other factors helping teachers to implement reform teaching methods mentioned by interviewees in this category include: the emergence of a "change-welcoming" school culture (e.g., "The active atmosphere of change would naturally result in this success" [Alexandria Supervisor].), the participation of the board of trustees in schools, the spread of the standards culture, school cluster-based meetings, the new relationship between the teachers and supervisors, and encouragement of school administrators (e.g., "The positive attitude of the administration, above all, is what helped me" [Qena supervisor]. "Their principals would welcome and encourage the implementation of what they have been trained on" [Qena supervisor].). We will discuss further the changing role of administrators and supervisors in a subsequent section.

drawing on data from the focus group interview discussions¹⁹ stimulated by the following questions:

1. From your perspective, in what ways, if any, have school administrators and supervisors in this governorate moved toward functioning like (*developmental*) *instructional supervisors* during the last three years?
2. How, if at all, have their *interactions* with (individual or groups of) teachers *changed* in the last three years?

When asked to describe how their role had changed in the last three years, almost all participants in the *local supervisors*' focus groups reported movement from being more of an inspector to becoming more of a source of guidance and support for teachers. They mentioned that they met more often with teachers, tended to use a three-stage model of supervision (pre-class, during class, and post-class), and made systematic use of a classroom observation form (and discussed the findings with teachers). For example:

- The teacher now waits for the visit of the supervisor to benefit from him. In the old days a teacher used to run from the supervisor. (Alexandria Supervisor).
- The supervisor could bridge the gap that was separating him [or her] from the teachers by following systemic observation skills. (Aswan Supervisor)
- I became a better supervisor, listening first and then commenting. I now understand supervision correctly. (Bani Suef Supervisor)
- We [now] tend to deal with the teachers like friends who need our help. (Cairo Supervisor)
- The role of the supervisor has changed by 180 degrees. Now there is integration between the role of the teacher and that of the supervisor. (Fayoum Supervisor)
- My role as a supervisor has developed from that of an inspector to that of a supervisor through the triad model of observation; pre-, during, and post-class. (Minia Supervisor)
- Most supervisors now use the new methodologies of supervision and observation skills. In the past we were merely inspectors." (Qena Supervisor)

Some supervisors were less positive in their assessment, though they represented a minority voice. For instance: "There are no new ways of supervision in the schools; supervisors are as they have always been" (Qena Supervisor). "The supervisor, the principal, the headmaster, and senior teachers all are trained on using the observation form, but few of them really use it – mostly supervisors" (Aswan Supervisor).

While, as noted above, *school administrators* also participated in professional development activities designed to enhance their capacity as instructional supervisors, neither they nor other categories of focus group participants had much to say about how school administrators' behavior had changed in this regard.²⁰ Indeed, a few SBTEU staff noted that they had not observed as

¹⁹ In addition to the above-mentioned two groups of teachers, SBTEU staff, and local supervisors, these questions were addressed to 37 school administrators participating in focus groups in six of the seven governorates (not Cairo).

²⁰ The following are among the *few* statements on this topic made by school administrators. Note that they provide a picture of change at least in their school: "We [principals] now care for the teacher's portfolio

much change in principals' behavior compared to supervisors' behavior (see also above quote from Qena Supervisor). For instance: "The principal has not changed in the same way as has the supervisor" (Minia SBTEU Staff). In any case, most participants in the school administrators' focus groups reinforced the generally positive view of *change in supervisors' behavior* articulated by supervisors themselves (see above):²¹

- The ERP SCOPE observation sheet helped the supervisor follow scientific standards in his supervision. (Alexandria School Administrator)
- Three years ago a supervisor used to pick up teachers' errors and embarrass them in front of their students; now both parties agree on items in the observation sheet. (Aswan School Administrator)
- Most supervisors would now follow up with the points of weaknesses they discussed with the teachers to see whether there is any development. (Fayoum School Administrator)
- In case the supervisor finds a teacher making the same error each time, he would discuss the matter with the school-based training and evaluation unit manager for conducting training on this aspect. (Minia School Administrator).
- [Now the supervisor's] role is one of guidance and assistance. Before ERP, it was the role of inspection and picking errors. (Qena School Administrator)

Arguably, teachers are the most important source of information on changes in supervisors' behavior. Any reform effort of this type is likely to be effective to the extent that teachers experience a change in their relationships with supervisors. Thus, it is important to note that most *teachers in ERP-supported schools* who participated in focus group interviews reported that they had witnessed positive changes in supervisors' behavior:²²

- Now we have coordination between the teacher and the supervisor. (Alexandria Teacher)
- A supervisor used to come, sign in the register at the principal's office, and leave. Now, he [or she] visits classes and fills in the observation form in addition to the signature. (Aswan Teacher)

more than the paper work" (Alexandria School Administrator). "A principal now practices his [or her] guidance role by supervising teachers and identifying their needs based on the observation form" (Bani Suef School Administrator). There were also a few comments by other categories of interviewees about principals performing as instructional leaders: "Our principal has changed drastically; he used to care about whether the school door is open or not (minor issues). Now he cares about our professional development" (Aswan ERP-Supported School Teacher). "Our principal [now] holds monthly meetings to discuss our needs and to explain points of weakness and strengths of each of us" (Qena SBTEU Staff).

²¹ As with supervisors, there were a few school administrators who disagreed that supervision had improved in recent years. For example: "Supervision was better in the old days; a supervisor used to visit schools every now and then and provide good feedback ... Now most supervisor are resident supervisors and they do not benefit the teacher as before" (Alexandria School Administrator).

²² As with supervisors and school administrators, there were a few teachers in ERP-supported schools who did not observe positive change in supervisors' behavior. As illustrations: "Supervision is still unfruitful" (Alexandria Teacher). "I am a teacher of math, and in one class, a student mispronounced a word. The supervisor then stopped me and asked me to provide a grammatical explanation for the correct pronunciation. I couldn't. He did and I was embarrassed" (Bani Suef Teacher).

- [The supervisor] used to overuse his red pen in correcting my preparation notes. (Bani Suef Teacher)
- The relationship between us (teacher and supervisor) is a positive one; there is no more error picking. (Fayoum Teacher)
- [The supervisor] has become like a father to me; even in the break time he tends to guide me. (Qena Teacher)

In contrast to the teachers just discussed, teachers working in non-ERP-supported schools who participated in focus groups generally did not report positive changes in supervisors' behavior.²³

- My supervisor helped me in planning for the lesson, but still his main focus was on the formalities – my notes, students' grading sheets, book sheets – with no real emphasis on my work as a teacher. (Alexandria Teacher)
- There are no changes in [supervisors'] conduct; they are still looking for mistakes. (Aswan Teacher)
- 10 years ago it was [actually] better. Supervisors really visited schools and provided guidance. Now a supervisor calls a school and asks the principal to sign for him so that the papers say that he came and supervised, while [in fact] he did not. (Fayoum Teacher)
- [The supervisor] has lost his dignity because he is not seen as a source of help. (Minia Teacher).

Interviewees in this category also communicated continuing shortcomings in the supervisory role played by administrators in their school, though the focus group interview discussions gave more attention to the supervisor's role:²⁴ "Compared to the change in the role of administrators, supervisors seem to change faster" (Aswan Teacher). "A principal would normally behave based on compliments and social relationships; he does not provide professional comments" (Minia Teacher).²⁵

²³ Nevertheless, there were a few teachers working in other schools in focal governorates who noted some positive change in supervisors' behavior. For example: "[The supervisor] used to come to the principal's office and ask for my notes without seeing me. Now he visits me occasionally after seeing the notes" (Aswan Teacher). "The supervisor is very sincere in his [or her] work. [Unlike in the past, now] he [or she] does not embarrass me, and I really learn from him [or her]" (Bani Suef Teacher). "My supervisor has changed for the better; he [or she] used to search for my negative or weak points, now he uses an observation form, and guides me. I believe this is due to the training he [or she] attended with ERP" (Qena Teacher).

²⁴ A few teachers working in other schools in the focal governorates related positive experiences with the supervisory role played by school administrators. For instance: "A principal would normally visit my class, listen carefully to my explanation, and finally tell me some comments and write a report ... I like this attitude" (Qena Teacher).

²⁵ That these interviewees were less likely to observe positive changes in school administrators' behavior actually suggests an impact of ERP in the area of administrative and leadership development, in that the school administrators in these schools (compared to those working in ERP-supported schools) were unlikely to have participated in workshops and other professional development experiences. However, we should recall that relatively few interviewees called attention to changes in school administrators' supervisory behavior. Furthermore, that there were differences in views about supervisors' behavior change expressed by teachers in ERP-supported schools compared to their colleagues in other schools in focal governorates does offer evidence of project impact. However, we must qualify this conclusion, because it is likely that at least some of the supervisors who participated in ERP-supported workshops and other

Further evidence of supervisors having changed their behavior, moving from the role of inspector to that of guide and supporter of teachers, is offered by the findings from the focus groups involving SBTEU staff, school-level personnel who are mainly teachers themselves. The large majority view of SBTEU staff in all seven focal governorates commented that supervisors had changed their behavior in a positive direction:²⁶

- The supervisor is the one who uses the observation sheet, while the principal is still picking errors. (Aswan SBTEU staff)
- In the old days, we worked to satisfy the supervisor. Now, the supervisor wants us to be satisfied with his comments and guidance. (Bani Suef SBTEU Staff)
- The class observation form helped to set standards for supervisory interactions. (Fayoum SBTEU Staff)
- In the old times, a supervisor used to come and pick up faults. Now he evaluates my performance scientifically using the observation sheet. (Minia SBTEU Staff)

Factors Influencing Change toward Instructional Supervision

Our discussion of the factors that helped supervisors and school administrators to change from acting like inspectors to becoming guides and supporters of teachers is based on data obtained from the school administrators' and supervisors' focus group interviews, prompted by the following questions:

1. What circumstances or factors have helped school administrators and supervisors in this governorate to function more like (developmental) instructional supervisors?
2. Now, please describe the professional development activity (or activities) conducted by ERP which was/were *most helpful* to you in implementing the role of (developmental) instructional supervisor. Why were they helpful?

Participants in these focus groups in the seven focal governorates identified an overall local and national cultural environment as encouraging change in education: "The biggest factor is the spread of the culture of change in our idara" (Fayoum Supervisor). "National standards changed my way of thinking about education in general and changed my role into that of an instructional supervisor" (Qena School Administrator). Additionally, some interviewees stressed how attitudes and dispositions of teachers and school administrators facilitated the changes in supervisory behavior:

- The teachers' desire for change and their belief in the utility of instructional supervision. (Alexandria School Administrator)

professional development activities had responsibilities for some of the "other" schools in the focal governorates, and thus one might have expected interviewees in this category to have noticed some positive change in supervisors' behavior.

²⁶ A small minority of SBTEU staff in each governorate-based focus group reported less progress in role change for supervisors. As an illustration: "[Supervisors] care only about filling out the forms" (Aswan SBTEU Staff).

- One of the good things is that, from the very first day when we started working on classroom observation, the teacher, the senior teacher, the supervisor, the principal and the inspector general all were well informed about it. So, cooperation was a natural result. (Aswan School Administrator)
- The high level of some teachers forced me to change my old ways of supervision. (Bani Suef Supervisor)
- The positive attitude of the administration, above all, is what helped me. (Qena Supervisor)
- Their principals would welcome and encourage the implementation of what they have been trained on. (Qena Supervisor)

In all administrator and supervisor focus groups, participants emphasized that training and other professional development activities were critical to promoting and facilitating a change in supervisory behavior. While some interviewees referenced activities organized by other projects,²⁷ they tended to focus on ERP-supported initiatives. Some of their comments were general in indicating their positive evaluation of ERP-supported activities:

- ERP helped me a lot. It made me change the way I think and the way I practice my job. (Bani Suef School Administrator)
- Professional development trainings were crucial to our development. (Cairo Supervisor)

Focus group participants also provided more specific examples of ERP-supported professional development activities, focusing on a range of workshops and other trainings:²⁸

- Training on cooperative learning especially helped in bridging the gap between the supervisor and the teacher. (Alexandria School Administrator)
- I benefited from a training program ... on the role of instructional supervision. (Aswan School Administrator)
- I benefited from trainings on computers and using the [classroom] observation form. (Aswan Supervisor)²⁹

²⁷ For example, interviewees mentioned: a) “We attended a professional diploma for 36 school principals. It was very effective. It was done in four stages, and included topics like IT [information technology], management, and leadership” (Bani Suef School Administrator); b) “The best training program was the one on SPEER [Spotlights on Primary English Educators’ Resources, organized by the USAID-funded IELP2 Project] for supervisors of English” (Fayoum Supervisor); c) “The French Cultural Center held some training sessions on teaching French for supervisors and they were good” (Qena Supervisor); and d) “Trainings with the World Bank’s Education Enhancement Project were important” (Qena School Administrator).

²⁸ Participants in focus groups also highlighted other kinds of professional development activities as contributing to changes in supervisory behavior. These included cross-governorate visits; exchanging field visits (central system supervisors) and exchanging supervisors’ experiences (Bani Suef Supervisors). Interviewees also mentioned traveling abroad and US-based training: “Traveling abroad and training on new methodologies were great” (Fayoum Supervisor). “Traveling abroad, to Montana University, helped me in my profession” (Qena Supervisor).

²⁹ Relevant here are the statements made and generally agreed to during focus group discussions on factors that contributed to changes in supervisory behavior by *standards support team members* in Alexandria as well as Aswan: One big reason for the success of teachers in their classroom practices is “the objective evaluation generated from the observation sheets used by supervisors.”

- Participating in action research training helped me identify my teachers' needs. (Bani Suef School Administrator)
- Training on action research, classroom observation, critical thinking, effective administration, community participation, self assessment, and developing a curriculum matrix were all very helpful to us. (Minia School Administrator)
- Training on critical thinking, national standards, and quality assurance were the best. (Qena School Administrator)

It is important to note, as a supervisor from Alexandria observed: "The training programs that grouped teachers and supervisors were the best ones that helped us." Similar comments about the importance of teachers, administrators, and supervisors sharing training and other experiences were made by participants in other focus groups:

- The parallel between teachers' training and supervisors' training paved the way for mutual understanding and even experience exchange. (Alexandria SBTEU Staff)
- Through conference meetings we exchanged experience with other supervisors and with teachers. (Aswan Supervisor)
- A supervisor will sometimes help the teacher in presenting the lesson by following a new teaching methodology that they both agree on, simply because they both have participated in the same training program on such methodology. (Bani Suef Teacher in ERP-supported school)
- We keep exchanging experiences based on the training each one of us attends. (Fayoum Teacher in ERP-supported school)
- The principal and the supervisor should always attend the same training programs together in order to guarantee a good result. (Alexandria School Administrator)

Finally, although one interviewee commented that "everything was fine, nothing needs modification" (Aswan Supervisor), focus group participants offered a variety of recommendations for improving the quality and effectiveness of ERP-supported professional development activities. As was the case with such activities for teachers (see discussion above), some of the suggestions in effect reiterated stakeholders' perception of the value of ERP-supported professional development initiatives, in that they called for more people to benefit and more often from such participation:³⁰

- There were fewer training programs for school principals as compared to those presented to teachers. (Qena School Administrator)
- Training should cover all supervisors and not be limited to a certain number responsible for certain subjects in ERP's focal idaras. (Fayoum School Administrator)

³⁰ In addition, at least some interviewees called for more follow-up after workshops, to provide guidance and support to workshop participants as they attempt to implement some of the new ideas and practices. As one school administrator from Aswan mentioned: "Some supervisors went to Alexandria and attended the training on classroom observation, but they didn't apply it." Similarly, a supervisor from the Bani Suef governorate noted the importance of follow-up activities after international study tour professional development programs, while also noting the challenge of diffusing lessons learned to other colleagues: "Let's not be so optimistic. We are only 8 trained supervisors and we are required to pass this experience to about 500 other supervisors, and we couldn't."

- I didn't like having many training programs for Arabic, science and math, and forgetting [to provide training for supervisors of] English and French. (Qena School Administrator)
- I suggest holding a monthly meeting with supervisors for updating them on the new methodologies. (Alexandria School Administrator)
- More visit-exchanges are needed. (Fayoum School Administrator)

CONCLUSION

Our review of government, international organization, and project documents reveals increasing attention to improving quality of education, often framed as changing teaching and learning processes from teacher-centered/transmission and memorization to student-centered and active-learning approaches (sometimes explicitly referencing behavioral and/or cognitive dimensions). Although student-centered, active-learning pedagogies were promoted by some Islamic philosophers/educators in the eighth and ninth centuries (Günther, 2006) and a few Egyptian educators criticized the predominance of memorization-oriented, rote learning in schools even before the 1952 Revolution (e.g., Radwan, 1951), such discourse did not appear in Egyptian government documents until the 1970s (MOE, 1979). This was also the time when USAID/Egypt documents (e.g., 1978 and 1981) documents began to mention these issues. While the Egyptian government and USAID/Egypt devoted some attention to improving educational quality through reforming pedagogy during the 1980s, the real shift from a focus on quantitative to qualitative improvements in education occurred in the early 1990s. This shift in emphasis is signaled in the *World Declaration on Education for All* (Interagency Commission, 1990) as well as Egyptian government publications (Mubarak, 1991; MOE, 1992), and reflected in the reform initiatives undertaken by the Egyptian government, including important examples supported by UNICEF, the World Bank, and USAID/Egypt. Rhetoric and action promoting active-learning pedagogies was even stronger in the new millennium (e.g., Mubarak, 2000, MOE, 2003). Among the reform efforts undertaken in subsequent years was the USAID/Egypt-supported Education Reform Program (2004-2009).

In terms of strategies for promoting active-learning pedagogies, ERP initially followed a *cascade model* of professional development, in which experts organize a trainer-of-trainers (TOT) workshop, designed to develop the knowledge and skills of a group of trainers, each of whom afterwards has the responsibility for training one or more groups of teachers. Subsequently, ERP employed a *refined cascade model*, in which project staff organized workshops with expert consultants to train staff of school-based training and evaluation units (SBTEUs), who would then deliver such training to their colleagues in their own schools or in a *cluster* of schools. By July 2006 ERP further refined its approach to professional development (*TOT with supervised practice*), adding a step in which ERP staff/consultants supervised the initial practice of the school-based professional developers as they planned and implemented workshops for teachers in their schools or school clusters and sought to insure that all training provided for teachers was also provided for school administrators and supervisors. At times ERP also used a *direct training model*, in which staff and consultants conducted workshops directly for the teachers, but eventually ERP pursued another approach to teacher professional development – *collaboration with multiple levels of the training system*. In this latter approach ERP staff and consultants collaborated with MOE personnel to design a cascade TOT program, redesign workshop and classroom instructional materials, and implement professional development activities.

The qualitative data (collected via focus group interviews with key personnel) and quantitative data (obtained via standards-based classroom observation of teacher behavior) provide evidence that at least some of the professional development activities organized through ERP helped to inform educators about the theory and practice of active-learning pedagogies. Moreover, teachers in ERP-supported schools reported that their classroom behaviors had changed toward employing such pedagogies, a view that was reinforced by supervisors and school-based professional development staff. Such change was not generally reported by teachers working in other schools in the seven focal governorates. Importantly, moreover, these interview findings are supported by quantitative data based on classroom observations, in that teachers in ERP-supported schools increased their use of active-learning pedagogies (behavioral and cognitive dimensions) more than other teachers.

The results from ERP-supported pedagogical reform efforts are encouraging, although we should remember we witnessed – among teachers in ERP-supported schools – only relatively modest movement on average toward using active-learning pedagogies. Moreover, the fact that even such limited pedagogical change was not evident among teachers in other schools in the focal governorates suggests that the reform was not broad in scale. If our goal is to diffuse pedagogical or other types of educational reforms (see Megahed and Ginsburg, 2008), then project staff, government personnel, and international agency representatives need to focus their energies early on in collaborating on promoting systemic as well as individual-level change.

Certainly, focus group interviews revealed that teachers, school administrators, and supervisors who were not part of ERP-supported activities, were open to change, based on what they had heard about the reform pedagogies through formal and informal channels. However, they were unable or reluctant to even begin implementing active-learning methods without formally organized professional development activities and they were not likely to deepen and sustain such reform pedagogies without ongoing guidance and support – at both interpersonal and policy/system levels. Given the sizeable number of teachers (and supervisors and school administrators) who have learned about and have come to value active-learning pedagogies, Egypt has a base of educators who could play an effective role in diffusing this reform. But for this to occur, the Egyptian government (perhaps with support from international organizations) would need to create stronger incentives for teachers to improve their instructional methods and more comprehensive, ongoing professional development that offer teachers the requisite capacity building, guidance, and support. Finally, the Egyptian government would need to go beyond introducing continuous assessment of students and restructure the examination system, so that teachers, students, and parents will not be so oriented to prefer transmission and memorization styles of teaching and learning.

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