The Hashemite Kingdom of Jordan

National Center for Human Resources Development

Supervision Committee for Evaluation Studies for Education Reform for Knowledge Economy Project (ERfKE I)

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Formative Evaluation Study of

Two School Initiatives
[ERfKE-I]

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Executive Summary

The vision for the current phase of education reform in the Hashemite Kingdom of Jordan came to the lime light at the "Forum for the Future of Education in Jordan" (September 2002), which identified four strategic issues for implementation:

> ***Structuring the education system to ensure lifelong learning; Ensuring responsiveness of the education system to the economy; Accessing and utilizing information and communication technologies for effective learning and system management; and Ensuring quality learning experiences and environments.***

Building on the output from the 2002 Vision, the Government of Jordan (GoJ) entered into an agreement in 2003 with the World Bank and other partners to initiate and implement the first phase of a reform program entitled Education Reform for the Knowledge Economy (ERfKE-I) having the development objective to:

> ***Support the Government of Jordan to transform the education system at the early childhood, basic and secondary levels to produce graduates with the skills necessary for the knowledge economy.***

The World Bank played a leading role in the development of ERfKE-I (2003-2008) as a program that included, twelve significant donors who financed programs that were aligned with the education reform objectives of this program. Of the US$ 380+ million donor-mobilized financing, the World Bank, with US$ 120 million, is the largest donor in ERfKE-I. The Jordan program is built on the basic premise that helping students compete in the twenty-first century knowledge intensive globalized marketplace requires the schools to offer challenging curriculum to all students, create courses relevant to the lives and goals of today's students, and surround these students with teachers who know and care about them.

The ERfKE-I program, currently being in its final year of implementation, has provided significant outputs, as a basis for the evaluation of the education reform in Jordan. The formative evaluation study, reported herein, is about two "pilot initiatives" (referred to in this document as SJE Experiment and SDU Experiment to avoid confusion with numerous projects and programs) within the overall framework of the Ministry of Education implemented program for Education Reform for Knowledge Economy (ERfKE-I) in Jordan.

School education in Jordan is based on two cycles: basic stage (for 6-15 year olds, covering grade 1 to grade 10), secondary stage (for 16-17 year olds, covering grade 11 and grade 12). The first cycle is compulsory for all boys and girls. Pupils take the general secondary examination (Tawjihi) at the end of the secondary cycle. Total number of pupils is approximately

1,598,200 enrolled in 5,690 schools (as of June 2008). In the same time frame, total number of teachers is approximately 89,500 and the overall student-teacher ration is 17.7. About 60 percent of all the schools are run by MOE (Ministry of Education), 4.5 percent by UNRWA (which is responsible for basic stage education within the Palestinian camps), and 35.5 percent are educated through private schools. Thus, public schools (run by the MOE) represent the majority of schools in all the educational cycles. Moreover, schools in Jordan are categorized into three types of schools: boys' schools; girls' schools; and mixed schools. In the private sector mixed schools are for children between ages 6-8 years; while in the public schools, in grade 5 (10 years old) girls and boys separate and join singe-sex schools.

It is important for the reader to note that comprehensive education reforms for knowledge economy in a developing country includes six aspects: (1) curriculum development; (2) improving instruction; (3) strengthening parent-community relations; (4) improving school climate; (5) effective staffing; and (6) better student outcomes, as the major components. Thus, putting in this holistic perspective, the involvement of the SJE and SDU pilot experiments are indeed very limited in scope. Specifically, SJE experiment is helping schools to strengthen community participation and school improvement planning through a process of collective self-assessment, and SDU experiment is helping schools to strengthen school council operation and capacity building through training of principals and teacher collaboration. Here are the highlights of findings of this study:

- Given that both of the experiments involved designing, applying, and refining their approaches for participative assessment regarding improvements needed, and collaborative planning for selected gap reduction, What is the scope and impact of the two approaches within the respective schools and within the overall functioning of education management and development at the district and school levels?

  The SJE and SDU pilot experiment activities described in full in earlier parts of this report can be considered as complementary in scope to each other and they collectively cover a wide variety of issues for education reform at the district and school levels. In particular, the SDU pilot experiment promoted capacity building approach through training and cooperative learning based on the concept of using a leader school for cluster formation. The SJE experiment, in particular, promoted management of school development planning activities through an approach of participative self-assessment using a large number of indicators. Therefore, the scope and impact are good but non comparable.

- What are the characteristics of the schools in each program in terms of understanding their own needs, solving problems, filling the gaps, relationships, communications, management, attitudes, behaviors, instructional needs, commitment, and accountability? And in which ways do the schools in these two districts differ from other matched schools?

There are no inherent differences in the characteristics of the schools taken for pilot experiments. The SJE experiment dealt with all schools in two districts; and the SDU experiment dealt with a very limited set of schools. The reform activities introduced by the two pilot experiments are described in full in earlier sections of this report.

- What are the degrees of awareness, satisfaction and perception of the different groups at the field directorate level, at the school management level, and among teachers, students and parents, and the community level?

  Degree of awareness created in the two school districts (Jarash and Al Badia Al Wosta), as could be ascertained through discussions with a number of teachers and principals from a sample of 15 schools and from the two district-level focus group meetings (involving: principals, teachers, students, parents, and community members from 15 schools) appears to be excellent. The perceptions of different stakeholder groups regarding specific issues are described in earlier sections of this report.

- What are the major contributions of these programs in supporting the overall mission of ERfKE in enabling decentralized education management at the district and school levels (e.g. in terms of stimulating teachers and administrators to properly manage and implement ERfKE interventions)?

  Both of the pilot experiment (SJE and SDU) documents and reports claim that they have carefully integrated the specific ERfKE-I goal of decentralization by establishing councils/committees for collective problem solving — assessing, prioritizing, solution designing, and development decision-making — leading to empowerment of the stakeholders at the school management level.

- Are there specific pros and cons that can be identified from the experiences of both programs and how do these relate to the design of the next phase of education reform?

  Although self-assessment approach is rightly used for "empowerment" by both experiments, actual self-assessment activities in the two experiments are not identical, and are used for different purposes. In the SDU Experiment, self-assessment is used for strategic assessment and assessment of student learning – first and foremost – as well as the causal factors for patterns of low (and high) performance. It is constructed through guided inquiry, and is organized procedurally to assist schools to ask questions in teams, and to find collective answers and judgments. It is evidence-based, not data-driven. It is scorecard-based, not report-card based. On the other hand, the SJE experiment presents indicators for schools and districts to determine their needs, find their

weaknesses, select priority areas for improvement, and monitor progress. However, for effective indicators, what is measured should be what matters to the school, and what matters most is student learning and achievement. As far as the SJE experiment is concerned, the apparent emphasis on "indicators" is misleading — "more factors is not necessarily better" and "consideration is not really assessment" — because for effective application the indicators should be measurable against well-established international standards.

- What are the external and internal factors or dimensions that are associated with each program's activities and levels of achievement that need to be taken in considerations when planning for integration of these programs in future education reform design planning?

  Clustering of SDU schools is planned, but not implemented. For leader school designation, SDU clusters have to have one of the "Discovery" schools in the nearby geographic area. Expected mutual cooperation among schools, schools and directorates, and community support for school resources are certainly dependent on the economic wellbeing of the community of the school district.

- What is the respective contribution of the two approaches in establishing an overall state of readiness for ongoing reform among all schools within a particular district, among all units within the respective district organization, and between the district and its schools, and between the district and the Central Ministry organizations?

  Both SJE and SDU management higher-ups believe that they are indeed ready to roll out their activities for all schools in the Kingdom of Jordan. But, the key question is whether that is the most efficient and effective way to utilize limited resources of loan taken from the World Bank. This point is scrutinized in the next section and the financial burden is taken into consideration in formulating the recommendations presented as the last part of this report.

It is conclude from the discussion and presentation contained in this report that much competence has been acquired from the experience of both SJE and SDU pilot experiments. The two experiments have made significant contribution in re-establishing the benefits of:

- **Revising Job Specification for Supervisors;**
- **Revising Job Specification for Principals;**
- **Utilizing Self-Assessment Technique for Improvement Management;**
- **Training Principals for Technical and Administrative Tasks (including self-assessment process and methodologies);**
- **Ensuring Teacher Collaboration within a Cluster (including training on mentoring process);**

- **Mandating Community and Parents Involvement in School and District Councils; and**
- **Information Sharing between Directorate and School Administration.**

But, is there anything new? The answer is a resounding NO. Moreover, all of the above development tasks should be the routine job of the Ministry of Education.

It is, therefore, recommended that the Development Coordination Unit (DCU) of the Ministry of Education be strengthened to take primary responsibilities for undertaking the following activities as part of the planned future projects of ERfKE-II, which are intended to ensure continuation of the development tasks listed above:

- **Identify common improvement priorities**
- **Conduct training programs to respond to improvement priorities**
- **Design and deliver standardized awareness creation program for principals, teachers, students, parents and community representatives in every district**
- **Design and deliver standardized self-assessment methodologies**
- **Design and deliver standardized procedures for determining improvement priorities**

The DCU should have a full-time world class educationalist to guide all of the above activities. Moreover, to ensure effectiveness of implemented reforms in all of the school education system of Jordan, it is recommended that some attention be given to the following aspects in designing the next phase activities of the DCU group:

- **Align formative development with education system goals and national development strategies;**
- **The methods for teaching, learning, and management should be integrated into a coherent package;**
- **Develop teacher growth perspectives and linkages to school development;**
- **Evidence rubrics for needs assessment should to be made more specific and measurable for management;**
- **Criteria for prioritization should be developed and manuals prepared for application at the schools and directorate levels; and**
- **Field directorate officials and community members in the school councils should receive some exposure to collective decision making tools and techniques that incorporate pragmatic tradeoff considerations.**

I. Introduction

Globalization is now a formidable challenge for every nation. Even though globalization is not a new phenomenon, the process of globalization has recently accelerated tremendously due to unprecedented technological advancements. The most prominent drivers of globalization are: (a) liberalization of national economies; (b) growing integration of world trade; (c) emergence of global capital markets; and (d) increased demand for new knowledge resources that provide an edge in international competition. Consequently, the present world economies are becoming more and more knowledge intensive. One can thus observe a paradigm shift towards knowledge capitalization for improvement in productivity-driven competition to attain: better economic performance, wealth generation, and development of societies all over the world. Economic development trends clearly show that the knowledge industry is becoming the most dominant contributor to sustainable economic growth (World Bank, 1999; 2006).

A knowledge industry develops and operates in a knowledge-dense environment. In such an environment, the balance between knowledge and other resources has now shifted towards the former such that knowledge has become perhaps the critical factor determining the standards of living — significantly more than land, than tools, than labor (World Bank, 1999). Both, already developed and the emerging economies, are hence moving more and more towards knowledge capitalization (a concept that focuses on improving market-driven productivity of knowledge) for advancement of necessary productivity-driven competitive edge of nation economies in attaining sustainable: (a) economic growth; (b) wealth generation; and (c) social justice (Kwiatkowski and Sharif, 2005). Therefore, Education Reform for the Knowledge Economy [ERfKE] is a strategic and timely initiative of the Kingdom of Jordan. The objective of the first phase of the ERfKE Program is to transform the education system at the early childhood, basic, and secondary school levels to produce graduates with the skills essential for becoming a knowledge economy (Masri, 2005). ERfKE-I calls for better management of the school education system of the Kingdom of Jordan through a transformation of the existing school system to become: (i) knowledge focused; (ii) learning centered; and (ii) outcome based (World Bank Project - PO75829).

World Bank (1999). ***The World Development Report 1998/99: Knowledge for Development.*** New York: Oxford University Press.

World Bank (2006). ***Work globally, develop locally: Diaspora networks as springboards of knowledge-based development.*** Paper commissioned by the World Bank, Washington, DC.

Kwiatowski, S. and Sharif, N. (2005). An intellectual entrepreneurship dialogue in ten years perspective, and with a view for future. In S. Kwiatkowski & N. Sharif (Eds.), **Knowledge café for intellectual entrepreneurship and courage to act**. Warsaw: Leon Kozminski Academy of Entrepreneurship and Management, Poland.

Dr Munthir Masri (2005). ***Needs Assessment of Education In Jordan,*** Publication Series No. 115, National Center for Human Resources Development (NCHRD), Amman, Jordan.

II. Study Terms of Reference

School improvement, school development, and school transformation are at the core of **Education Reform for the Knowledge Economy** (ERfKA-I; 2003-2008) in the Hashemite Kingdom of Jordan. The school, its leadership, management, teaching, learning, and connections to its community are factors in the improvement of school performance and student achievement. As part of ERfKE-I, the Ministry of Education (MOE), in collaboration with donors (such as: Canadian International Development Agency CIDA, US Agency for International Development USAID), has piloted two school and district initiatives to support selected schools and districts undertake self-assessment and evaluation of their status in order to identify their needs and gaps (shortcomings), and to formulate and deliver interventions. Both of these pilot experiments are intended to improve school environments and relationships, empower school and district administrators and leaders, train coaches and mentors, involve the civic communities, increase student and parent awareness, and support teachers in classroom activities. Both projects have identified a set of indicators for school success in different aspects/domains such as: school administration and leadership, staff qualifications, school resources, school finances/budgets and human resources, and support services. As part of two pilot experiments (described below), selected schools and related district officials are being trained on self-assessing their current status based on some indicators/factors that will lead to selection of certain development plans for overcoming their current weaknesses.

The **Support for Jordan's Education Project** (SJE) was designed to provide technical assistance to build sustainable capacity in the Ministry of Education (MOE) for continuous quality improvement of: (a) curriculum, (b) instruction, (c) learning, (d) assessment, and (e) system management. SJE's strategies focused on gender equality and on ICT (Information and Communication Technology) as a transforming and integrative technology. The SJE program is being tested for the last three years to enhance school–based changes through a systemic self-evaluation approach within a district, within the district schools, and between the schools and districts for common areas of improvement. It is also based on the introduction of a number of education support processes, mechanisms and personnel from within the district education organization and from member schools. The SJE pilot project is designed to increase student success by creating an effective teaching-learning environment through adopting schemes that depend on well-defined target results for school improvement. The SJE approach relies on a process that fosters open dialogue through careful review of collected data and is based on the development of skills and strategies to manage a system of continuous change. At the core of a selected approach for institutionalizing "school management improvement" is a self-assessment scheme that involves active participation and collaborative formulation of improvement plans. Additionally, supervisors at the directorate level continue with their mandated responsibility for monitoring school conditions, but actual operational responsibility is shifted to the administrators and teachers of each school included in the pilot experiment.

The **School Development Unit** (SDU) program was designed to focus on building the internal capacity of schools, identified as "leader schools" at three levels: national, directorate,

and the cluster. The SDU program trains mentors from within these schools (either school principals/vice-principals or teacher coordinators for different subjects) who can provide support for capacity building of other schools in their cluster region. The focus of the SDU initiative is primarily school-to-school, with governance issues handled within a community of practice, from which leadership and support groups (peers, experts, coaches, and specialists) are drawn. This ground-up approach is combined with a top-down placement of pilot SDUs that are in direct contact with "SDUs-in-training". Therefore, the organizational structure utilized for school development is lateral or horizontal in its orientation, and non-hierarchical in linkage. The SDU project group in the Training Directorate of the Ministry of Education has worked for about four years, promoting the above concept in the SDU pilot schools. The SDU program is also part of an international reform agenda that focuses efforts on improving overall student performance through capacity building for school effectiveness. The shift to schools and to improvements that focus on students, and the shift from teaching to learning by teachers and students require substantial organizational rethinking at the school level, and equally at the level of the school cluster, the directorate and also nationally.

Specific Objectives for this Study

(1) **Assess and evaluate the experience to-date of the two experiments:** School Improvement Program (SJE pilot project), and School Development Program (SDU pilot project). In this regard, the following questions need to be researched:

- What is the scope and impact of the two approaches within the respective schools and within the overall functioning of education management and development at the district and school levels?
- What are the characteristics of the schools in each program in terms of understanding their own needs, solving problems, filling the gaps, relationships, communications, management, attitudes, behaviors, instructional needs, commitment, and accountability? And in which ways do the schools in these two districts differ from other matched schools?
- What are the degrees of awareness, satisfaction and perception of the different groups at the field directorate level, at the school management level, and among teachers, students and parents, and the community level?
- What are the major contributions of these programs in supporting the overall mission of ERfKE in enabling decentralized education management at the district and school levels (e.g. in terms of stimulating teachers and administrators to properly manage and implement ERfKE interventions)?

(2) **Formulate recommendations that would ensure the effectiveness and efficiency of adopting these models on a system wide basis.** In this regard, the following questions need to be researched:

- Are there specific pros and cons that can be identified from the experiences of both programs and how do these relate to the design of the next phase of education reform?

- What are the external and internal factors or dimensions that are associated with each program's activities and levels of achievement that need to be taken in considerations when planning for integration of these programs in future education reform design planning?

- What is the respective contribution of the two approaches in establishing an overall state of readiness for ongoing reform among all schools within a particular district, among all units within the respective district organization, and between the district and its schools, and between the district and the Central Ministry organizations?

Study Significance

In July 2003, the Government of Jordan (GOJ) launched the Education Reform for the Knowledge Economy (ERfKE) initiative. This five-year, $380 million program, developed and being implemented with CIDA, USAID and other donor agencies, is one of the most ambitious education reform programs in the Middle East and North Africa region to date. The primary goal of Jordan's education reform program is to re-orient education policy, restructure education programs and practices, improve physical learning environments, and promote learning readiness through improved and more accessible early childhood education. The Ministry of Education (MOE) is currently at the finalization stage of preparing the next phase document of educational reforms for knowledge economy in Jordan (ERfKE-II) for deliberation with the World Bank representatives, and for that purpose this study report would be a critical input.

World Bank and the Government of Jordan recognize that until there is an independent evaluation of ESP, SJE and SDU programmes it will not be possible to recommend a settled way into ERfKE-II. Since future plans for Component-1 of ERfKE-I (which is: Reorient Education Policy Objectives and Strategy through Governance and Administrative Reforms) is expected to include an element of "school improvement, school development, and school management," recommendations of this formative evaluation are considered to be important. However, every effort must be made to avoid wasteful duplication and replication of efforts.

Study Rationale

Even though the term "pilot" is used in many documents, including the TOR given to the international consultant, it should be borne in mind that the two pilot projects are really two "experiments." Both of the experiments were supposed to have involved designing, applying, and refining their approaches for participative assessment regarding improvements needed, and collaborative planning for selected gap reduction. This logical process of design-apply-refine needed to be verified and lessons learned so far had to be carefully scrutinized for inclusion in future activities to be adopted for implementation in the next phase of education reforms.

It was, therefore, anticipated in the TOR that at the end of this "formative evaluation" of successful elements from these two experiments (SJE and SDU pilot initiatives), the consultant is expected to identify opportunities of any further refinement in the approaches. And then the consultant has to formulate recommendations on "scenarios" regarding how to best blend these two experiments, nationally focusing on the role and function of "school as a development unit." The consultant was requested to provide recommendations targeting strategies, designs, policies and regulations that need to take place to constitute a successful and sustainable implementation in the next phase of education reform (ERfKE-II). As far as possible, current costs and ways to reduce cost should be addressed in the proposed scenarios for future projects.

Thus, this is not a standard "end of project" evaluation study but a "formative" evaluation study with the stated expectation for the consultant to come-up with the interim report (draft; back from field study report) by the end of June 2008, regarding a "suitable" model for system-wide adoption (rolling-out) to be included in the ERfKE-II. Then, after systematic data collection and analysis of the total situation (including assertion of correctness of the draft report content), a final report needs to be prepared and submitted by September 2008 before the World Bank meeting for finalization of ERfKE-II projects in October 2008.

Study Limitations

There are two critical ingredients needed for the commissioned formative evaluation study of two experimental initiatives. These are: (a) The baseline design of the experiment as included in a formally approved "project document" used for funding and implementing its activities; and (b) A rigorous process of data collection and validation for arriving at conclusions to be used in the design of subsequent projects for full-scale operation. Unfortunately, neither of the project (SJE and SDU) administrators nor the evaluation agency administration (NCHRD) could provide copies of "official project documents" to the international consultant. Other constraints faced by the consultant were: (a) timing of the study; and (b) research facilities made available for the study. Unfortunately, the consultant was recruited to start work in Amman, Jordan, on 1st of June 2008, when the schools were having year-end final examinations and the academic year for all other activities have already ended. This has put a serious constraint on the international consultant for not being able to observe any of the pilot experiment activities in real action. Moreover, due to time constraint imposed on finalizing the report, NCHRD management decided not to proceed with a scientifically designed questionnaire survey for data collection by local counterpart researchers for transmission to the international consultant. Therefore, this report by the international consultant is very qualitative in nature, and represents a number of judgment calls regarding achievements related to the experiments and options for future plans. One more observation by the consultant is worth noting here. The ministry officials, the two project office administrators, and the NCHRD researchers were all apprehensive of the "political sensitiveness" of the study. Hence, it is apparent that the international consultant was hired to be the escape goat for all blames, as the wishes of various parties were made known. However, all of them together are indeed considerate enough to let the consultant produce a report to the best of his abilities under the constraint of not having copies of the project documents and not supported by extensive data collection through a questionnaire based survey as stipulated in the TOR attached with the consultancy agreement between NCHRD and the Consultant, and as recorded in the Technical and Financial Proposal of the Consultant.

Study Methodology

A case-study approach was used to assess the performance of the two pilot experiments. The time-constrained study of the two pilot experiments included collection and analyses of representative type impact information from 15 schools and two school directorates — to analyze the experiments to-date and to formulate recommendations for the future — based on direct school visits (4 SDU Pilot Schools; and 11 SJE Pilot Schools) and two focus-group meetings with stakeholders from SJE Pilot Schools Districts (which included principals, teachers, students, parents and community representatives). Besides, twelve school-based specific sample surveys were conducted for information validation related to conditions and activities, performance, and perceptions of the stakeholders regarding the two pilot experiments. In the absence of official project documents, most background information was extracted from secondary sources, obtained from two project offices, and the NCHRD database.

The evaluation framework utilized for the study of two pilot experiments was anchored in a comprehensive context of the global movement on "school education reform for the knowledge economy" and was influenced by the consultant's experience with the current US practice, which is briefly summarized below. In recent years, the US State of North Carolina (NC) has created considerable momentum toward reforming the school system. The school reform movement in North Carolina is primarily built on the premise that helping students compete in the 21st century marketplace requires public schools to offer challenging curriculum to all students, create courses relevant to the lives and goals of today's students, and surround these students with adults who know and care about them. With an $11 million grant from the Bill and Melinda Gates Foundation, the North Carolina New Schools Project (NCNSP) provided planning and implementation grants for the creation or redesign of schools. A study recently concluded by the Center for Teaching Quality (CTQ) in North Carolina identified specific stakeholder roles and assessment needs for school management. Most important issues described in the study report are noted below (For additional details see: The CTQ-NC Report: ***Teaching and Learning Conditions Improve High School Reform Efforts***, North Carolina, February, 2007.):

ROLE OF TEACHERS:

Educational change depends on what teachers do and think — it is as simple and complex as that. In the US, the conditions for school level teaching appear to have deteriorated — stress and alienation and the intensification of teacher's work, is at an all time high. Teachers look first to other teachers in such times for sources of help and their greatest rewards come from, those moments when they feel their students have learnt something, and from respect from their fellow teachers. Too often teachers work in isolation increasingly feeling frustrated and burnt-out with imposed curriculum and increasing accountability demands.

ROLE OF PRINCIPALS:

The principal is the gatekeeper of reform. There is not an improving school without a leader who is good at leading transformational improvement. Successful principals share leadership, they reach out to their parents and community and work hard to expand the professional 'capacity' of all teachers to develop a coherent professional community. Leader

principals are relationship centered, able to develop a clear collegial value framework and individual accountability. Such principals foster the conditions required for school growth and develop a commitment to a mutual purpose and a shared belief in ongoing common actions. By doing this they develop school capacity which in turn affects the quality of teaching within the school. Such individual and school-wide capacity development combats the fragmentation and curricula incoherence presented by multiple innovations.

ROLE OF STUDENTS:

Student views often get lost in the shuffle of school change. They are rarely thought of as participants in the process. Students to be successful need to be provided with relevant, engaging and worthwhile experiences. Disengaged students lack meaningful connections with teachers. Students have ideas about how schools should be. Students in recognition for a safe and caring environment where their efforts are rewarded will work hard. Not only must they be part of the solution, but also, in many cases, they may even have better ideas for solutions.

Some students report that teachers ask them for their opinions, but many find lessons boring, and a great majority of student comments reflect an alienation theme. Student learning is enhanced when they understand what is expected of them, when they get recognition for their work, learn quickly from their errors, and receive guidance in improving their performance. Too many students, particularly at the secondary level, are disengaged from their learning — and a growing number feel alienated. Some thing needs to be done quickly. Effective teachers give students a "voice" in their classrooms. Such teachers invite students to talk about what makes learning difficult, what diminishes their motivation, makes then give up, or settle for a minimum effort position. They expose students to an "atmosphere of hope."

ROLE OF PARENTS AND COMMUNITIES:

Involving parents in all matters of the school management is important because the closer parents are to the educator the greater the educational impact. Schools need to reach out to parents but to do this will require shifts of power and influence. Parents, and the wider community, have largely untapped expertise essential to the partnership. However well or badly parents do, they are the students' first educators. Schools need to develop an "invitational" attitude towards parents and do more to help parents assist their children. Advancing schools involve parents in a range of innovative ways. Most parents do not want to run the school but they do want their children to do better. There is little evidence to indicate over the years that schools and parents have become closer. Parent involvement cannot be left to individual teachers it must involve a school wide emphasis. Parent involvement must be seen as a crucial and alterable variable for school development in any community.

Schools belong to the community they reside in and progressive schools acknowledge this. Thus the "power of three" (school administrators, parents and community representatives) is critical for effective development of all schools. However, this too often remains an unleashed force. School Boards and teachers need to take the first steps. Involving the wider community is very challenging. It requires a lot of preparation and follow-up work by school principal and teachers. Unfortunately, too many schools still operate in isolation from their community.

CLASSROOM ENVIRONMENT ASSESSMENT:

Collecting data on student understanding is an essential step in moving students toward full understanding of important concepts and standards. Instruction and formative assessment are indivisible. Assessment refers to all those activities undertaken by teachers — and by their students in assessing themselves — that provide information to be used as feedback to modify teaching and learning activities. It is formative assessment only when the evidence is actually used to adapt the teaching environment to meet changing student needs. The researchers found that strengthening formative assessments can raise student achievement overall and be especially helpful to low-achieving students.

STUDENT PROGRESS ASSESSMENT:

Progress tracking should be designed to answer two main questions: (a) how is the school doing? (b) How can the school be improved? The needs assessment process enables one to look more deeply at those areas in a diagnostic sense and to establish some priorities for program planning or revision. It should be kept in mind that the operative word "needs" in needs assessment most often refers to students' needs. Although needs assessment questions generally ask one to look at outcomes of one kind or another for specific groups, formative evaluation allows one to look at processes as well.

A Note for the Reader of this Report

Understanding the processes that create or contribute to school outcomes and contexts in which these relationships occur is a pre-requisite for developing a program improvement agenda. Moreover, sensible evaluation is formulated in collaboration with program administrators and implementers. A cautionary note for education reform designers: Sensible evaluation is useful; but useful evaluations are designed with inputs from both those who know the program best as well as those who are responsible for improving the program.

School level evaluation activities should provide parents, teachers, principals, and even district administrators with concrete evidence of school quality improvement in a timely manner. Also, evaluation provides a framework for engaging teachers, parents, and the wider school community in the improvement process as well as mechanism for informing all involved of school successes and strengths. This larger perspective helps build support for the local school as well as increased mutual understanding among different members of the schools community.

Educators are nowadays are living in a time of decreasing resources and increasing demands both from the communities they serve and from the wider body politic. When there is limited resources, decision about which programs are worthwhile require more stringent criteria (like productivity) than "the kinds like it" or "teachers say it's a great program." However, in education, productivity is not so easily defined. Increasing productivity of education implies improving the quality of processes and outcomes while tailoring services to an increasing number of specialized clients. Unlike industry, education business is people intensive; and changes are mediated by attitudes and skills of the people involved.

III. Contextual Background for this Study

Education reform has become a movement in every country for effectively participating in the emerging knowledge intensive world. In this part of the report, an attempt is made to put this specific study on "formative evaluation of two school initiatives" in the total perspective of the current global movement on "education reform for knowledge economies" as envisaged by international development agencies and echoed by national commissions in selected countries. The SDU pilot experiment had some funding for 15 School Principals to receive an exposure to the school education system in England. The SJE pilot experiment, being administered by the Canadian International Development Agency, obviously introduced elements of the Canadian school education system. In this section, therefore, we discuss various World Bank projects and other country (Australia, India, Japan, USA) experiences to put this study in global perspective.

World Bank Projects for Knowledge Economy

Education for the Knowledge Economy (EKE) refers to World Bank assistance aimed at helping developing countries equip themselves with the highly skilled and flexible human capital needed to compete effectively in today's dynamic global markets. Such assistance recognizes first and foremost that the ability to produce and use knowledge has become a major factor in development and is critical to a nation's comparative advantage. It also recognizes that surging demand for secondary education in many parts of the world creates an invaluable opportunity to develop a workforce that is well-trained and capable of generating knowledge-driven economic growth. What is the World Bank doing to support work in this area? World Bank assistance for EKE is aimed at helping countries adapt their entire education systems to the new challenges of the "learning" economy in two complementary ways:

- Formation of a strong human capital base: A framework for knowledge-driven growth requires education systems to impart higher-level skills to a rising share of the workforce, foster lifelong learning for citizens, and promote international accreditation of a country's educational institutions.

- Efforts along two dimensions are needed: to provide quality and relevant education to a larger share of each new generation of young people through expanded secondary and tertiary education; and to train and retrain the existing labor force to provide opportunities to those who were unable to complete secondary or enter tertiary education.

School Based Management Principles of World Bank

Reviewing the last of the World Bank document series on "School Based Management" (***What is School Based Management?*** Washington DC, November, 2007), the following assertions are worth noting for arriving at valid conclusions from the assessment of two pilot experiments studied by the international consultant:

- No theorist disputes the interdependence of government, school administration, teacher, classroom behavior, and parental attitudes.
- Involving community members (who are usually parents of children enrolled in the school) have incentive to improve student's education.
- Local decision-making and budgetary decentralization can have positive effects on school outcomes such as test scores or graduation rates by holding school accountable for the outputs that they produce.
- Training in shared decision-making, interpersonal skills and management skills can improve effectiveness of school councils.

School Reform for Excellence in Australia

The School Reform for Excellence Initiative is the overarching framework for achieving high standards in student learning, innovation and best practice in ACT government schools. The outcome of striving for school excellence is to create quality in the domains of schooling. These are learning and teaching, leadership and management, community involvement and student environment. The core of school excellence is student achievement and learning.

The concept of school excellence has the fundamental assumption that teachers are at the heart of all student learning and the degree of teacher expertise impacts on the outcomes of their students. In their desire for school excellence, schools focus their energy and desire for innovation into the classroom ensuring that school improvement strategies impact directly on learning and achievement – the essence of teachers' business.

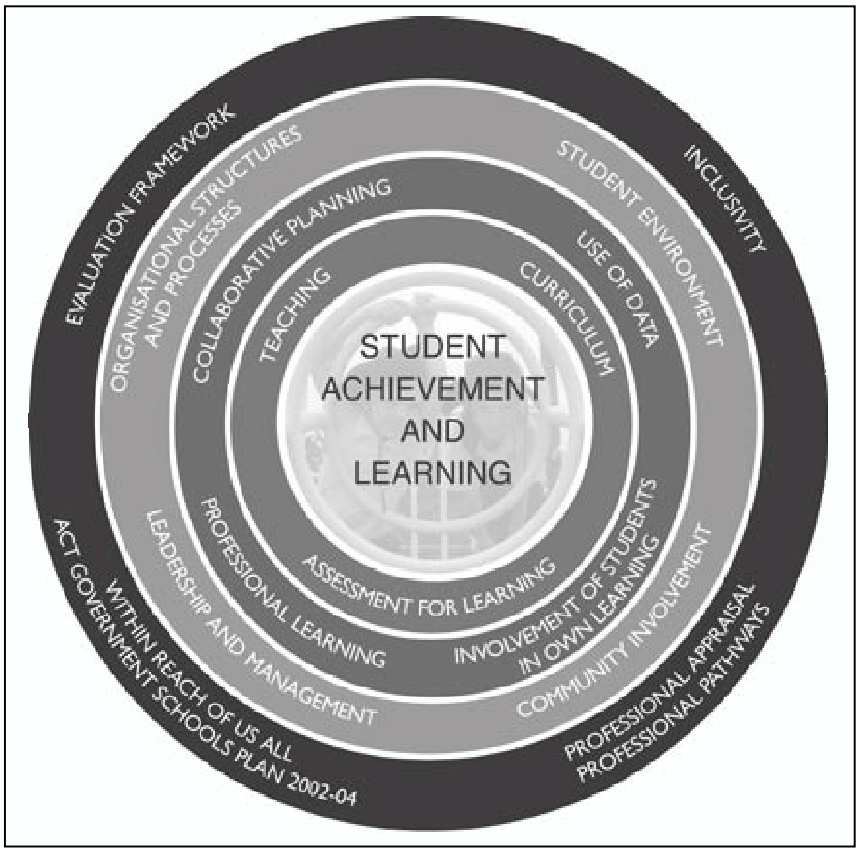
As a consequence, the School Reform for Excellence Initiative promotes schools that are vigorous and confident in their capacity to provide high quality education for all students. ACT schools have always been committed to the delivery of excellence. The School Reform for Excellence Initiative continues the promotion of achievement. This striving for school excellence provides the context for the School Improvement Framework.

Excellent schools are not content to merely accept high achievement. They ask questions about student outcomes and about school practices that are impacting on the achievement levels. These questions might include:

- Have we established explicit, high standards for learning?
- What are our agreed parameters for determining high standards?
- What factors are affecting student achievement?
- Does the level of achievement meet with community expectations?
- What classroom pedagogical practices are clearly resulting in high student achievement?

The answers that arise from this reflective process point to aspects of school policy and practice that, if modified, could reasonably be expected to further enhance learning. Schools that challenge themselves in this way are striving for best practice in an outcomes focused school environment. The Australian School Improvement Framework (see the schematic diagram below) supports schools in answering these questions. The answers inform improvement planning and provide quality assurance for the ACT government school system. Successful schools incorporate ongoing monitoring processes to ensure continuous school improvement. An excellent school knows:

- What it is aiming to do;
- Whether it is meeting its aims successfully;
- What needs to be maintained or improved;
- Whether changes are working; and
- What the community values about the school.



In Australia, an excellent school seeks to answer following questions about its performance:

How are we going?

- What is the quality and standard of achievement of our students?
- Is this standard high enough, given what we know about these students, the capacity of this school, community expectations and our own professionalism?

How do we know?

- What evidence do we have about school performance?
- What are the quality indicators that assist us in making judgments about school performance?

What are we going to do now?

- What issues and priorities will become part of the school's strategic plan?
- What are our key strengths?

What results do we want?

- What benchmarks do we want to set in order to achieve our goals?
- What does our student performance look like against system benchmarks?
- What are our expectations about the quality of classroom teaching practice and the levels of student participation?

In short, excellent schools are able to answer the question: How good are we? If a school knows these things and acts upon them, it should be well on the way to delivering educational excellence. Thus, schools are engaged in a constant process of learning and developing their ideas. As this thinking develops, so will a school's and the community's view of what is 'good' or 'excellent' will ultimately grow. Continuous school self-evaluation, change and subsequent innovation are therefore essential to an effective school and bring a connectedness to the concepts of the School Improvement Framework presented above. For additional details see: ACT Report (2005), ***School Improvement Framework: Guidelines for School Improvement***, Australian Commonwealth Territory (ACT), Canberra, Australia.

School Education Reform in India

The following information is taken from an official letter on school education, (from the Chairman of National Knowledge Commission (NKC), to the Prime Minister of India, dated 3 February 2008, letter available in the Internet) that summarizes the most important issues and suggested interventions for education reform in India. For more details see National Knowledge Commission Report (2007), R***ecommendations on School Education,*** New Delhi, India.

1. Central legislation for the right to education, backed by financial commitment

NKC endorses the speedy enactment of a central legislation that will ensure the right of all children in the country to good quality school education up to Class VIII, supported with financial commitments of the central and state governments. This obviously requires substantially increased public spending for both elementary and secondary school education, which must be seen as a priority area for spending. Currently school education is highly segmented, even in government run institutions, as a result of the parallel track of "education centers" in some states. These separate systems must be integrated to give all children access to schools of acceptable quality, which will obviously require additional spending.

2. More flexibility in disbursal of funds

However, there is a strong case for changes in the manner in which such expenditure is incurred. The current norms for central government disbursal to states of funds for, including for 'Sarva Shiksha Abhiyan' (SSA), the planned SUCCESS program for secondary education and other central schemes, are too rigid and must be made more flexible. NKC strongly recommends a system of funds transfer and accounting that will allow for regional and other differences as well as changing requirements over time, and thereby allow state governments to use the resources in the most effective way. There should also be greater flexibility in disbursing funds down to the school level and a greater degree of autonomy of local level management in the use of funds. The norms and rules should allow schools to adapt to local conditions and meet particular requirements of their students.

3. Decentralization and greater local autonomy

Community participation is an important instrument to ensure accountability and improve the day-to-day functioning of schools. This in turn means that the management of schools, including the use and management of funds, should be decentralized to local authorities as far as possible, whether they be 'panchayats', Village Education Committees or municipalities, and to School Boards that have representation of all stakeholders including parents.

4. Expansion of functional literacy

NKC would like to stress the continuing importance of a focus on expanding functional literacy among the population. Illiteracy remains a major problem, even among the age-group 15-35 years, and therefore literacy programs must be expanded rather than reduced, and given a different focus that is directed towards improving life skills and meeting felt needs, especially (but not only) among the youth.

5. Planning for school infrastructure

It is important to remember that land is an essential requirement of schools, and this requirement is likely to increase in the near future given the expansion implied by demographic changes and need to ensure universal schooling. Therefore urban master plans and local development plans must explicitly incorporate the physical requirements for schooling, including provisions for play grounds and other school facilities.

6. Enabling and regulating mechanisms for private schools

Since private schools play an important role in the provision of education, there is need for both enabling and regulating mechanisms to be developed and strengthened for them. There should be transparent, norm-based and straightforward procedures for the recognition of private schools, to reduce harassment and bureaucratic delay. There should also be transparent criteria as for the disbursement of aid from the government to some self-financing schools, especially those which cater to underprivileged children, and clear norms with respect to the ability of school managements to raise resources from other sources. The monitoring of private schools, in terms

of ensuring a transparent admissions process, regulation of fee structures, as well as meeting minimum set standards for quality of teaching and infrastructure, also requires attention. The possibility of greater exchange between schools, including mentoring of one school by another, should be allowed and encouraged.

7. Database on school education

Educational planning and monitoring are made much more difficult because of the lack of comprehensive and accurate data on schools, school-age children and actual attendance of both students and teachers. The collection and speedy dissemination of accurate and current data on schooling must be made a priority. It is necessary to create a complete database on schools and school-age children so as to track the actual coverage and quality of schooling at different levels, and to make it widely available in a timely manner. Such data collection may be made an essential part of the fund allocation for school education, with appropriate institutional mechanisms.

8. More co-ordination between departments

The multiplicity of management structures and government departments that currently governs schooling creates confusion, unnecessary replication and possibly inconsistent strategies across different schools. There must be greater co-ordination between different departments of government on school education policy, even while ensuring more autonomy to the local management of schools.

9. National evaluation body for monitoring quality

Educational administration also needs to be more conscious of actual learning outcomes at different levels, which will determine both policy and functioning. NKC therefore proposes a national evaluation body to monitor the quality of both government and private schools, using a results based monitoring framework based on a short list of 'monitorable' criteria that include both process and outcome indicators.

10. Revamping school inspection

The system of school inspection needs to be revamped and revitalized, with a greater role for local stake holders and greater transparency in the system. The solution does not lie in simply expanding the system – rather, we need to develop systems to ensure meaningful monitoring, including provision of greater facilities to school inspectors, a separation of inspection of qualitative and administrative aspects, transparency in the criteria of inspection, and greater involvement of local stakeholders.

11. Teachers and teacher training

Teachers are the single most important element of the school system, and the country is already facing a severe shortage of qualified and motivated school teachers at different levels. It is urgent to restore the dignity of school teaching as a profession and provide more incentives for

qualified and committed teachers. Non-teaching official duties such as electoral activities should not be allowed to interfere with the teaching process. All types of forums, which allow and encourage teachers to exchange ideas, information and experiences, including a web-based portal, should be developed. At the same time, there should be transparent systems for ensuring accountability of school teachers. As far as possible, teachers should be recruited to particular schools. The training of teachers is a major area of concern at present, since both pre-service and in-service training of school teachers is extremely inadequate and also poorly managed in most states. Pre-service training needs to be improved and differently regulated in both public and private institutions, while systems for in-service training require expansion and major reform that allows for greater flexibility.

12. Reforms in the curriculum and examination system

Curriculum reform remains a critically important issue in almost all schools. School education must be made more relevant to the lives of children. There is need to move away from rote-learning to understanding concepts, developing good comprehension and communication skills and learning how to access knowledge independently. This also requires substantial changes in the examination system, especially at Board level but also earlier.

13. Use of information and communication technologies (ICT)

Wherever feasible, ICT should be made more accessible to teachers, students and administration for learning, training, research, administration, management, monitoring, etc. This requires the provision of more facilities such as computers as well as connectivity and broadband facilities. Computer-aided learning also requires training of teachers and other staff in order to make the best use of the technology.

14. English language teaching

Proficiency in English is widely perceived as an important avenue for employment and upward mobility, which also greatly facilitates the pursuit of higher education. The incorporation of English into the curriculum through the teaching of English as a language in Class I and teaching of one other subject in English medium in later classes requires making pedagogical changes to contextualize language learning, increasing the availability of English language teachers and providing more bilingual and supplementary teaching materials. At the same time, 'mutlilinguality' must be promoted and language issues must be explicitly taken on board in designing school curricula and methods of pedagogy. Obviously, specific measures are required to ensure greater enrolment and retention of girl students. Education of SC children must be a priority, which necessitates both flexibility of approach and avoidance of discrimination. The access of children from Scheduled Tribes requires more flexible and sensitive schooling strategies. Language issues must be explicitly taken on board in designing school curricula and methods of pedagogy. Special strategies are required to ensure greater access to schools for children in backward regions, remote locations and difficult terrains. Official strategies for ensuring better access of Muslim children to schooling are excessively focused on 'mudrusas' which cater to only a tiny minority of such children; the emphasis should be on creating enabling conditions for Muslim children in the general school system. Children of seasonal migrants

require special conditions and efforts to ensure continuous access to schooling. Similarly, laboring children require incentives and bridge courses. The needs of physically disadvantaged children, as well as teachers, have to be factored in more thoroughly in provisions for school education. We realize that there is wide diversity across states in terms of progress towards achieving universal elementary education, and also diversity within states with respect to the quality of school education. But we believe that these proposals, which require the active involvement of the central government as well state governments, will go some way in terms of ensuring universal access to elementary education, wider access to secondary education as well as better quality and greater relevance of all schooling. Given the strong synergies between this and other areas such as libraries, translation, knowledge networks, etc., these suggestions should be seen in conjunction with other recommendations that have already been made in these other areas, as part of a systematic set of knowledge initiatives for the young.

School Educational Reform in Japan

Based on the National Commission on Educational Reform report, in January 2001 the Ministry of Education, Culture, Sports, Science and Technology (MEXT) released its Education Reform Plan for the 21st Century. The Plan established an overall vision for education reform as well as conveying the specific policy plans and tasks to be tackled. In March 2003 the Central Council for Education submitted a report on a radical overhaul of education to modernize and update the system under the title, "Fundamental Law of Education and the Basic Promotional Plan for Education in a New Era." The Central Council for Education, responding to MEXT's request for advice, submitted a report regarding policies for promoting reform of primary and secondary education in May 2003 entitled "Immediate Policies to Enhance and Improve the Curriculum and Instruction in Primary and Secondary Education." It is currently discussing the introduction of increased flexibility in compulsory education and other school education systems, future concepts for upper secondary schools and policies to promote lifelong learning.

With the intense interest that education is attracting, MEXT is currently moving forward comprehensively with the following measures for all levels from primary and secondary education to higher education, guided by the four principles of "respect for individuality and ability," "fostering of sociability and international outlook," "emphasis on diversity and choice" and "promotion of openness and evaluation." The following paragraphs represent major recommendations. For more details, see Education Ministry Report (2005), ***Educational Reform in Japan*****,** Ministry of Education, Tokyo, Japan.

Main theme of Primary and Secondary Education:

> **Develop 'Academic Ability' — Boost children's academic ability with teaching that is more tailored to individual personality and ability.**

Specific Recommendations for Education Reform:

(1) Teaching adjusted to ability, small classes, more developmental and complementary learning

- Á Have children experience the fun of learning, increasing their desire to learn and improving the "quality of academic achievement"

(2) Establishment of a "period of integrated study," more experiential learning; links between schools, families and local communities encouraged under a five day school week

- Á Realization of "understandable lessons" using IT and cultivation of the ability to use information

(3) All public schools to have high-speed 24-hour internet connection for "cultivation of richness in mind"

- Á Fostering enrichment

(4) Development of ethics, civic-mindedness and sensitivity

- Á Expanded moral education (distribution of "Kokoro Note" (a notebook to be used by students in moral education) to all elementary and lower secondary school students
- Á Promotion of volunteering/social service activities, hands-on activities and reading
- Á Enhanced education on traditional culture
- Á Development of school counseling (appointment of school counselors nationwide)

(5) Towards better health and physical ability

- Á Rollout of a comprehensive policy in line with the Plan to Boost Children's Physical Ability
- Á Promotion of nutritional education (instruction about food)

(6) Development of Schools of Unique Character Harnessing Community Creativity and Initiative

- Á Schools with more individual character as a result of student and parent/guardian choice

(7) Increased freedom in selection of elementary and lower secondary schools, elimination of upper secondary school zones

(8) Development of Open, Trustworthy Schools

- Á Truly accountable schools

(9) Encouragement of school evaluation and information sharing—toward implementation in all elementary, lower secondary and upper secondary schools

- Á Official requirements stipulated for elementary, lower secondary and upper secondary schools.

School Education Reforms in the United States of America

One of the greatest changes initiated in the United States by first wave reform was that of **standardization**. Though the majority of states already required periodic standardized testing of students, the results of those tests did not always lead to direct assistance to the children who were scoring poorly. By the mid-1980s, though, 45 states had expanded their testing, including more strenuous graduation requirements, more regular testing and greater standardized test preparation. Additionally, many states have already begun legislating **merit pay programs** for educators. By 1986, 46 states offered merit pay plans, an increase from 28 states in 1983. Teachers were evaluated on their educating ability and knowledge of their subjects in order to determine periodic raises and bonuses. But despite the vast developments of first wave reform, research now suggests that this focus on standardization did little to affect student learning and comprehension (Fuhrman et al, 1988; Fuhrman and Elmore, 1990; Clune, 1989, Schwille et al, 1988, McCarthy, 1990). The studies suggested that changes in professionalism and administration did not always trickle down to effective education strategy implementation. Teaching guidelines became more complex and less coherent.

Reform, therefore, had to tackle the bureaucracy of the administrative structure, as well as curricular planning, assessment and teacher empowerment. In terms of actual instruction, computers are an invaluable tool for providing active collaborative learning and assessment. While basic word-processing programs allow students to become independent publishers of ideas and opinions, email provides opportunities for "peer review" and group editing. More sophisticated interactive multimedia packages offer true inquiry-based learning, where students must construct and demonstrate solutions to a variety of in-class projects. This is not to suggest that computers are used in reform to replace the role of the teacher; realistically that would be both undesirable and impractical. Instead, the computer must be recognized as an effective teaching tool which assists the educator. Software offer students individualized learning, so while some students progress on a subject at their own paces, those who begin to fall behind can receive proper interpersonal attention from the instructor. The computer lets the teacher concentrate on interaction and individualized assistance. In a sense, because computers have proven to be a successful tool of reform-minded schools and educators, they are now inextricably linked to the reform movement itself.

One of the greatest complaints over the American education system has been its top-down approach; for many years policymakers at the federal level have attempted to dictate education policy at the state and local level. Over time a broad grass-roots coalition of concerned parents and politicians began to push for more local control. This bottom-up approach to learning would be found in states gaining control from the federal government, districts gaining control from the states, schools gaining control from the districts, and eventually, parents gaining control from the schools. This movement has solidified into a broad family of policy concepts.

With Site-Based Management (SBM) and teacher professionalization, schools and teachers are asserting more control over education management decisions. Non-profit charter schools and for-profit education management organizations offer students public school learning environments that break away from the traditional state-run system. Through school choice,

parents can choose to take their students out of poorly run schools and place them into other institutions - including parochial schools in some cases. And an increasing number of families are choosing to reject classrooms altogether and adopt homeschooling instead.

The next generation of Americans will likely require a solid grounding in mathematics and science for their creativity to be maximized in a world increasingly dependent on technological advances for prosperity and security. As the majority of Americans do not earn a postsecondary degree, it is essential that students be given this solid grounding during the elementary and secondary years. For references and further details regarding US picture see: Education Commission of the United States Report (2008), ***The Progress of Education Reform: What Works in Improving Low-performing Schools and Districts?*** CREST Report (NCLB), California, USA; Paul Glewe and Meng Zhao (2005), ***Attaining Universal Primary Completion by 2015: How much will It Cost?*** American Academy of Arts and Sciences, Cambridge, MA; and Melissa Binder (2005), ***The Cost of Providing Universal Secondary Education in Developing Countries,*** American Academy of Arts and Sciences, Cambridge, MA.

Synthesis of Issues from Global Trends in School Education Reform

Based on a thorough review of the reports briefly mentioned above, it is possible to list the most important ingredients identified for national education reform of schools as follows:

- **Active Learning** — the emphasis in both instruction and assessment has shifted from getting students to 'respond' to having them 'produce' or 'demonstrate' what they know.

- **Collaborative/Cooperative Learning** — in collaborative/cooperative learning, students work in groups on common tasks.

- **Contextualized Learning** — the impetus for contextualized learning comes from recent research in psychology, which suggests that 'problem solving' or 'decision making' or even 'reading' have different meanings in different disciplines and contexts.

- **Developmentally Appropriate Instruction** — many programs, especially for elementary children, are now founded on developmental learning principals.

- **Integrated/Interdisciplinary Instruction** — young children have difficulty separating their world into 'subject mains' or 'disciplines' that may appear to be artificial.

- **Prior Knowledge as Basis for Learning** — learning is more efficient and meaningful when students can use what they have learned already to make connection with new material.

- **Thinking Skills as an Instructional Outcome** — although thinking skills are to be taught in context, transferrable skills, rather than information, are desired outcomes of instruction.

- **Authentic Performance Assessment** — a trend in classroom testing has been to design tests that look much more like real-life tasks.

Synthesis of Major Aspects of School Improvement Programs

Based on a thorough review of the reports briefly mentioned above, it is also possible to list the most important program elements being followed by many countries of the world:

- **Student outcomes** — achievement, attitudes, school completion, preparation for work or college.

- **Curriculum** — adequacy and effectiveness of educational materials, technology, resources; content coverage; course work requirements; access by different students populations; alignment with district/nation goals and assessments.

- **Instruction** — strategies, grouping, teacher role, classroom organizations, student interaction, use of technology.

- **School Climate** — consensus on school goals, expectations for student achievement, relationships among and between students and teachers, pride in and satisfaction with school, administrative leadership, teacher empowerment, support for innovation, safety, students and teacher morale.

- **Staffing** — staff preparation, professional development, student-teacher ration, teacher-staff understanding of student population needs.

- **Parent-Community Relations** — attendance at school events, parent involvement with child's educational progress, understanding of school goals, support for school volunteer programs, financial support, business partnerships.

Rationale for Considering the Overall Context

Two of the requirements stipulated for this study in the Terms of Reference presented to the International Consultant are to seek answers to two very critical questions —

(1) What are the degrees of awareness, satisfaction and perception of the different groups at the field directorate level, at the school management level, and among teachers, students and parents, and the community level?

(2) What are the major contributions of the two pilot experiment projects in supporting the overall mission of ERfKE in enabling decentralized education management at the district and school levels (e.g. in terms of stimulating teachers and administrators to properly manage and implement ERfKE interventions)?

Moreover, it is required that the consultant should formulate recommendations that would ensure the effectiveness and efficiency of adopting these models on a system wide basis. In this regard, it was also requested that the study recommendations should take into consideration two important criteria — effectiveness and sustainability of additional investment in the long run.

Nowadays, "school based management" is being used as a way to leverage additional money. School based management and restructuring (reform), by placing more authority and responsibility at the school level, shift accountability from the district office to the school site. The shift in accountability forces school staff to formalize and make public both their decision-making processes and the information upon which their decisions are based. But, they are unlikely to support such reforms if they cannot comprehend the gravity of the situation and know about trends in the global arena. While traditional instruction in Jordan had been largely confined to teacher-centered lectures, the country has now embraced a new direction with its ERfKE-I Initiative. Jordan's Ministry of Education is making a major commitment to reform their schools to support student development in critical thinking, problem-solving and the "soft skills" needed for success in the new information economy. Therefore, the questions for the consultant should be grounded on a global perspective and a systematic approach to education reform.

As we have learned from the above discussions, globally agreed areas included in school based management reform are: (1) curriculum; (2) instruction; (3) parent-community relations; (4) school climate; (5) staffing; and (6) student outcomes. In this holistic perspective, it will become clear in subsequent sections of this report that the two pilot experiments being assessed here deal with a very tiny, almost insignificant, part of the "Education Reform for Knowledge Economy" activities that needs to be pursued in the Kingdom of Jordan.

Additionally, in the opinion of the consultant, based on his belief in the need for a systems approach to avoid sub-optimization, a conscious as well as careful consideration of all the issues regarding "Education Reform for Knowledge Economy in a Competitive World Setting" and the totality of interrelated programs that are integral parts of "School Education Reform" activities being promoted by the World Bank and undertaken by a large number of countries should form the fundamental "bed-rock" for any formative evaluation of the two experiments and for making recommendations for ERfKE-II interventions.

Note: For this report the term "experiment" is used to designate the two (SDU and SJE) pilot activities. For all other activities, terms "program", "project", and "initiatives" are kept as mentioned in selected document from which the information is extracted.

IV. Education Reform for Knowledge Economy in Jordan

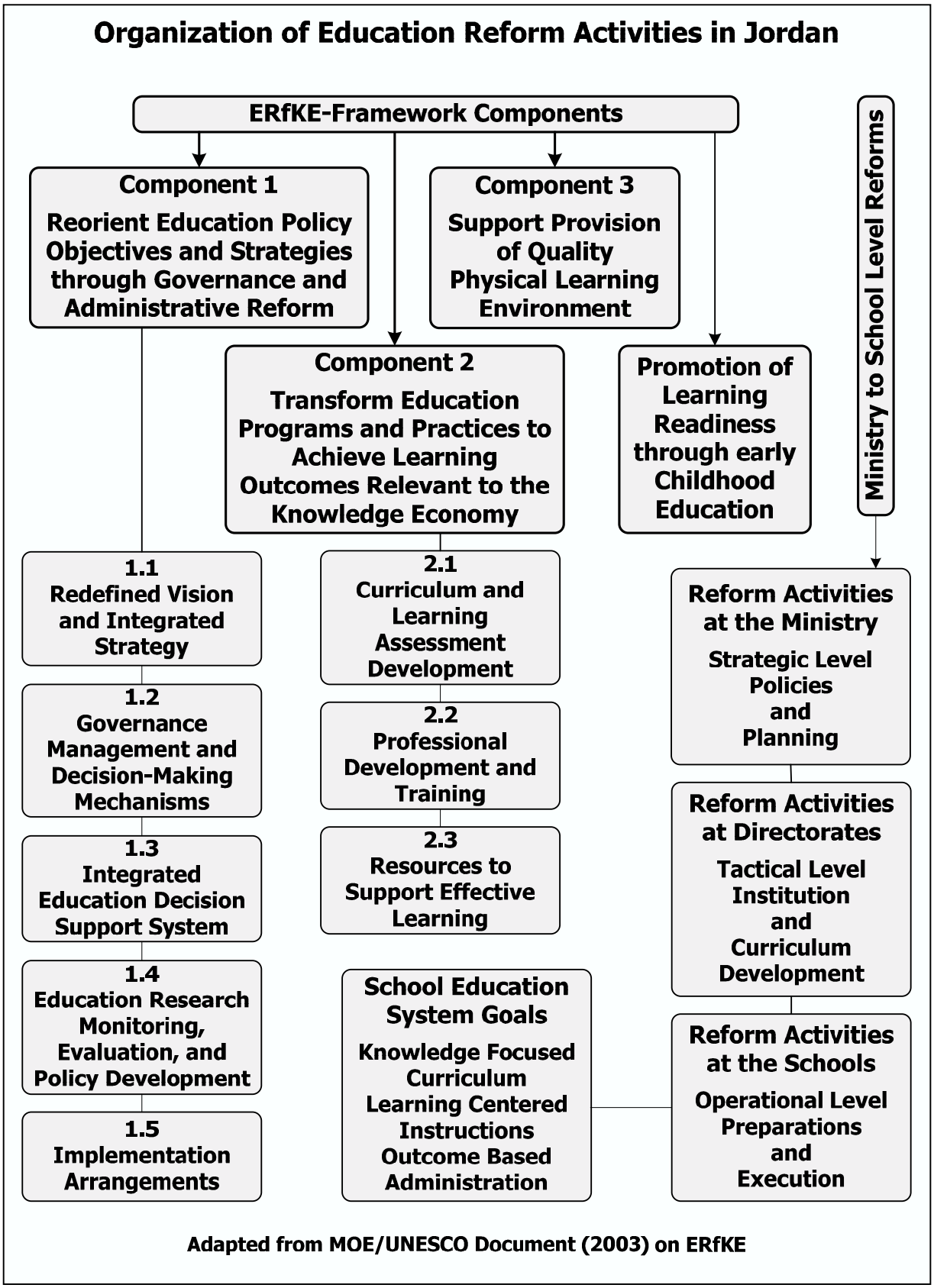
Human Resource Development (HRD) is a priority in Jordan, where the population is seen as the country's main resource. Jordan is well advanced in terms of the MDG, Millennium Development Goals related to the universal completion of primary schooling and the elimination of gender disparities (in 2000 the primary completion rate was 99% for both boys and girls). Furthermore, investment in education in the private and public sectors by both the state and families is increasing, particularly in basic and higher education. For details see: ***UN Millennium Development Goal (MDG), Country Analysis 2005, Jordan*** (www.etf.eu.int). Here we move on to the World Bank project, which is within the MDG umbrella.

World Bank Jordan Project

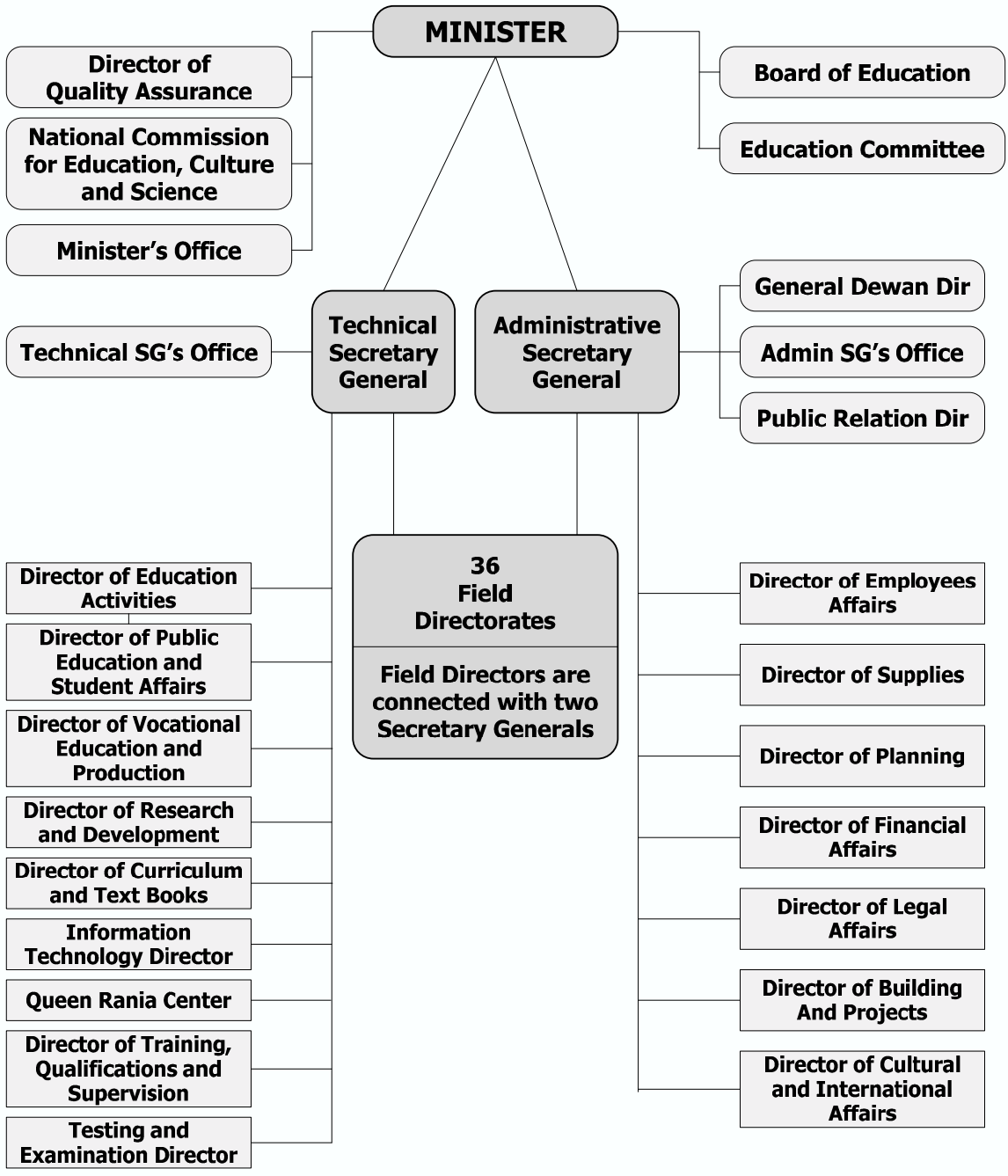
[World Bank Project for Jordan (PO75829): May 2003-December 2008; Cost $370 million]

The objective of the Education Reform for Knowledge Economy Project (**ERfKE**) is to support the Government of Jordan to transform the education system at the early childhood, basic, and secondary levels to produce graduates with the skills needed for the knowledge economy. There are four project components. **Component-1** re-orients education policy objectives and strategies through governance and administrative reform. The five sub-components consist of (1) a redefined vision and comprehensive integrated national education strategy; (2) revised governance, management, and decision-making mechanisms to achieve and support an education system that delivers basic skills, core emergencies, and essential learning for the knowledge economy; (3) an Education Decision Support System (EDSS) to facilitate efficient policy analysis and effective system management as well as to promote transparency; (4) comprehensive and coordinated educational research, policy analysis, and monitoring and evaluation activities; and (5) effective management and efficient coordination of educational investments directed towards reform efforts. Additionally, support will be provided to school-based innovations. **Component-2** transforms education programs and practices for the knowledge economy. ITS three sub-components develop new curriculum and enhanced learning assessment; support the professional development of Ministry of Education personnel; and provide required resources to support effective learning. **Component-3** is designed to ensure adequate provision of structurally safe school buildings and improved learning environment. The two sub-components replace structurally unsafe and overcrowded schools; and upgrade existing schools to support learning in the knowledge economy by providing computer and science labs. **Component-4** promotes readiness for learning through early childhood education. It is designed to enhance equity in low-income areas by providing kindergarten for children of age 5. The sub-components enhance institutional capacity for early childhood education, develop a cadre of ECE educators, and increase access to kindergartens for the poor and foster parent and community participation and partnership (public awareness and understanding).

Following pages (p23; p24) schematically present the major components of the ERfKE-I Project and the organization chart of the Ministry of Education, which is the implementation body for the ERfKE-I Project in Jordan. They serve as the reference point for this study.


Organization of Education Reform Activities in Jordan
ERfKE-Framework Components
Component 1
Reorient Education Policy Objectives and Strategies through Governance and Administrative Reform
Component 3
Support Provision of Quality Physical Learning Environment
Component 2
Transform Education Programs and Practices to Achieve Learning Outcomes Relevant to the Knowledge Economy
Promotion of Learning Readiness through early Childhood Education
Ministry to School Level Reforms
1.1 Redefined Vision and Integrated Strategy
1.2 Governance Management and Decision-Making Mechanisms
1.3 Integrated Education Decision Support System
1.4 Education Research Monitoring, Evaluation, and Policy Development
1.5 Implementation Arrangements
2.1 Curriculum and Learning Assessment Development
2.2 Professional Development and Training
2.3 Resources to Support Effective Learning
School Education System Goals
Knowledge Focused Curriculum
Learning Centered Instructions
Outcome Based Administration
Reform Activities at the Ministry
Strategic Level Policies and Planning
Reform Activities at Directorates
Tactical Level Institution and Curriculum Development
Reform Activities at the Schools
Operational Level Preparations and Execution
Adapted from MOE/UNESCO Document (2003) on ERfKE

Organizational Structure of the Ministry of Education (MOE)



Source: Ministry of Education WebPage <www.moe.gov.jo>

Current Status of School Education in Jordan

The following information is compiled by the consultant through a review of the limited number of documents in English in an otherwise very extensive Arabic language database. The excerpts are primarily from Dr Munthir Masri, ***Needs Assessment of Education in Jordan,*** and ***Educational Reform in Jordan: An Analytical Overview*** by Ahlawat et al, and other documents in the Publication Series of the National Center for Human Resources Development (NCHRD), Amman, Jordan). The references cited in the excerpts are available in NCHRD documents and hence are not duplicated in this report to reduce unnecessary length of this report.

The aims and general objectives of **Education in Jordan** emanate from the philosophy of education, which draws on Islamic and Arabic heritage, the continuation and the Jordanian national political, social and economical experience. The development of the educational system in Jordan has witnessed many changes through the past year based upon meeting the development needs of a society with a high growth rate. These changes can be expressed into three phases of development, the first phase focused on the provision of education to all children, the second phase focused on a variety of education to meet the country's economic and social development needs, while the third phase focused on the quality of education.

A turning point in teacher qualifications for basic education took place in 1988 when the new education law then stated that a university degree in addition to pedagogical (curriculum and teaching practices) certification are prerequisites for the teaching profession. Later, in-service training for teachers has become one of the major activities undertaken by the Ministry of Education and other concerned authorities. Thousands of teachers join in-service training courses annually to upgrade their skills in such fields as teaching methodologies, Information and Communication Technology, etc. According to Dr Munther Masri, some of the basic weaknesses in school education system in the Kingdom of Jordan are:

- Inadequacy of currently available teaching methodologies and learner education techniques;
- Inadequacy of teacher performance supervision services that emphasize the inspection function, rather than the support and development function;
- The modest social status of the teaching profession; and
- Weak guidance and counseling services, reflecting negativity on streaming criteria and procedures.

Jordan invests 13 percent of public expenditure on basic and secondary education. School education in Jordan is based on two cycles: basic stage (for 6-15 year olds, covering grade 1 to grade 10), secondary stage (for 16-17 year olds, covering grade 11 and grade 12). The first cycle is compulsory for all boys and girls. Pupils take the general secondary examination (Tawjihi) at the end of the secondary cycle. Total number of pupils is approximately 1,598,200 enrolled in 5,314 schools (as of academic year 2008). In the same time frame, total number of teachers is approximately 89,500 and the overall student-teacher ration is about 18.

About 60 percent of all the schools are run by MOE (Ministry of Education), 4.5 percent by UNRWA (which is responsible for basic stage education within the Palestinian camps), and

35.5 percent are educated through private schools. Thus, public schools (run by the MOE) represent the majority of schools in all the educational cycles. Moreover, schools in Jordan are categorized into three types of schools: boys' schools; girls' schools; and mixed schools. In the private sector mixed schools are for children between ages 6-8 years; while in the public schools, in grade 5 (10 years old) girls and boys separate and join singe-sex schools.

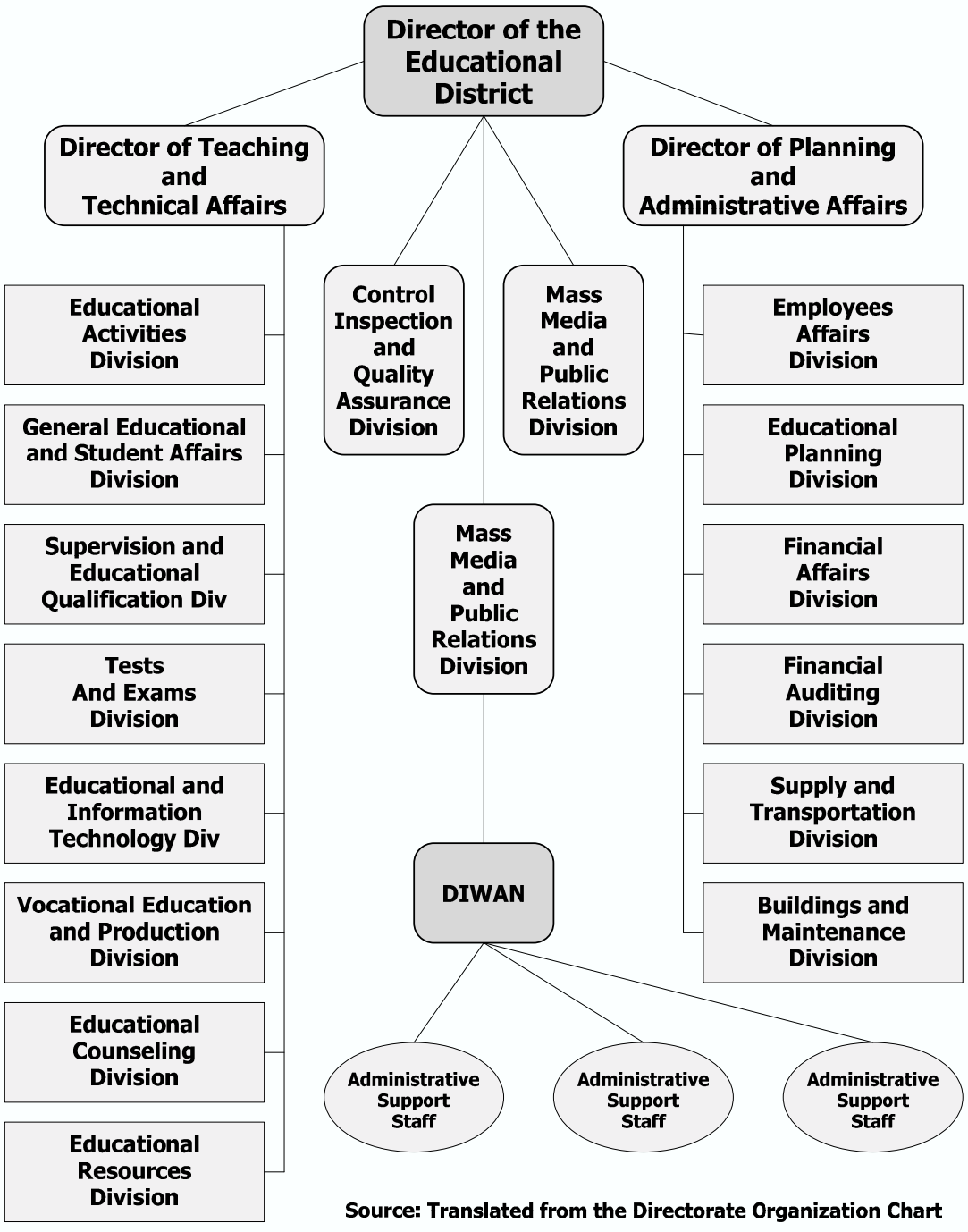
Participation is high for basic education (grades 1-10) with an estimated 88 percent of all 6-15 year olds in school. Secondary education enrollments are approximately 66 percent of the relevant age group. Fully 86 percent of all 6 to 16 year olds attend school in Jordan. School enrollment rates reach their highest levels at age eight where an estimated 97.4 percent of all children in the country are in attendance. Enrollment rates fall-off to 62.1 percent by age 16. The Ministry of Education provides education to approximately 74 percent of all students in grades 1-12. The vast majority of students enrolled in basic and secondary schools are in schools funded by the government. Fully three quarters (76 percent) of all students attend basic and secondary schools funded by the government. Of these, the majority are run and financed through the Ministry of Education. The picture is different for kindergartens where less than two percent of enrollees are in government financed schools. At the secondary level, 94 percent of all students are enrolled in government schools. In addition to the nearly universal participation in basic education, residents of Jordan have a variety of other educational opportunities. However, the primary authority of educational provision lies with the Ministry of Education, Ministry of Higher Education and with the public Universities. At the kindergarten and preschool level, more than 600 schools exist throughout the country, which service approximately 34 percent of the age group 4-5 year old boys and girls of the country's population.

At present, there are three primary providers of education for the country's residents — the **Hashimite Kingdom of Jordan** (HKJ), the United Nations Relief and Works Agency (UNRWA), and the private schools. The primary responsibility for education funded by the government is with the Ministry of Education (MOE), The Vocational Training Corporation (VTC), the Ministry of Higher Education (MOHE; which also overseas community colleges), and with the government Universities. The provision of basic and secondary education is the responsibility MOE. A number of private basic and secondary schools also exist in the country.

A wide range of educational and training activities take place in Jordan. Public and non-profit organizations provide a number of training and educational opportunities for residents. At the MOE, several types of vocational training opportunities exist. The Vocational Training Corporation (VTC) provides short and long terms training for basic education graduates and some training at the professional and instructor level. Many institutes provide specialized training such as the Banking Institute (Central Bank), and Statistical Training Center (Department of Statistical). Finally, adult education is offered through the MOE and through a number of social-service organizations and foundations. The government of Jordan also funds a number of other types of institutions. Several government ministries and departments have basic and secondary schools, and a number of secondary or tertiary training or professional institutions exist in the Kingdom of Jordan as well.

In the Kingdom of Jordan, there are 36 school districts. Figure on Page-27 schematically shows the organization of a typical school district directorate in the kingdom of Jordan.

Organization of a Directorate of Education in a School District



Source: Translated from the Directorate Organization Chart

Jordan Education Initiative (JEI)

The JEI is an agent of change supported by USAID with a vision to be a global capacity building model of effective public-private partnership that leverages reform to generate value through technological innovations introduced in the education system.

Objectives of the Jordan Education Initiative:

- Improve the development and delivery of education to Jordan's citizens through public-private partnerships, and in the process help the government of Jordan achieve its vision for education as a catalyst for social and economic development
- Encourage the development of an efficient public-private model for the acceleration of educational reforms in developing countries based on unleashing the innovation of teachers and students through the effective use of ICT
- Build the capacity of the local information technology industry for the development of innovative learning solutions in partnership with world class firms, creating economic value that will lead to mutually beneficial business opportunities
- Leverage an environment of national government commitment and corporate citizenship to build a model of reform that can be exported to and replicated in other countries

Status and Current Investment in the JEI

To date no less than 17 global corporations, 17 Jordanian entities, and 11 governmental and non-governmental organizations are working together to achieve the JEI objectives in partnership with the Government of Jordan. Direct contributions to the Initiative from global and local partners have reached over US$15 million. These, coupled with the Government of Jordan's in-kind contribution of over US$3 million, are being innovatively channeled towards achieving the JEI goals. In the case of the Discovery Schools track for example, these investments are reflected in the ongoing technology deployment efforts, the development of five e-Curricula, one of which is fully deployed in a number of Discovery Schools, as well as in continuing teacher training efforts.

ERfKE Support Project (ESP)

The ERfKE Support Project (ESP) is a USAID funded project in support of Government of Jordan Education Reform for a Knowledge Economy (ERfKE) program. The Academy for Educational Development (AED) is implementing the project with the American Institutes for Research (AIR), in collaboration with the Ministry of Education of Jordan and local NGOs under the EQUIP2 Associate Award mechanism.

ESP is managed in the most cooperative and collaborative way possible with the Government of Jordan and other parties. ESP project personnel work through established Ministry of Education offices, the ERfKE committee system, and the Development Coordination

Unit (DCU). The project is consistent in design with the government of Jordan's knowledge economy focus and the ERfKE framework and management process. It is also consistent with developing the behaviors and creative problem-solving skills that the Ministry of Education wishes its young people to have, beginning in kindergarten with activity-based learning to reinforce knowledge and in secondary education with computer–based learning.

The ESP projects are carried out over a four-year period in partnership with Jordan's Ministry of Education and in support of the Government's efforts to develop a robust knowledge-based economy. In collaboration with the Ministry of Education, a team of skilled professionals from the different partner organizations were responsible for coordinating and implementing project activities. The methods and approaches used in the project will be consistent with the behaviors and creative problem solving skills that Jordan wishes its young people to have. Education improvements will enable activity participation and emphasize hands-on practical experiences. Project activities will encourage exploration and experimentation and seek to integrate living and learning through various means including the employment of instructional technology. The ERfKE Support Project (ESP) is an integrated set of support and capacity-building activities that support three major components of the Jordanian government's ERfKE initiative:

1. Improve and Expand Early Childhood Education (ECE)

The goal of this component is to improve the physical appearance and readiness of early childhood education facilities, modernize and update the kindergarten curriculum, strengthen the skills of ECE professionals, and promote high quality ECE. Expand and improve Jordan's public early childhood education by enhancing, rehabilitating and creating new kindergartens as integral parts of Jordan's public education system. This part of the project is based on the recognition that the ability of children to learn throughout life, think critically, solve problems, be creative and become entrepreneurial is dependent on creating a solid foundation in early childhood. ESP will improve and promote early childhood education by improving existing kindergarten facilities, building new kindergartens in schools where they do not currently exist, providing ECE learning resources, enhancing curriculum, training teachers, facilitating decisions on standards, promoting awareness of the benefits from early childhood education in the general society and encouraging parental participation in ECE activities.

2. Youth, Technology and Careers (YTC)

The goal of this component is to enhance the curriculum for the new Management and Information Stream (MIS) in grades 11 and 12 to better prepare youth for the workforce, integrate the use of information and communication technologies (ICTs) into teaching and learning in the MIS program, develop e-Learning curriculum elements to support teaching and learning, strengthen teacher training capacity for the MIS program, help train MIS teachers, and develop a pilot school-to-work (STW) transition program in grades nine through 12. Assist the Ministry of Education in implementing the new Management of Information Stream (MIS) in grades 11 and 12 of the country's public education system. Central to the new MIS education specialization is enabling students to

develop marketable skills for Jordan's growing information technology sector. This part of the project is based on the recognition that secondary education needs to be better targeted and more practical oriented toward the world of work. ESP will help prepare youth for Jordan's knowledge economy by enhancing the secondary level MIS curricula, developing MIS e-Leanring modules, training MIS teachers, facilitating decisions on standards and piloting a school-to-work transition program. By working closely with schools and the private sector, ESP will help make the MIS program relevant to the needs of youth and businesses.

3. Shorouq Project

The goal of this component is to strengthen the Ministry of Education's efforts to advance education in the south of Jordan by targeting resources to enhance connectivity, bolster the MIS learning environment, and renovate additional kindergarten classrooms.

A Note for Clarification

It appears that in the enormous database of existing documents
(both in English and in Arabic languages),
regarding relevant World Bank and Other Donors' funded
activities in Jordan, as well as,
all past and on-going activities related to
"Education Reform" in the Kingdom of Jordon,
the terms 'PROGRAM', 'PROJECT' and 'INITIATIVE'
are used interchangeably. Therefore, the consultant decided to keep them
as such, but used the term 'EXPERIMENT' for packaging activities
being assessed for this formative study of two pilot ...

V. Information Collected regarding Pilot Experiments

As we have learned from the global movement in education development, the areas of concern for "school based management" reform are: (1) curriculum; (2) instruction; (3) parent-community relations; (4) school climate; (5) staffing; and (6) student outcomes. Out of these areas only a very limited set of activities are addressed by the two pilot experiments. In this part of the report, an attempt is made to recognize the boundary of the two pilot experiments. It will be clarified that a number of reform activities that cover other areas, but have impact on the SJE pilot experiment, are addressed by the "SJE Enterprise" operations. At the outset, it should be noted that the "SJE Pilot Experiment" is a very small component of the SJE Enterprise activities. To ensure that one does not compare the SDU Pilot Experiment activities with that of the SJE Enterprise activities, in this section we first review the Enterprise activities and then identify the Pilot Experiment activities of SJE, and then describe the SDU Pilot Experiment activities.

Activities of the SJE Enterprise Related to ERfKE

The following information is obtained from briefings provided by project personnel and publications of the SJE Enterprise, SJE Webpage, SJE Bulletins, and SJE promotional materials. Besides, the international consultant benefited from the report "The Systematic Approach for Institutional Development" – The Jarash and Al Badia Al Wosta District Program – ***SJE Annual Workplan (2008-2009)*** prepared by Agriteam Consulting Company, and submitted to Canadian International Development Agency (CIDA), in Amman, Jordan.

As reported, SJE Enterprise goal is to strengthen Jordan's human resources to support its transition to a knowledge-based economy, thus contributing to poverty reduction and promotion of peace and security. We aim to build sustainable capacity in the MOE for the continuing quality improvement of curriculum, instruction, learning and assessment, focusing on ICT as a transforming and integrating technology, in conformity with the Government of Jordan's ERfKE strategy. The Ministry of Education is engaged in a major reform of education at all basic and secondary education levels, including the introduction of kindergarten education, within the context of an effort to devolve more responsibility to field directorates and schools. The ministry has promulgated a broad and demanding National Education Strategy (2007–2011) and the SJE project aims to enable some key aspects of the strategy at the district and school levels. The primary focus is to model mechanisms and processes that provide for a more decentralized education management system, including greater participation by parents and the community.

The Ministry of Education has provided the SJE Enterprise with the opportunity to concentrate inputs in five field directorates in order to ascertain management practices that can be assumed readily within the field directorates and schools. The experience gained in applying technical improvements at these levels will be used by the ministry for its longer-term reform program. Improvements include a strong emphasis on performance management, ICT integration, gender mainstreaming and school-based management. The SJE Enterprise is reported to be specifying "Vision and Mission of Schools", is reported to have prepared "Guidelines and Manuals" for giving Practical Training to various school and directorate personnel.

The SJE Enterprise is focused on six target outcomes. These provide the basis for the work that has been undertaken to date and the activities planned for the remainder of the project. Each outcome is addressed from the context of intensive inputs into selected districts following a conceptual model based on "whole district and whole school" development. There is a heavy emphasis on strategic and operational policy as well as the implementation mechanisms that provide for districts and schools to assume greater responsibility and accountability for a quality education in the Kingdom of Jordan.

1. Improved foundation and application of national education directives within the context of an articulated policy framework, medium-term and annual planning strategies, system indicators and socialization/feedback mechanisms.

2. Strengthened governance and administration of education, including the appropriate devolution of authority to district and local school levels and the empowerment of school principals, teachers and their communities as educational change agents.

3. Sustainable capacity in the MOE to support continuous improvement in curriculum, instruction, learning and assessment, and to use appropriate education information to monitor progress and inform education policy, planning and system management.

4. Reformed curriculum Grades 1–12 shifted from a top-down emphasis on content to a classroom-based emphasis on learning outcomes based on curriculum reflecting student-centered learning and gender-sensitive strategies.

5. Innovative pre- and in-service teacher and sector-wide administrator training programs that support progressive instructional and management practices to meet education reform objectives, including the appropriate use of ICT as delivery tool.

6. Improved teaching and learning in Jordan's public schools, relevant to its ICT-based economic development strategy and consistent with the integration of ITC into curriculum as a tool to enhance teaching and learning in selected subjects.

Besides the School and District Improvement Program, which is described in details in the next section, here are brief descriptions of other activities of the SJE Enterprise which have indirect impact on the SJE Pilot Experiment impacts.

Student Assessment Strategies and Tools Program

It is reported that, as a direct result of the SJE Project Team's efforts, a comprehensive, objective and authentic assessment tool was developed to address student knowledge and available products under this program:

- A core team of 26 trainees received 50 hours of training using the 'train the trainer' approach for the Assessment Strategies and Tools training sessions.

- From the Jarash School District, all 115 school principles received 15 hours of intensive training in student focused ‘Assessment Strategies and Tools’ course.

- From the Al Badia Al Wosta School District, all 322 school principles and teachers received 15 hours of intensive training in student focused ‘Assessment Strategies and Tools’ course.

Principals Leadership Program

It is reported that, as a direct result of the self-assessment based evaluations conducted using the systematic approach guidelines detailed under the ‘School and District Development Program’, a series of 19 significant indicators were designed, developed and tested with 11 potential trainers:

- The program addressed 9 - basic leadership 1 day courses and an additional 10 - 1 day courses related to basic teaching methodologies.

- From both School Districts, all 109 principles received 140 hours of intensive training, over 19 days, in student focused ‘Leadership for Principles’ course.

- As part of ensuring accurate data, each school principal has been trained in how to install and update a School Information System (SIS) and data has been submitted to the district planning office.

The Supervision Role Development Program for the Educational Service Providers

It is reported that, in an effort to improve all students’ ability to produce quality products and to improve their educational performance, a program has been developed specifically for both educational supervisors and the school principles. This program is targeted to ensure that both types of supervisors understand the modern concepts of educational supervision and take a more active role in the students' daily school life:

- The program will initially target the 66 educational supervisors and the 281 school principles in both Jarash and Al Badia Al Wosta districts. Eventually this program will be presented, in various forums, to a wide ranging audience from the local school community groups to the ministry directorates.

- Establishment of a district managed Professional Development Program (PDP) to provide for capacity building initiatives.

- An awareness program was conducted on the 6 district program domains in order to ensure all key district employees have a good understanding of the management improvement program.

- A leadership program is underway for all supervisors in the 3 districts. The program is conducted after working hours (6 training hours for each of 9 days). This is one component of a planned certification program for supervisors to qualify as authorized education advisors.

Some Other Reported Programs of SJE Enterprise

- Human Resource Management / Performance Management Program — This activity is part of the SJE/CIDA contribution to improved management practices in MOE.

- Leadership Programs for Women — Women as Leaders in the MOE, Leadership Program for MOE Directors, and Refresher Course for facilitators.

- Policy Development Program — Forums on the ICT in Education policy, the E-content policy and policy renewal workshops Managing Directors, and ICT Consultants.

SJE Pilot Experiment (Specific Activities)

A complete review was conducted of all documents from where the consultant could find information related to the SJE Pilot Experiment, including the descriptions and reviews on the activities of the SJE Enterprise listed above. The following are identified as the major activities of the SJE Enterprise that could be directly linked to the SJE Pilot Experiment.

The SJE pilot experiment was designed to ultimately increase student success by creating an effective teaching-learning environment through adopting approaches that depend on well-defined target results for school improvement with governance and management focus putting student performance at the center of attention. The SJE pilot experiment involved both School and Directorate improvement programs. SJE pilot initiatives' (started in 2005) were introduced in three stages: Phase I – 2006/7; Phase II – 2007/8; and Phase III – 2008/9). SJE directly focused on improving performance by institutionalizing a system-wide process evolved through collective learning and self-assessment, which is a democratized approach for improving institutional performance. This institutionalization process was designed on the premise that management learning occur through self-assessment methodology that takes into consideration empowerment, transparency, accountability, and sustainability issues in a decentralized setting. SJE pilot school learning model is based on a changing role of the teacher from a "provider of knowledge" to a facilitator and assessor of participant-centered learning through general partnership with learners to achieve the desired learning outcome.

It is reported by the SJE Enterprise that the following districts are executing their District Improvement Plans and are continuing to build their capacity and strengths:

- Stream-1 / Sept. 2006 - April 2007 — 33 schools from Jarash and 30 schools from Al Badia Al Wosta reached the Intervention / Training Courses step.

- Stream-2 / April 2007 - Sept. 2007 — 40 schools from Jarash and 36 schools from Al Badia Al Wosta reached the development of improvement plan step.

- Stream-3 / Sept. 2007 – Aprt 2008 — 80 schools from Jarash and 60 schools from Al Badia Al Wosta were in the orientation and awareness step.

- A District Education Coordination Reform Team (DECRT) has been formed. It is to assume full responsibility for the overall MOE improvement program.

- As part of the process of defining the uniqueness of each district, considerable socio-economic data has been collected which will be used to define variations in the approaches to be used in improvement programming.

- A system has been applied to identify clusters of schools in order to help expedite the improvement planning and programming activities and in order to ensure that all schools get involved at the initial stages rather than bringing some schools into the activities on a sequential basis.

For the pilot experiment, it is reported that the SJE's "Systematic Approach" is helping participants to derive own strategy leading to designing and implementing quality improvement work, through increased guidance provided by experts to schools and their communities. The stage-by-stage learning and improving procedures were designed to achieve a change in attitude of all the people involved with the schools system. Development through multiple training workshops that promoted self-assessment approach also brought in current knowledge through external resource persons. Two years spent by the participants for learning to effectively utilize self-assessment indicators (for details see 2006 and 2007 review reports).

It was emphasized that the SJE Pilot Experiment modus-operand has been "Improvement Planning" through: weekly and monthly meetings introducing new ideas; regular follow-up meetings; continuously tracking progress; monitoring performance; ensuring documentation and report preparation, which have become ingrained and appreciated by the stakeholders.

It is also reported that the SJE Pilot Experiment involved the preparation of manuals for self-evaluation and the SJE Enterprise has produced guides for: Human Resources Development; Teacher Standards; School Development Strategy; and Gender Mainstreaming; etc.

SJE Reported Directorate and School Improvement Indicators List

General (Directorate Level)

(1) Curriculum — (a) Curriculum Material / Teacher Involvement
(b) District Curriculum Analysis and Leadership
(c) Supervision of School Curriculum

(2) Instruction — (a) Educational Technology in Teaching
(b) District Models / Demonstration

(3) Assessment — (a) Comprehensive Articulated Student Assessment
(b) Student Assessment Analyzed, Used and Reported

Leadership and Governance (Directorate Level)

(1) Planning — (a) Mission and Strategic Plans
(b) District Action Plans

(2) Community/Parent Involvement — (a) Planning and Academic Performance
(b) Community and Vocational education
(c) Teachers/Principal Involvement

(3) Communication — (a) District-School (two way)
(b) District-Community (two way)

(4) Structure/Delegations — (a) District Structure
(b) Schools/Principals Delegation
(c) Internal Delegation in District Office

Business and Financial Management (Directorate Level)

(1) Budgeting — (a) Takes Account of Future Needs
(b) Reviews and Reports
(c) All Income/Grants Tapped and Included

(2) Financial Management — (a) Financial Data Reliability and Standards
(b) School Level Reports
(c) Timely Purchases and Bill Payment

(3) Management Information System — (a) Regular Reports

(4) Personnel/Human Resources — (a) Personnel Manuals
(b) Staff Oriented and Well Managed
(c) Admin Staff Appraisal
(d) Recruiting

(5) Public Relations — (a) Financial Data Reliability and Standards
(b) Facilitating Events and Visitors

(6) Facilities and Equipment — (a) School Facilities Functioning and Safety

Management (School Level)

(1) Planning — (a) Strategic Plans
(b) Follow Up

(2) Supervision — (a) Teacher Participation
(b) Classroom Teaching
(c) Student Work

(3) School Organization — (a) Distribution of Management Task
(b) Financial/Admin Records

(4) Maintenance — (a) Buildings and Surroundings
(b) Equipment/Books

Students (School Level)

(1) Academic — (a) Student Records and Use
(b) Individual Learning and Plan
(c) Programs for High and Low Achievers

(2) Behavior — (a) School Rules
(b) Monitoring
(c) Remedial Plans
(d) Preventive/Remedial Programs

(3) Activities — (a) Activities Program
(b) Participation
(c) Public Performance

Staff (School Level)

(1) Professional — (a) School Policies
(b) Development
(c) Support Groups

(2) Administrators — (a) District Liaison
(b) Information Technology Skills
(c) Development

School Relationships (School Level)

(1) School Council — (a) Meetings/Management
(b) Effective Participation

(2) Parents — (a) Participation
(b) Appreciation
(c) Newsletter/Meetings
(d) School Reputation

(3) Community — (a) Sharing
(b) Funding

(4) Within School — (a) Staff Communication
(b) Staff Morale
(c) Student (Preparatory and Secondary School)

SDU Pilot Experiment Related Experience and Activities

A complete review was conducted of all documents related to the School Development Unit program, including the National Education Strategy, related work plans of donors, the National Teacher Professional Development Standards, Curriculum and Assessment Framework plus updates, etc. This was necessary to get a complete picture of the SDU Pilot Experiment vis-à-vis the myriad of activities of the Ministry of Education and the SJE Enterprise activities described above. Thus, by necessarily, this section on SDU is a little longer.

The "School Development Unit" (SDU) pilot experiment was designed to focus on building the internal capacity of schools, and "leader schools" at three levels: national, directorate, and cluster. Program focused on capacity building through skill development and training of key personnel involved in the school management system. SDU is based on the World Bank suggested "school as a development unit" concept, with teacher focus for improving their performance in the classrooms for better learning. The Education Support Program (ESP) and Jordan Education Initiative (JEI) are the forerunners of the SDU initiative. Jordan Education Initiative (JEI) was created in 2003, with the assistance of the World Economic Forum (WEF), to leverage public-private partnerships for improving the application of Information and Communication Technologies (ICT) in grades 1-12 in Jordanian schools. Discovery schools (also Leader schools) have respectable status in the community and hence are natural hub for teacher interactions within a cluster of schools for lateral collaboration. For more general information see ***SDU Progress Reports*** 1-5 and Final (2008), School Development Unit Initiative, Ministry of Education, Directorate of Training, Supervision and Quality Assurance, Amman, Jordan. The following information is obtained from Consultant Attfield and Dunlop-Robertson ***Reports on SDU Activities*** (2006 and 2007), Amman, Jordan.

The Ministry of Education had many forerunners to the SDU project, through work it did with DFID and the British Council in late 1990s. The SDU concept was either resuscitated or revamped during **ERfKE-I**, and it was primarily placed in **Component-2** as a professional development initiative to build school development capacity at the school level. ESP began working intensively with Training in 2004 beginning with the Emergency Teacher Training Program for the new Management Information Stream. ESP moved from supply-side to demand-driven training, from off-site to school-based training (i.e. CADER's education technology training program through ESP), and finally, migrated to school-based professional development. At the same time, ESP developed school-to-career programs that would fall under the SDU, communities of practice that would fall under the SDU, and at times advocated school technology planning – equally under an SDU. From 2004-2006, there was a lot of coordination between Bearing Point's consultants to training, World Bank/CIDA consultants and ESP staff to ensure everyone was working in the same direction. The SDU's program was revised in 2007-

2008, and reoriented in part towards teaching and learning. ESP's work with learning teams predates the 2007-08 revision of the SDU program, and informed it.

The school development unit program in Jordan is first and foremost about building the internal capacity of schools, and leader schools at the levels of the country, directorate and cluster. From within these leader schools, the program attempts to "train" mentors (either/and: school principals/vice-principals and teacher coordinators) who can in turn provide support for that capacity-building in their geographic areas. From floor and ceiling, the foundation is basically school-to-school, with the governance issues handled within a community of practice, from which its leadership and its support groups (peers, experts, coaches, and specialists) are drawn. The ground-up approach is mixed with a top-down placement of pilot SDUs in direct contact with SDUs-in-training, such that the organizational structure of school development is lateral or horizontal in orientation – and non-hierarchical.

Within the first round of trainings in 2007-2008, the mentoring and peer-to-peer learning are instructional design elements. As the work began from ground-up, the mentors and experts learn their jobs in handling the mentoring responsibilities and learning to act and interact within their new roles as service providers to schools. Consequently, locations for lateral support are built through the roll-out of the program, as mentors come on board to help school clusters, and mentor-of-mentors become situated at less proximate places within the learning network of schools (cluster of schools in a geographic area).

The quality improvement framework for community leadership professionals is to serve as the guiding framework for professional development programs and for assessments of school quality. It provides a picture of the community leader professional's main areas of performance, as well as indicators of acquisition of mastery within each area and along each performance measure. The framework presents the main domains of CLP performance, and the list of detailed competencies associated with the effective performance in their positions. In addition, it provides indicators of mastery and proficiency along each main component.

The U.K. mentors probed the extent to which the teams had developed their SDU programs, and the extent to which the teams had accomplished the strategic self-assessment of their schools, collected data on student performance, and began prioritizing the areas of school development that required more immediate action.

First stage pilot experiment of SDU (which has been implemented for about three years) involved: school identification; job specification of Principal; training Principals for technical and administrative tasks; Community involvement in School Councils; and Teacher collaboration within a cluster. Only 15 schools were involved in the first phase. One cluster of 10 schools (5 boys' + 5 girls' schools) with Al-Amira Taghdir School as the focal point (a Discovery School) is operational. Next stage, currently underway, includes expansion of the coverage to 2 schools from each of the remaining 32 districts. The School Development Unit Experiment has been under discussion and in existence for about three years, beginning with the first British Council pilot activities. Since that time, the momentum has built to further test a pilot initiative and to continue rolling out the program.

SDU Reported School Capacity Development Domains List

Domain One: Learning and Teaching

(1) Learning and Assessment — (a) Learning and teaching differs according to student needs and performance level
(b) Student learn through experiment and challenge
(c) Student assessment is continuous and is outcome based
(d) Teachers learn through groups according to their needs

(2) Facilitating Learning and Teaching — (a) Teacher is student centered and depends on inquiry
(b) Teaching strategies are variant and based on outcome
(c) Teaching utilizes learning resources (including ICT) effectively
(d) Schools present leadership models in classroom and cooperation features for learning

(3) Curriculum — (a) Curriculum designed according to knowledge economy standards
(b) Curriculum updating based on students assessment results
(c) Curriculum improvement through experience and designing enrichment materials at the school level

Domain Two: Administration and Leadership

(1) Strategic Leadership — (a) School leadership transfer the strategic vision into action plans to develop the schools
(b) School vision reflects the values of educational system and community
(c) School leadership seeks continuous improvement for teaching and learning practice

(2) Transformational Leadership — (a) School leadership can lead changing and continuous development
(b) Leadership in the developed schools is sharing based leadership
(c) Schools culture based on sharing, exchanging experience and support between individuals
(d) School is a community for continuous learning

(3) Administration — (a) Human resources support student performance
(b) Resources are invested effectively
(c) Knowledge, policies, processes, and actions are organized on the basis of data analysis

Domain Three: Community Involvement

(1) Communication with Community — (a) Schools work on life long learning and developing for the community
(b) Community has to participate in making decisions in schools and developing its programs and action plans
(c) School has to establish partnership with both public and private sectors

(2) Relations with Parents — (a) Schools inform parents about children's progress towards achieved and credible standards
(b) Schools encourage parents to involve with school's daily life
(c) Schools cooperate with parents to prepare ideal environment for integrated personal growth for students

(3) Learning Community — (a) Educators participate in professional community and seek professional development
(b) Students are encouraged to cooperate and exchange experiences with their parents
(c) Community learns and participates through the relation with school

Domain Four: Student Environment

(1) Priorities — (a) Learning opportunity is available for all
(b) Learning environment is safe and rich
(c) Students are encouraged to participate in activities

(2) Student Authority — (a) Student participate in making decision
(b) Students are given chance to develop their knowledge economy skills

(3) Supporting Students — (a) Students get the support and encouragement to manage their learning
(b) Special needs students get the support they need
(c) Students can establish their own performance indicators

Formative Evaluation Study Boundary of the two Pilot Experiments

Considering the information provided in the previous parts of this report, it is possible to draw a clear-cut boundary around the activities that are designated (for this study) as the "SJE Pilot Experiment" and the "SDU Pilot Experiment" as follows:

SJE Pilot Experiment — District and School Improvement Activities

Pilot experiment of SJE involved specifically:

- District Identification and School Coverage by Phase;
- Supervisor Job Specification;
- Cooperative Directorate and School Administration;
- Community Involvement in School Affairs; and
- Introducing Self-Assessment for Improvement Planning.

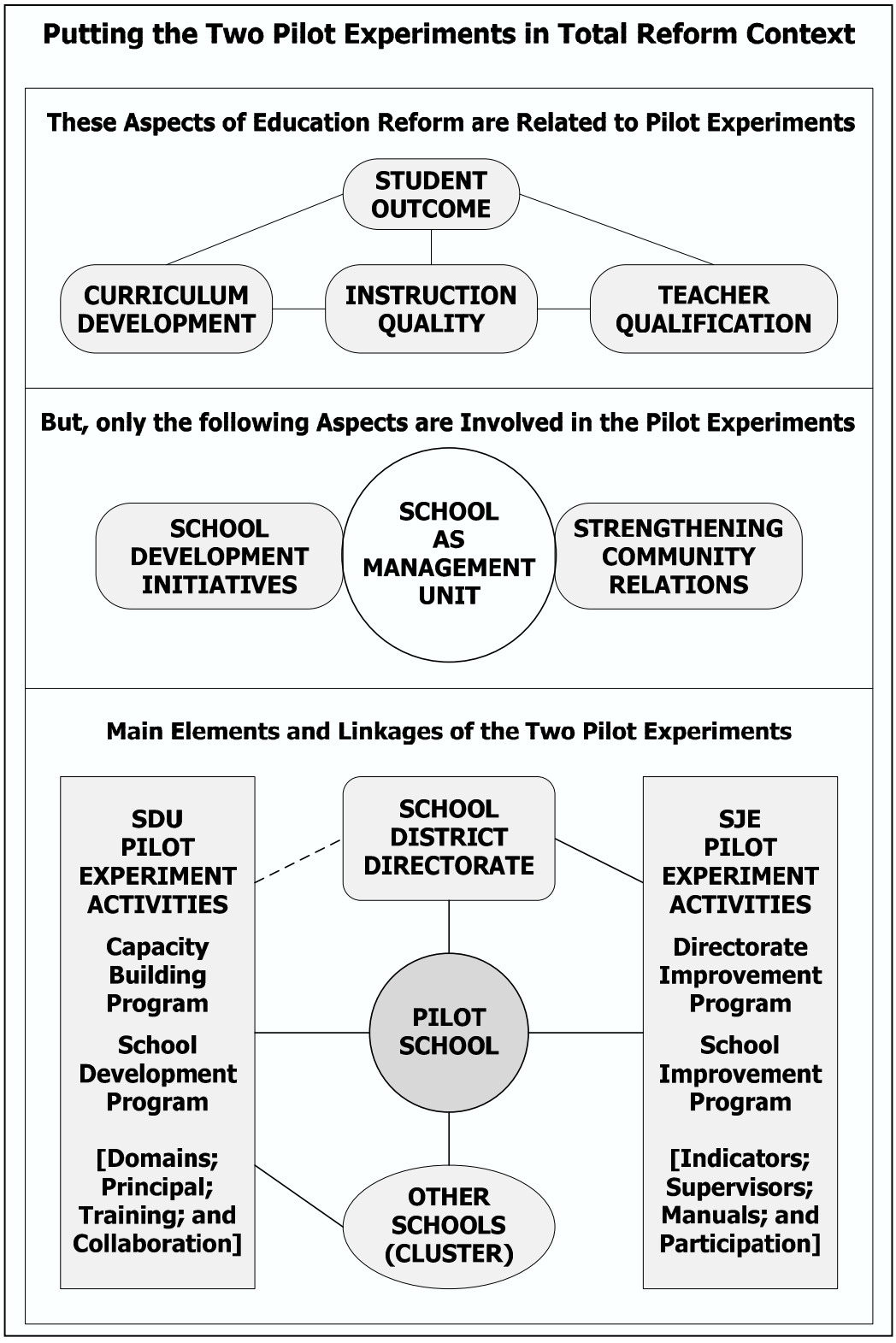
SDU Pilot Experiment — School Capacity Development Activities

Pilot experiment of SDU involved specifically:

- School Identification;
- Job Specification of Principal;
- Training Principals for Technical and Administrative Tasks;
- Community Involvement in School Councils; and
- Introducing Teacher Collaboration within a Cluster.

Moreover, it is important for the reader to note that comprehensive education reforms for knowledge economy in a developing country includes six aspects: (1) curriculum development; (2) improving instruction; (3) strengthening parent-community relations; (4) improving school climate; (5) effective staffing; and (6) better student outcomes, as the major components. Thus, putting in this holistic perspective, the involvement of the SJE and SDU pilot experiments are indeed very limited in scope. Specifically, SJE experiment is helping schools to strengthen community participation and school improvement planning through a process of collective self-assessment; and SDU experiment is helping schools to strengthen school council operation and capacity building through training of principals and teacher collaboration.

The following diagram (Page 43) presents the boundary of the two pilot experiments as well as their coverage with respect to the overall landscape of the Education Reform for Knowledge Economy programs in the Kingdom of Jordan.


Putting the Two Pilot Experiments in Total Reform Context
These Aspects of Education Reform are Related to Pilot Experiments
STUDENT OUTCOME
CURRICULUM DEVELOPMENT
INSTRUCTION QUALITY
TEACHER QUALIFICATION
But, only the following Aspects are Involved in the Pilot Experiments
SCHOOL DEVELOPMENT INITIATIVES
SCHOOL AS MANAGEMENT UNIT
STRENGTHENING COMMUNITY RELATIONS
Main Elements and Linkages of the Two Pilot Experiments
SDU PILOT EXPERIMENT ACTIVITIES
Capacity Building Program
School Development Program
[Domains; Principal; Training; and Collaboration]
SCHOOL DISTRICT DIRECTORATE
PILOT SCHOOL
OTHER SCHOOLS (CLUSTER)
SJE PILOT EXPERIMENT ACTIVITIES
Directorate Improvement Program
School Improvement Program
[Indicators; Supervisors; Manuals; and Participation]

VI. Information Collected from Primary Source

Meetings at the Ministry

Ministry of Education Meeting on ERfKE Component-1

Wednesday 4 June 2008 — Ministry of Education, GPSC Component One Sub-Committee

Agenda Item — Monitoring and Evaluation (NCHRD)

Secretary General for Technical Education Affairs
Secretary General for Administrative Affairs
Managing Director, Monitoring, Inspection and Quality Assurance
Managing Director, Education Planning
Managing Director, Education Research and Development
Managing Director, Training, Qualification and Supervision
Executive Director, Development Coordination Unit, DCU/ERfKE
Others: Representatives of NCHRD, SJE, and DCU

In order to help formulate the ERfKA-2 Plan, the Meeting suggested that this Formative Evaluation Study would be useful and hence a preliminary/draft (return to office type) report should be submitted by the end of June 2008.

Meeting at the Directorate for Training, Qualification and Supervision

Wednesday 4 June 2008

Dr Fawaz Jaradat, Secretary General
Dr Mohammed Al-Zoubi, Managing Director, DTQS
Dr Ahmed Ayasara, Director Training

This meeting provided an elaborate exposure to the consultant regarding the status of completed and ongoing activities of the SDU project.

Meeting at Development Coordination Unit

Wednesday 4 June 2008

Engr Firyal Aqel, Executive Director, ERfKE/DCU

This meeting impressed upon the consultant to remember three critical factors for his recommendations regarding rolling out the pilot initiatives, which are — implementability; sustainability; and cost effectiveness.

Meetings at NCHRD, SJE/SDU Project Headquarters, and Directorates

The consultant participated in a series of group meetings as well as one-to-one meetings at the National Center for Human Resources Development (NCHRD) Office for discussions regarding the Terms of Reference, Field Visits, Data Collection Schemes, and Study Methodology.

Group Meetings held on 1st, 5th and 12th June 2008 with

Dr Munther W. Masri, President, NCHRD
Dr Khattab Abu Libdeh, Senior Researcher, NCHRD
Dr Khaled Al-Qudah, Senior Researcher, NCHRD
Dr Ahmed Al-Sa'd, Senior Researcher, NCHRD
Dr Imad Ababuchi, Researcher, NCHRD
Dr Sheren Hamed, Researcher, NCHRD

SJE Pilot Experiment related discussions at the Support Jordan Education Project Office of CIDA in Amman, Jordan

Meetings on 1st, 3rd, and 8th June 2008 with

Dr Fouza Al-Naimi, Deputy Project Director, SJE
Dr John Rostron, Project Director, CIDA

SDU Pilot Experiment related discussions at Education Support Project Office of USAID in Amman, Jordan

Meeting on 9th June 2008 with

Dr Jeffery Coupe, Consultant, USAID

Meeting with World Bank Consultant at NCHRD Office

Meeting on 10th June 2008 with

Dr Sue Ellen Berryman, Education System/Finance Specialist

Meetings with Decentralization Consultant

Meetings (at the SJE Office) and field visits (to Badia Al Wosta School Directorate and one Badia al Wosta Boys School) with Ministry of Education engaged consultant for the decentralization study

Dr Tom Welsh (discussions held on 1st, 2nd, and 5th June 2008)

Information Obtained from the Senior Officials of Two School Directorates

The international consultant and his national counterpart (senior researcher from NCHRD) visited the following two directorates:

(1) School District Directorate of Al Badia Al Wosta on Tuesday 10 June 2008
(2) School District Directorate of Jarash on Thursday 12 June 2008

Pertinent observations obtained from these two meetings are summarized below:

- SJE and SDU initiatives have contributed to awareness creation regarding the rationale and modalities of the ERfKA activities. Although ERfKA-I is in the final year of implementation, rest of the education directorates (other then Jarash and Al Badia Al Wosta) have very little understanding regarding the importance and urgency of ERfKA for national development.

- SJE activities have substantially improved mutual interactions between the directorates and the schools within the district. There is now much cooperation for mutually beneficial interactions.

- SDU activities have increased the interactions within a specific cluster of schools, particularly for teachers to learn from each other.

- SJE activities have helped redefine the roles of supervisors at the directorate level and school principals for them to facilitate teacher development through team work with respect to performance evaluation and improvement planning.

- SJE and SDU activities have encouraged and systematized local community participation in the affairs of the schools and the directorate on a regular basis.

- Both SJE and SDU pilot projects have used the "self-assessment" approach for problem identification, priority determination, and improvement planning. Both projects have presented to the participants a large number of "indicators" for self-assessments corresponding to different aspects of school management.

- SJE activities have shown the direction for meaningful decentralization that empowers the principals, teachers and students to manage their school affairs more effectively. MOE has given special permission to try different job specifications.

- SJE project initiatives are followed up continuously for training as well as implementation of systematic methodologies developed for different types of problem solving. Follow-up, documentation of activities and manuals are well-appreciated.

List of Schools Visited for Specific Data Collection

SDU Pilot Experiment Schools

- Ain Al-Basha Boys Secondary School
- Al-Baqaa Secondary School [Discovery School for Girls]
- Al-Amir Taghrid Comprehensive School
- Jamil Shaker Girls Secondary School

SJE Pilot Experiment Schools

- Abu Helyfa Elementary School
- Al-Amir Taghrid Comprehensive School
- Al-Noquna Comprehensive Secondary School
- Al-Muwaqar Secondary School
- Al-Hadadeh Secondary School
- Al-Burj Secondary Comprehensive School
- Arenbah Secondary Comprehensive School
- Dhahr Al-Sarrow Basic School
- Dhahr Al-Sarrow Secondary School
- Um Qseir Secondary Comprehensive School
- Wadi Al-Deir Al-Shurqi School

As the school year already ended, no real time observation of any pilot experiment in SJE and SDU involved schools and directorates were feasible. Therefore, the International Consultant and his local counterpart researcher from NCHRD visited a total of 15 schools (4 SDU Pilot Schools; and 11 SJE Pilot Schools) to collect data regarding the two experiments. Two lengthy visits were organized at the two school district directorate offices, where the officials were kind enough to have a presentation and discussion regarding the SJE Pilot Experiment in the presence of some Community Representatives. The SJE Enterprise was very kind and cooperative in helping the international consultant organize two Focus Group Meetings (held in the Al-Badia Al-Wosta and Jarash districts) for xx schools involved with the SJE Pilot Experiments within a very short notice of few days. The focus group meetings brought together stakeholders (Principals, Teachers, Students, and Community Representatives) from 15 school communities in the two districts (Al-Wosta and Jarash).

Two tables in the following pages (Pages 48 and 49) list the participants who took part in two day-day long focus group meetings for assessment of SJE Pilot Experiment. The Table on Page 50 provides the list of core persons, who were contacted by the international consultant or the local counterpart researcher for information regarding the SDU Pilot Experiment.

List of Participants at the Focus Group Meeting

District: Al Badia Al Wosta; Date: Tuesday 10 June 2008

Serial No.	Name	Designation	Gender
1	Abdelazeez Khaled Al-Wathri	Student	Male
2	Afaf Al-Khraysha	Teacher	Female
3	Aref Mohammad Omar Al-Zayadi	Principal	Male
4	Aref Mohammad Omar Al-Zayadi	Parent	Male
5	Awad Al-Dawri	Principal	Male
6	Bader Mohammad Al-Rajori	Teacher	Male
7	Fayza Dari Al-Khraysha	Principal	Female
8	Hajar Dayfallha Msalam	Teacher	Female
19	Hamza Mohammad Mzhmoud	Student	Male
10	Hanina Ali Al-Harbee	Teacher	Female
11	Hasan Ali Saleh	Teacher	Male
12	Heshame Al-Rajori	Teacher	Male
13	Kawthar Khalaf Nazal Al-Ghonmee	Teacher	Female
14	Khaled Abdullaha Al-Khraysha	Principal	Female
15	Khawla Odahallaha	Teacher	Female
16	Kholod Salem Al-Otman	Teacher	Female
17	Lutfi Yousef	Principal	Male
18	Lutfi Yousef	Community Member	Male
19	Malek Al-Hayekmale	Teacher	Male
20	Manal Awaad Al-Dahamsha	Teacher	Female
21	Maryam Faysal	Student	Female
22	Mohammad Fadel-Allah	Principal	Male
23	Mohammad Obaid Al-Odat	Principal	Male
24	Mohammad Obaid Al-Odat	Community Member	Male
25	Noor Al Deen Khalafmale	Principal	Male
26	Noor Al Deen Khalafmale	Parent	Male
27	Ramia Ayed Al-Dahamsha	Teacher	Female
38	Saeda Nayef Al-Kharabsha	Student	Female
29	Sameera Mahmoud Awad	Teacher	Female
30	Samiha Husain Mahmoud	Principal	Female
31	Shefa'a Mohammad Al-Dahamsha	Teacher	Female
32	Wafa Khalaf Al-Ghonmee	Teacher	Female
33	Yasmeen Fraih Al-Thman	Student	Female
34	Yazan Sami Al-Arfan	Student	Male
35	Yusra Hamada Al-Zeben	Principal	Female

List of Participants at the Focus Group Meeting
District: Jarash; Date: Thursday 12 June 2008

Serial No.	Name	Designation	Gender
1	Ahmad Rashed Bani-Mustafa	Community Member	Male
2	Ali Muhammad Bani-Mustafa	Principal	Male
3	Amena Hassan	Principal	Female
4	Bani-Mustafa	Student	Female
5	Bassam Al-Ahmad	Teacher	Male
6	Bothyna Hussain Bani-Mustafa	Teacher	Female
7	Dejla Akram Bani-Mustafa	Student	Female
8	Dena Ali Aref	Principal	Female
9	Ebtehal Muhammad Bani-Mustafa	Student	Female
10	Eman Khaleel Ebraheem	Teacher	Female
11	Entesar Mohammad Suliman Otoom	Teacher	Female
12	Faisal Mershed Bani-Mustafa	Teacher	Male
13	Fatima Ali Al-Ajoor	Teacher	Female
14	Ghadeer Ebraheem Bani-Mustafa	Student	Female
15	Hawamda Talqees	Teacher	Female
16	Haydar Mohammad Ali	Community Member	Male
17	Jameel Najeeb Al-Aza	Principal	Male
18	Kawther Esmaeel Al-Rabeea	Teacher	Female
19	Khaled Amad	Principal	Male
20	Khetam Ali Mohammad Otoom	Teacher	Female
21	Khetam Otoom Tatima	Teacher	Female
22	Laila Shafea	Principal	Female
23	Lena Otoom	Teacher	Female
24	Mohammad Falah Zreqat	Community Member	Male
25	Muneera Ahmad Otoom Sundus	Student	Female
26	Nabeela Ahmad Otoom	Teacher	Female
27	Naser Mahmoud Al-Nawasra	Principal	Male
28	Rania	Student	Female
29	Rania Quwqaza	Principal	Female
30	Sanad Al-Fayezmale	Parent	Male
31	Subhi Otoom	Student	Female

List of SDU Core Team Members (2007-2008)

	SDU Names	Title/Job Description	Location
1.	Dr. Ahmed Ayasara	Director of Training Tel: 0795182559	Training Directorate
2.	Mrs. Ibtisam Ayoub	Training Coordinator, SDU Tel: 0777309877	Training Directorate
3.	Mr. Hussein Badarneh	Training Coordinator, SDU 0777756984	Training Directorate
4.	Mr. Ahmad Zawahreh	Head of Training / Administrators Training Coordinator, SDU 0777350986	Training Directorate
5.	Ms. Kholoud Jarad	Principal, Ajnadin Secondary School for Girls	Zarqa 1 Directorate
6.	Mrs. Intisar Al-Qhewi	Principal, Amira Taghreed School for Girls	Amman Directorate
7.	Mrs. Maha Al-Jaradat	Principal, Al Qasr Secondary School for Girls 0777935148	Qasr Al-Mazar Directorate
8.	Mrs. Huda Etoom	Principal, Lubaba bint Harith Secondary School for Girls Tel: 07777157076	Jerash Directorate
9.	Mrs. Intisar Khalil	Principal, Al-Baqaa Secondary School for Girls	Ain Al-Basha Directorate
10.	Mr. Abdel-Khaleq Abu Seif	Principal, Ain Al-Basha Secondary School for Boys	Ain Al-Basha Directorate
11.	Mr. Mohamed Al-Bdaiwi	Principal, Jaresh Thanawiya Secondary School for Boys	Jerash Directorate
12.	Mrs. Arabieh Gharaibeh	Principal, El Khansah Secondary School for Girls Tel: 0777351124	Jerash Directorate
13.	Mr. Abdel Fattah Abu Amru	Principal, Omar bin al Khattab Secondary School for Boys	Al-Qasr Al-Mazar Directorate
14.	Mr. Saleh Khalil	Principal, Walid bin Abdel Malik Secondary School for Boys (?) Tel: 0788388174	Zarqa 1 Directorate
15.	Mr. Attalah Al-Maaqbeh	Principal, Khalid bin Walid Secondary School for Boys Tel: 0799854739	Qasr Al-Mazar Directorate
16.	Mrs. Amal Al-Oyon	Principal (not actively participating in the current program)	Northern Badiah Directorate
17.	Mr. Belal Al-Dabbas	Principal, Jamil Shaker School Tel: 0795519452	Amman 1 Directorate
18.	Mrs. Thoraya Othman	Principal, Kerama Primary School for Girls	Zarqa 1 Directorate
19.	Mr. Mohamed Maghariz	Principal, Firas Al-Ajlouni School (through March, 2008)	Amman 2 Directorate
20.	Mr. Mohamed Maghariz	Principal, Wadi Al-Seer Secondary for Boys (March-June 2008)	NA

Source: USAID Project Office, Amman, Jordan

VII. Experiment Outcome Analysis and Discussions

At the outset, it is important for the reader to remember that comprehensive education reforms for knowledge economy in a developing country includes six aspects: (1) curriculum development; (2) improving instruction; (3) improving school climate; (4) strengthening parent-community relations; (5) qualified staffing; and (6) better student outcomes, as the major components. Thus, putting in this holistic perspective, the involvement of the SJE and SDU pilot experiments are indeed very limited in scope. Specifically, SJE experiment is helping schools to strengthen community participation and school improvement planning through a process of collective self-assessment, and SDU experiment is helping schools to strengthen school council operation and capacity building through training of principals and teacher collaboration.

The ultimate outcome desired from both pilot experiments (SJE and SDU) is obviously better performance by students so as to help Jordan become a knowledge economy. However, success in this regard can only be assessed after results of student performance in national examinations are known, which will be a few years from now. Therefore, here we assess the outcome of the two experiments in terms of its secondary outputs, which can be considered as pre-requisites for achieving the ultimate desired result.

SDU Pilot Experiment Outcome

The pilot experiment of SDU (which has been implemented for about three years) involved: school identification; job specification of Principal; training Principals for technical and administrative tasks; Community involvement in School Councils; and Teacher collaboration within a cluster. Only 15 schools were involved in the first phase. One cluster of 10 schools (5 boys' + 5 girls' schools) with Al-Amira Taghdir School as the focal point (a Discovery School) is operational. Next stage, currently underway, includes expansion of the coverage to 2 schools from each of the remaining 32 districts.

During the first phase of the SDU initiative, foreign training of 15 Principals (two weeks in UK, supported by British Council) was provided. Now those Principals provide training (through Mentoring/Coaching) to other school Principals. School Committees and Course Coordinators are now sharing administrative work of the Principal. New work classification — Principal (80% Tech + 20% Admin); Assistant (20% Tech + 80% Admin); and Course Coordinator share technical work for Principal — I s in effect.

The development program for principals included an overview of the contributions of renowned authors: (1) David Hopkins (Intelligent Accounting); (2) Kaplan and Norris (Strategic Performance Management); (3) Elmore and Argyris (School Development and Learning Organization); (4) Gordon and Dufour (Professional Development and Professional Learning Communities); and (5) Noble Laureate Amartya Sen (Development as Freedom).

Fifteen Principals from public schools in Jordan were sent to the United Kingdom for two weeks exposure-cum-training on the British system of school management. The consultant was

informed by the members of SDU Core Group (see next page for a list of the people involved, including principals who were sent to UK for development) that the Principals had been exposed to the following techniques for improved management of their school affairs:

- Plan-Do-Study-Act Portfolio method of organizational change through learning.
- Assessment-Planning-Implementation-Evaluation method of improvement.
- Two perspectives of teacher portfolios — Positivist and Constructivist.
- Resolving tensions between formative assessment and summative evaluation.
- Difference between criteria-referenced and professional-growth portfolios.
- Various perspectives of performance auditing and performance management.
- Balance Score Card for complex multidimensional outcome assessment.

The SDU uses the term "Teacher Coordinator" to denote a subject or curriculum area leader of a team of teachers. ESP uses the term "champion teacher" to denote a locally-identified leader of a learning team, who is willing and able to coordinate school-based professional development. It is not necessarily an administrative position, but reduced teaching hours comes with the responsibility.

SDU Experiment helped establishment of school development councils – generally meeting once per semester — including following membership: Principal + Teachers + Students + Directorate Representatives + Community Members. The Council is supposed to be responsible for school development planning, starting from a vision and mission determination for the school. School Council's involvement procedures for community and directorate members has been designed and a booklet produced by the Directorate for Training, Qualifications and Supervision. Since it was not possible to see the activities of any School Council in operation, comments received during focus group meetings will be presented in the nest part of this report to give a qualitative assessment of outcome achieved.

Reported Progress to Date in SDU Pilot Experiment Schools

The 2006-2007 Dunlop-Robertson review of the SDU Experiment provides additional insight into the outcome achieved so far. The following sections highlight there findings.

Nine of ten SDU core team schools had development programs in place. In most schools, the leadership teams had completed their self-assessment activities and had begun the process of gathering more data and evidence in areas of school development. All of the implementing schools showed varying signs of distributed leadership, the development of strategic thinking within their institutions, and the application of assessment information (for assessment of learning, if not "assessment for learning," or "assessment as learning"), among other visible program implementation results.

Through school tours and in extensive meetings with the school principals and their SDU teams, the U.K. mentors probed the extent to which the teams had developed their SDU programs, and the extent to which the teams had accomplished the strategic self-assessment of

their schools, collected data on student performance, and began prioritizing the areas of school development that required more immediate action. During these visits, the mentors reviewed teacher portfolios, viewed samples of school development plans, asked questions about the types of data schools were collecting for development purposes, the involvement of community in schools, the development of strategic vision, the use of technology in teaching and learning, and the overall quality of the student environment.

There are two qualities frameworks for the SDU experiments, both of which had some impact on the design of SDU programs. The Community Leadership Professional and the School Director qualities frameworks were used to define a probable future role for the school principal/vice-principal, and SDU leaders working beyond the school level (i.e. cluster coordinators, revamped supervisors, cluster teacher coordinators working with school-based learning teams). Mentoring and coaching is "job-embedded professional development" – we needed to map out what jobs we were preparing them for in the future, the general processes and tasks that they would be responsible for, so that we could begin to redesign the program and reduce its sequence from 5 phases to 4 phases, with a substantial reduction in total hours of formal training (see Robertson recommendations). There are general benchmarks developed at the end of last year regarding the domains and aspects of the framework. My belief is that benchmarking is necessary, but that schools need to work through the logical process of how benchmarks relate to results in student learning. A below-average mark in one area may not have much effect on results, as much as further attention to an above-average area of development that is yielding very high returns. The school must come to understand very well the relationship between benchmarks, lead indicators for inputs, processes and outcomes, and lag indicators of educational performance.

Clustering was a source of experience change and mutual training for the staff in both schools. When asked the question about the effect of SDU intervention or initiative on their improvement of work, they agreed that it is more than 80%, which indicated a good satisfaction among the school staff in both schools.

The 2006-2007 Dunlop-Robertson review of the SDU Experiment was favorable observing that the schools have appreciated the program and have begun to work collaboratively with each other as a group to effectuate change in their institutions. They made the following recommendations for moving forward (which are considered to be sound and agreed by the consultant):

- *Follow-Through / Program Development*. The SDU experiment requires follow-up to the training, using both pressure and support for quality assurance, including the use of evaluation and participant portfolios.

- *Working on Relationships at Multiple Levels*. In the SDU pilot schools, achieved change in roles including shared and distributed decision-making among the director and teachers, should be strengthened by providing training workshops in relational leadership.

- *Capacity-Building and Decentralization of Continuing Professional Development.* There needs to be a strong core team implementing “Training Directorate” programs, with coordinating professional development work situated at the directorate levels.

SJE Pilot Experiment Outcome

Not withstanding the observation made at the beginning of this part about the ultimate desired outcome of the SJE Experiment being better student performance, which are likely to be known after a number of years, in this section at attempt is made to qualitatively assess the secondary outputs – Awareness creation regarding ERfKE goals; Appreciation of needed reform for self-motivation; Increased awareness for change management; More interaction and involvement with change managers; Clear direction for reform in the future; School based professional development; Support for teachers' activities; Team building for administrative work; Improved knowledge, skills and professional competence of self-assessment for school as development unit; and Series of indicators presented to the participants as an extensive "check list" for "auditing" type self-assessment of performance.

Changes Attributable to SJE Pilot Experiment

The following are excerpts from extensive notes taken by the international consultant during two focus-group meetings (at Al Badia Al Wosta and Jarash):

Culture of Change from Within: Culture of Self-Assessment

- Changes are initiated at the school and the directorate levels
- Self-assessment is part of the new lexicon in the schools and the directorates
- Decentralization through empowerment via participative self-assessment
- It is real self-assessment because the assessment is focused on improvement
- More objectivity in assessment work due to use of indicators and scoring
- Assessments are systematic, objective, and forward looking.
- Performance improvement is the focus
- Improved self-confidence of all concerned
- Everybody is willing to change voluntarily
- Planning for improvement are based on achievable results
- Work documentation is becoming a routine activity for improvement

Another New Culture: Team Work Spirit

- Democratic way of decision making
- Student participation in all councils and committees
- Systematized participation in committees
- Organizing and conducting meetings n a productive way
- Exchange of views and ideas in committee meetings
- Spirit of dialogue and tolerance of diversity
- Cooperation among colleagues have become trustworthy
- There is enthusiasm in place of frustration
- Honest information sharing among peers and community members
- Enhanced partnership with community members

Communications and communicating taken center stage

- Rules are made known to students for good behavior
- Teacher is a change agent for student's behavior

Changes Attributable to both SDU and SJE Pilot Experiments

In the following section an attempt is made to present a qualitative assessment of the outcomes expected from the two pilot experiments, as stipulated in the TOR for the consultant. The consultant and his local counterpart researcher used a structured interview process for this purpose during the well attended focus group meetings in the Jarash and Al Badia Al Wosta school districts. Questions were specifically asked to determine what was happening before and what the current status was; the difference being the "changes attributable to the experiments." However, it must be noted that because the two pilot experiments are different and have different components, all of the following aspects are not fully applicable for both of the experiments. But, they were considered for assessment because of one additional requirement in the TOR requiring the consultant to assess contributions of these experiments in supporting the overall mission of ERfKE-I for decentralized education management at the district and school levels.

Awareness regarding Needs and Weaknesses for Improvement:

The specific form used for this aspect is given below. There appears to be real change in all five sub indicators in the four SDU Pilot Experiment schools visited by the international consultant and NCHRD counterpart researchers. It is clear that: needs assessment is recognized; schools assessed their own current situations; administrators and teachers identified their gaps for improvement; decide on priorities; and established a culture of self-assessment based for continuous improvement drives.

Qualitative Assessment of Factors in TOR regarding the Status of a School Before and After 'SJE' or 'SDU' Pilot Initiative

Factors in the TOR for the Study			Before Pilot Initiative		After Pilot Initiative		Specific Outcomes Achieved		Success of the Initiative	
			Y	N	Y	N	1	2	1	2
1. Awareness Related										
1.1	Needs	Needs assessment recognized								
1.2	Status	Able to assess own current status								
1.3	Gap	Weaknesses identified to improve								
1.4	Priorities	Selecting areas for improvement								
1.5	Culture	Commitment to self-assessment								

Y=Yes N=No 1 = Most Important Item 2 = Second Most Important Item

School Council/Committee Operations:

The specific form used for this aspect is given below. There are structured and panned meetings for many types of councils/committees in the schools. Moreover, there are committees for nearly all school subjects. Teachers were enthusiastic in talking about their experiences in terms of collective decision making, information sharing and cooperation. The following two tables provide the structure of data collection scheme used for assessing the status of the initiative to get parents and community representatives involved in the management of schools.

Qualitative Assessment of Factors in TOR regarding the Status of a School Before and After 'SJE' or 'SDU' Pilot Initiative

Factors in the TOR for the Study			Before Pilot Initiative		After Pilot Initiative		Specific Outcomes Achieved		Success of the Initiative	
			Y	N	Y	N	1	2	1	2
2. Council/Committee Related										
2.1	Ad Hoc	Only occasional meetings								
2.2	Regular	Frequent planned meetings								
2.3	Productive	Benefiting from meetings								
2.4	Team Work	Collective decision making								
2.5	Attitude	Cooperation and sharing								

Y=Yes N=No 1 = Most Important Item 2 = Second Most Important Item

The list of myriad school committees established in the sample pilot schools are: (1) Arts Committee; (2) Behavior Committee; (3) Community Service Committee; (4) Development Council; (5) Environment Committee; (6) Garden Committee; (7) Health Committee; (8) ICT Committee; (9) Library Committee; (10) Maintenance Committee; (11) Social Committee; (12) Sports Committee; (13) Students Council; (14) Scientific Committee; and (15) Teachers Council. Most of the committees met once a semester. The school development council meets more frequently, some schools claim that they met monthly.

Learning Environment:

The specific form used for this aspect is given below. It was evident that there is a systematic planning focused on students' need as well as measures for remedial teaching and learning inside and outside school hours in the Pilot Experiment schools. School level discussions provided evidence of motivation to work by the staff. There is evidence that teacher collaboration is becoming strong and student's care has become the main focus.

Qualitative Assessment of Factors in TOR regarding the Status of a School Before and After 'SJE' or 'SDU' Pilot Initiative

Factors in the TOR for the Study			Before Pilot Initiative		After Pilot Initiative		Specific Outcomes Achieved		Success of the Initiative	
			Y	N	Y	N	1	2	1	2
3. Learning Environment Related										
3.1	Study plan	Focused on student need								
3.2	Class enthusiasms	Making class interesting								
3.3	Special assistance	Remedial measures taken								

Y=Yes N=No 1 = Most Important Item 2 = Second Most Important Item

Quality of Instruction:

The specific form used for this aspect is given below. It was evident that there is a systematic planning focused on students' need as well as measures for remedial teaching and learning inside and outside school hours in the Pilot Experiment schools. School level discussions provided evidence of motivation to work by the staff. There is evidence that teacher collaboration is becoming strong and student's care has become the main focus.

Qualitative Assessment of Factors in TOR regarding the Status of a School Before and After 'SJE' or 'SDU' Pilot Initiative

Factors in the TOR for the Study			Before Pilot Initiative		After Pilot Initiative		Specific Outcomes Achieved		Success of the Initiative	
			Y	N	Y	N	1	2	1	2
4. Quality of Instruction Related										
4.1	Subject expertise	Knowledgeable teacher								
4.2	Mentor/Coach	Teacher collaboration								
4.3	Student care	Helping the weak attitude								

Y=Yes N=No 1 = Most Important Item 2 = Second Most Important Item

Communication:

The specific form used for this aspect is given below. From the discussion, it became clear that vertical (between school and directorate) and horizontal (among school cluster members) communication is employed to facilitate the routine work of the teachers and staff at all pilot experiment schools. There appears to have now good communications with the local community for school activities support and also involvement in students' learning in schools.

Qualitative Assessment of Factors in TOR regarding the Status of a School Before and After 'SJE' or 'SDU' Pilot Initiative

Factors in the TOR for the Study			Before Pilot Initiative		After Pilot Initiative		Specific Outcomes Achieved		Success of the Initiative	
			Y	N	Y	N	1	2	1	2
5. Communication Related										
5.1	Vertical type	Policy guidance received								
5.2	Horizontal type	Professional help received								
5.3	Decentralization	Authority delegation								

Y=Yes N=No 1 = Most Important Item 2 = Second Most Important Item

School Management:

The specific form used for this aspect is given below (page 59). Rather than a reactive approach, a proactive measure is taken into consideration for possible problems related to school management. Information and Communication Technology (ICT) is widely used in most schools. Moreover, in many schools school principals, teachers and students use computers in their work. They also have plans for the future. According to education ministry directives, District and School Information Systems are going to be linked soon.

Directorate Management:

The specific form used for this aspect is given below (page 59). Directorates have redefined the role of 'supervisors'. Rather than a reactive approach, a proactive measure is taken into consideration for possible problems related to school district management. Information and Communication Technology (ICT) is widely used in the district directorates. According to education ministry directives, District and School Information Systems are going to be linked soon. The directorates are also involved in developing the integrated school information system.

Qualitative Assessment of Factors in TOR regarding the Status of a School Before and After 'SJE' or 'SDU' Pilot Initiative

Factors in the TOR for the Study			Before Pilot Initiative		After Pilot Initiative		Specific Outcomes Achieved		Success of the Initiative	
			Y	N	Y	N	1	2	1	2
6. School Management Related										
6.1	Facilitative type	Problem solution designer								
6.2	More proactive	Own future planning								
6.3	ICT supported	Technology utilization								

Y=Yes N=No 1 = Most Important Item 2 = Second Most Important Item

Qualitative Assessment of Factors in TOR regarding the Status of a School Before and After 'SJE' or 'SDU' Pilot Initiative

Factors in the TOR for the Study			Before Pilot Initiative		After Pilot Initiative		Specific Outcomes Achieved		Success of the Initiative	
			Y	N	Y	N	1	2	1	2
7. Directorate Management Related										
7.1	Functioning	Clarity of procedure								
7.2	Decentralization	Participative decisions								
7.3	Supervisor Role	Facilitating assessment								
7.4	Community	Productive involvement								
7.5	Innovation	Culture of change								

Y=Yes N=No 1 = Most Important Item 2 = Second Most Important Item

Observations and Significant Statements by Stakeholders

In support of the assessments described above, the consultant feels that the following statements made by various stakeholders are very significant and useful. One is cautioned about the possibility of some over enthusiasms for SJE Pilot Experiment school participants because of the extra efforts (in kind and/or cash) that SJE management have devoted to some key personnel of schools and directorates. However, the consultant is grateful to SJE Enterprise management for mobilizing their associates to help organize the two focus group meetings in a very short notice. This section also includes some of the profound statements made by the officials during five school visits, two directorate level visits, and by the stakeholders (principals, teachers, students, parents and community representatives) from various schools during the school and district visits organized by the international consultant and the counterpart researcher.

Significant Comments regarding Directorate and School Relations:

- Pilot Experiments enabled to build clear vision for development at directorate and school levels.
- Directorates are now dealing with school development program in a comprehensive manner.
- Change in the culture from “top-down” approach to “school as the development unit” approach.
- Community involvements were encouraged before, but now have become more productive.
- Self-assessment approach is now accepted and nobody feels shy about honest evaluations.
- The concepts of transparency and accountability for decision-making became clear to them.
- Self-assessments based on “indicators” are now used for all kind of development activities.
- Pilot initiative driven revised role and function of the “supervisor” is appreciated by all.

Significant Comments made by Parents and Community Representatives

- Parents used to come to the school when there was a problem with their children, but now they come to school to attend regular meetings; they participate in school development work.
- Now there are more interactions between schools and communities for the benefit of students.
- More cooperative atmosphere in the schools can be observed by the community members.
- Everyone in school management has learned the self-assessment approach for improvement.

- The community members see the need for external funding for continuation of pilot schemes.

Significant Comments made by Teachers

- School meetings are not anymore for receiving instructions from Principal or higher-up.
- Nowadays, Principal and teachers' together determine the agenda for various meetings.
- Meetings are definitely well planned and have valuable participation from all stakeholders.
- Now students are given opportunity to tell the teachers what they want from the school.
- When necessary, teachers visit students at their homes and they are welcomed by the parents.

Significant Comments made by Students

- They are benefiting from improved ICT laboratories and helping attitude of school staff.
- They are not afraid of teachers any more; they now consider teachers as their friends!
- Students, who have computers at home, are providing computer lessons to teachers.
- They are learning a number of interesting things from the posters hung in school premises.
- They understand the benefits and agree with remedial activities for weak students.
- They are very happy to be full and active members of the school development councils.

Significant Comments made by Principals

- Now he/she does not conduct school meetings but lets teachers and others lead meetings**.**
- Principals are now open-minded to participate in discussions with teachers, students and community representatives on all matters related to school performance.
- Schools are now receiving resources (like school supplies and office equipments) from local community members (parents of students).

Clarification regarding the two widely used terms "domains" and "indicators"

These are the two over used terms. SDU calls it domain and SJE calls it indicator, where both are referring to various "aspects" used in proposed factor-lists for consideration. Both fail to meet the requirement of being: specific, measurable, attainable, rewarding, and time bound.

VIII. Formative Evaluations, Responses, and Costs

This part of the formative evaluation report presents in a summarized form specific responses that were mandated in the terms of reference given as part of the contract to the international consultant. Since these topics were discussed at length in the previous parts of this report, this part is only to highlight the most pertinent concerns.

Responses to Evaluation Issues in TOR

The purpose of this section is not to repeat what has been discussed in details in the previous parts of this report. But, what is attempted here is to give a consolidated and direct response to the specific issues raised for consideration in the Terms of Reference.

Directorates are Functioning Better:

Earlier, School District Directorate staffs were weak about strategic planning; not aware of self-assessment approach and not familiar with self-assessment tools; very weak in terms of community relationships; decision-making capacity was week; and had very little two-way communication between Directorate and Schools. But now, have increased awareness about needed education reform; learned self-assessment methodology for own weakness determination; are choosing priority weaknesses for improvement; having wider participation from local communities (parents and others); adding good values and work ethics — more loyalty and faithfulness for work; a culture of gender equality established —there is a council for gender matters; and training activities are located at the schools.

Supervisors' New Role is Effective:

No more teachers' performance evaluation, but teachers' performance assessed by teachers themselves, and monitored by Principal and supervisor using objective rubric; teacher performance improvement plans are agreements with participation of Principal, Teacher and Supervisor; focusing on how, what and when to assess performance; and improvement measures undertaken through agreement between teachers and principals with special provisions for creativity in teachers' performance in class rooms.

Culture of Change established at Schools:

As a result of the two pilot initiatives, all school management stakeholders now have developed a general culture for reform — i.e. social and human movement for ERfKE through formalization of a systematic framework; use self-assessment to find weaknesses; choosing priority problems for improvement; and building vision at the district and school levels. Added value of the initiatives — loyalty and faithfulness for school work.

School Councils and Committees are Productive:

School based committees (involving teachers and students; now meeting regularly, not occasionally) are many, such as: Health Committee; Garden Committee; Maintenance Committee; Sports Committee; Environment Committee; Social Committee; Library Committee; Arts Committee; Scientific Committee; ICT Committee; Behavior Committee; etc. Principals became more open to participative management. Community involvement in school affairs through formalized — School Council or School Development Council — that meet regularly to "create and maintain a learning environment" in the school are now success stories. However, continued success with the community involvement depends on the economic condition of the area and the commitment of the community representatives to help improve the schools (providing resources) of their locality.

School Cluster enabling Mutually Beneficial Cooperation:

Clustering is a good mechanism for experience sharing and mutually beneficial mentoring/coaching for teachers and staff in close-by schools. School members (Principals and Teachers) are now positively disposed in sharing of experiences with others.

Responses to the Evaluation Questions in TOR

The purpose of this section is not to repeat what has been discussed in details in the previous sections of this report. But, what is attempted here is to give a consolidated and direct response to the specific assignments listed in the Terms of Reference.

- Given that both of the experiments involved designing, applying, and refining their approaches for participative assessment regarding improvements needed, and collaborative planning for selected gap reduction, What is the scope and impact of the two approaches within the respective schools and within the overall functioning of education management and development at the district and school levels?

  The SJE and SDU pilot experiment activities described in full in earlier parts of this report can be considered as complementary in scope to each other and they collectively cover a wide variety of issues for education reform at the district and school levels. In particular, the SDU pilot experiment promoted capacity building approach through training and cooperative learning based on the concept of using a leader school for cluster formation. The SJE experiment, in particular, promoted management of school development planning activities through an approach of participative self-assessment using a large number of indicators. Therefore, the scope and impact are good but non comparable.

- What are the characteristics of the schools in each program in terms of understanding their own needs, solving problems, filling the gaps, relationships, communications, management, attitudes, behaviors, instructional needs, commitment, and accountability? And in which ways do the schools in these two districts differ from other matched schools?

  There are no inherent differences in the characteristics of the schools taken for pilot experiments. The SJE experiment dealt with all schools in two districts; and the SDU experiment dealt with a very limited set of schools. The reform activities introduced by the two pilot experiments are described in full in earlier sections of this report.

- What are the degrees of awareness, satisfaction and perception of the different groups at the field directorate level, at the school management level, and among teachers, students and parents, and the community level?

  Degree of awareness created in the two school districts (Jarash and Al Badia Al Wosta), as could be ascertained through discussions with a number of teachers and principals from a sample of 15 schools and from the two district-level focus group meetings (involving: principals, teachers, students, parents, and community members from 15 schools) appears to be excellent. The perceptions of different stakeholder groups regarding specific issues are described in earlier sections of this report.

- What are the major contributions of these programs in supporting the overall mission of ERfKE in enabling decentralized education management at the district and school levels (e.g. in terms of stimulating teachers and administrators to properly manage and implement ERfKE interventions)?

  Both of the pilot experiment (SJE and SDU) documents and reports claim that they have carefully integrated the specific ERfKE-I goal of decentralization by establishing councils/committees for collective problem solving — assessing, prioritizing, solution designing, and development decision-making — leading to empowerment of the stakeholders at the school management level.

- Are there specific pros and cons that can be identified from the experiences of both programs and how do these relate to the design of the next phase of education reform?

  Although self-assessment approach is rightly used for "empowerment" by both experiments, actual self-assessment activities in the two experiments are not identical, and are used for different purposes. In the SDU Experiment, self-assessment is used for strategic assessment and assessment of student learning – first and foremost – as well as the causal factors for patterns of low (and high) performance. It is constructed through guided inquiry, and is organized procedurally to assist schools to ask questions in teams, and to find collective

answers and judgments. It is evidence-based, not data-driven. It is scorecard-based, not report-card based. On the other hand, the SJE experiment presents indicators for schools and districts to determine their needs, find their weaknesses, select priority areas for improvement, and monitor progress. However, for effective indicators, what is measured should be what matters to the school, and what matters most is student learning and achievement. As far as the SJE experiment is concerned, the apparent emphasis on "indicators" is misleading — "more factors is not necessarily better" and "consideration is not really assessment" — because for effective application the indicators should be measurable against well-established international standards.

- What are the external and internal factors or dimensions that are associated with each program's activities and levels of achievement that need to be taken in considerations when planning for integration of these programs in future education reform design planning?

  Clustering of SDU schools is planned, but not implemented. For leader school designation, SDU clusters have to have one of the "Discovery" schools in the nearby geographic area. Expected mutual cooperation among schools, schools and directorates, and community support for school resources are certainly dependent on the economic wellbeing of the community of the school district.

- What is the respective contribution of the two approaches in establishing an overall state of readiness for ongoing reform among all schools within a particular district, among all units within the respective district organization, and between the district and its schools, and between the district and the Central Ministry organizations?

  Both SJE and SDU management higher-ups believe that they are indeed ready to roll out their activities for all schools in the Kingdom of Jordan. But, the key question is whether that is the most efficient and effective way to utilize limited resources of loan taken from the World Bank. This point is scrutinized in the next section and the financial burden is taken into consideration in formulating the recommendations presented as the last part of this report.

Response to Cost-Benefit of Rolling Out

While it was known that no additional funds from an allocated $250,000 Ministry of Education budget line were spent on the SDU Pilot Experiment in 2007-08 fiscal year, almost no specific information related to financial aspects of the SJE Pilot Experiment was provided in response to questions raised by the consultant for his work to estimate likely cost of rolling out of the two demonstratively successful reform activities to all schools in Jordan. The following cost-estimates are based on hear say during the school and directorate visits undertaken by the consultant and his local counterpart researcher.

SJE Pilot Experiment Expenditure Estimates:

For each Directorate Level activities, SJE provided 118,000 JD for 1 ½ Years
For each School Level activities, SJE provided 1,500 JD (500 JD per semester)
It was learned that SJE also provided in kind (automobiles) support to the directorate.
It is felt that SJE was providing contractual work to education officials for support.

SDU Pilot Experiment Expenditure Estimates:

Total budget for the SDU pilot experiment amounted to 200,000 JD for 15 schools.

Now, if both of the pilot school experiments were to be repeated to cover all public schools (3,267 in number; see statistical data regarding schools on page 67) in all school districts (36 in number), then the total cost will be a staggering 12 million JD, based on a very rough calculation given below (for cost estimates in other country see references listed below):

Directorate Reform cost by SJE for remaining 34 school districts	=	4,012,000 JD
Foreign Training of Principals and Cluster related cost of SDU scheme	=	3,000,000 JD
School Reform cost for Rolling out SJE Pilot scheme to all schools	=	4,900,500 JD

The findings of this study (presented in this report on the basis of discussions and focus group meetings) clearly show that benefits of the two pilot experiments are recognized by all stakeholders to be positive in value and hence, actual impacts of rolling out of the two schemes could be tremendous. But, to roll-out the two experimental models will require about 15 million US$ from external sources. Before making a judgment about the worthiness of rolling out both of the pilot experiment activities, it may be useful to review the following major components of the two experiments further: (1) Committee Operation and Self-Assessment for Improvement by the SJE model; and (2) Principals' Training and Cluster Cooperation by SDU model.

The indicators and domains for self-assessment were discussed earlier (see pages 35-38, 40-41, and 61) and not repeated here again to reduce length of the report. The needs assessment process enables one to look more deeply at those areas in a diagnostic sense and to establish some priorities for program planning or revision. Although needs assessment questions generally ask one to look at outcomes of one kind or another for specific groups, formative evaluation allows one to look at processes as well.

UNESCO Report (2005). ***School Based Management.*** International Academy of Education (IAE) and the International Institute for Educational Planning (IIEP), UNESCO, Paris.

UNESCO Institute for Statistics (2005). ***Global Education Digest 2005***. UIS, Montreal, Canada.

Melissa Binder (2005). ***The Cost of Providing Universal Secondary Education in Developing Countries.*** American Academy of Arts and Sciences, Cambridge, MA.

Overall Statistical Data Regarding Schools in Jordan and in School Districts

Statistics of Interest	Jordan Country Statistics	Field Directorate Level Statistics					
		Al Badia Al Wosta			Jarash		
		Total	Boys	Girls	Total	Boys	Girls
Total No. of Schools	5,314	127	59	68	193	92	101
Total No. of Students	1,598,210	19,326	9,585	9,741	40,880	20,271	19,817
Total No. of Teachers	89,510	1,627	706	921	2,719	1,223	1,496
Student/Teacher Ratio	17.70	11.87	13.57	10.57	15.03	16.57	13.24
Students Per Class	27.50	18.09			24.10		

School District	1st Irbid	2nd Irbid	3rd Irbid	South Ghor	North Ghor	South Badia	NE Badia	NW Badia	Mid Badia	Petra	Rusifa
Public Schools	160	84	47	30	63	67	143	127	127	40	79
Private Schools	193	63	13	8	22	0	0	0	0	5	82

School District	Ramtha	1st Zerka	2nd Zerka	Shobek	South Shoneh	Tafeeleh	Aqaba	Al Qasr	Korah
Public Schools	61	152	97	34	34	115	59	57	94
Private Schools	46	150	22	2	5	11	30	2	37

School District	South Al Mazar	Bani Kinaneh	Jerash	Deir Alla	Theban	Ajlun	1st Amman	2nd Amman	Alsalt
Public Schools	70	100	157	47	58	115	143	165	102
Private Schools	25	7	36	5	4	11	N/A	N/A	73

School District	3rd Amman	4th Amman	Ein Albasha	Karak	Mafrek	Madaba	Maan	TOTAL
Public Schools	110	134	52	100	153	60	31	3267
Private Schools	N/A	N/A	46	17	28	39	3	2047

N/A = not available; Total No of Private Schools in Amman = 1027; Source: NCHRD Database

The concept of parents and communities participation in school management has been in existence for quite some time. School principals and teachers are aware of its benefits, and yet somehow their utilization remains relegated to the back burner. Based on some probing questions regarding the operation of newly activated committees/councils using the form shown below, it became apparent that all stakeholders recognize the value of the committees and their regular meetings, but the most critical impediment is lack of time and additional resources needed by the teachers in the schools to really build on the benefits of parents' and communities' participation in the management of schools. Most of the teachers felt that the extra work is adding to their already "over load" situation. Therefore, it is felt that even though the maturity of community participation is now at Level-2, if the supporting resources like those provided by the SJE Pilot Experiment are withdrawn, the committees may exist only in theory and never meet.

Status of Empowerment focused Change Management [Maturity of Participation]

Level-1: Establishment of Committees for Once Only Change Activities	**Level-2:** Functioning of Committees for Regular Improvement Activities	**Level-3:** Adequately Trained and Competency Enhanced Committee Activities	**Level-4:** Committee Activities are Judged to be of International Standard

Besides utilizing committees/councils, it should however be noted that SJE model has a particular analytical framework, and it should be ensured then, for all future program elements, instruments, initiatives, etc. to learn from and take advantage of those frameworks and the underlying principles and assumptions that define their experiment. Similarly, SDU has a particular framework for school development, and has developed a certain methodology and set of tools that are based on a set of principles, qualities frameworks for professional development, a school development framework with perspectives/domains/aspects, and a set of tools that promote continuous assessment and organizational learning (strategic performance assessment, planning templates, benchmarks, professional development plans, learning team plans, student assessment/diagnostic tools, a teacher portfolio, etc.). All of these deserve incorporation in future projects. Finally, one should not forget that progress tracking should be designed to answer two questions: (1) how is the school performing? (2) How can the school be improved? Due to lack of data, these aspects were missing in the studies conducted so far.

Now, to give specific answer to the question: Is money worth spending on rolling out the two experimental models to the entire school system? Any sensible person will say NO. In the recommendations section of this report a proposal is made to integrate good elements of two models and support an integrated project with no additional funding from World Bank loan.

IX. Recommendations

It can be conclude from the discussion and presentation contained in this report that much competence has been acquired from the experience of both SJE and SDU pilot experiments. The two experiments have made significant contribution in re-establishing the benefits of:

- **Revising Job Specification for Supervisors;**
- **Revising Job Specification for Principals;**
- **Utilizing Self-Assessment Technique for Improvement Management;**
- **Training Principals for Technical and Administrative Tasks (including self-assessment process and methodologies);**
- **Ensuring Teacher Collaboration within a Cluster (including training on mentoring process);**
- **Mandating Community and Parents Involvement in School and District Councils; and**
- **Information Sharing between Directorate and School Administration.**

But, is there anything new? The answer is a resounding NO. Moreover, all of the above development tasks should be the routine job of the Ministry of Education.

It is, therefore, recommended that the Development Coordination Unit (DCU) of the Ministry of Education be strengthened to take primary responsibilities for undertaking the following activities as part of the planned future projects of ERfKE-II, which are intended to ensure continuation of the development tasks listed above:

- **Identify common improvement priorities**
- **Conduct training programs to respond to improvement priorities**
- **Design and deliver standardized awareness creation program for principals, teachers, students, parents and community representatives in every district**
- **Design and deliver standardized self-assessment methodologies**
- **Design and deliver standardized procedures for determining improvement priorities**

The DCU should have a full-time world class educationalist to guide all of the above activities. Moreover, to ensure effectiveness of implemented reforms in all of the school education system of Jordan, it is recommended that some attention be given to the following aspects in designing the next phase activities of the DCU group:

- **Align formative development with education system goals and national development strategies;**

- **The methods for teaching, learning, and management should be integrated into a coherent package;**
- **Develop teacher growth perspectives and linkages to school development;**
- **Evidence rubrics for needs assessment should to be made more specific and measurable for management;**
- **Criteria for prioritization should be developed and manuals prepared for application at the schools and directorate levels; and**
- **Field directorate officials and community members in the school councils should receive some exposure to collective decision making tools and techniques that incorporate pragmatic tradeoff considerations.**

One final recommendation is made here as a request to the Government of Jordan to note that "improvement in teacher working condition" as the most critical factor for education reform. For recruiting good quality teachers, keeping teachers, and helping students learn knowledge economy skills, one area that requires steady and continuous improvement is teacher working condition. It is a sensitive issue, subject to change and improvement almost everywhere. An increasing body of research evidence clearly demonstrates the effect that working conditions have on both teacher attrition, and ultimately, student achievement. Data collected and analyzed by the Center for Teaching Quality (CTQ) from more than 125,000 educators in North Carolina, Kansas, Arizona, Nevada and Ohio states in the USA, show powerful links between teachers' working conditions and both teacher attrition rates and student achievement levels in elementary, middle and high schools. Working conditions matter for students and matter for keeping teachers in all schools. And nowhere are working condition reforms more critical than in improving schools and informing school redesign efforts currently underway across the world.