National Education Strategy

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The National Education Strategy

**Ministry of Education
Directorate of Educational
Research and Development**

His Majesty King Abdullah II Bin Al Hussien

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Preface

The Ministry of Education is pleased to issue this *National Education Strategy* 2006, which has the aim of achieving two main objectives:

- Guiding the operations of the Ministry of Education for the next five to ten years as it implements annual development activities.
- Identifying the strategies, mechanisms, and methods to achieve the Vision and Mission.

These objectives are to be achieved in accordance with the general philosophy, goals, and policies of the *Education Act No. 3* of 1994, regarding the intellectual and national bases of the Jordanian educational system and policy.

This Strategy is the consequence of deliberations concerning the importance of human resources development for the future of Jordan in order to achieve integrated economic and social development and implement His Majesty King Abdullah II's directives. These Royal directives focus on the importance of a competitive national economy at world levels.

We hope that this Strategy will achieve its goals in orienting the programs and practices of teaching and learning to provide students with the skills required for success in the Knowledge Economy.

Overview

Education has always been an essential component of Arab and Islamic culture. It has a critical role in passing, from one generation to the next, understanding of and commitment to the Islamic faith, the rights and responsibilities of citizenship, and central Jordanian values such as respect for others, honesty, and awareness of national, regional, and international concerns. As Jordan strives to take its place as a modern country on the world map, education takes on even more significance. A country with few natural resources, Jordan looks increasingly to its human resources as the key element for its success in the markets of the region, and the prosperity, health, and security of its people. The country envisions a population of responsible, self-confident, and innovative learners, engaged in reflective and creative thought on important topics and issues.

Education is a key factor in encouraging investment in Jordan's economy, since it is the primary mechanism for upgrading labor market quality. To achieve its goal of becoming an IT hub for the Middle East, the country looks toward new skills and knowledge and a national commitment to life-long learning. The global business environment emphasizes such skills as teamwork, problem solving, and the use of information and communication technology (ICT) in managing information and generating and applying knowledge.

The education sector must be responsive to employing market demands in key industries and developing critical "Knowledge Economy Skills" at all levels of the education system.

In adapting to these national needs, Jordan has a sound foundation and some critical challenges. The country ranks high internationally in terms of access to education for all, providing a solid base from which to gradually shift its human resource skills toward the knowledge economy. For instance, Jordan's illiteracy rate has declined considerably over the last three decades and is now among the lowest in the region. Jordan's students have also shown significant progress in the Trends in International Mathematics and Science Study (TIMSS) ranking results over the years. In the 2003 TIMSS round, Jordan's 8th grade students ranked first among all Arab countries in science and second in mathematics.

Nevertheless, Jordan's enrolment ratio in early childhood education remains low compared to other countries, due to lack of affordable kindergartens and lack of awareness among the poor. Yet, on the other hand, enrolment ratios in basic and secondary education are among the highest in the region, with the exception of secondary vocational education, which has been decreasing, especially among women. Public expenditure on education is fairly high in Jordan, relative to the size of the economy, and is perceived to be fairly effective. The share of public expenditures on school-level education has been growing. Around 12% of the Government's budget, or 4.1% of GDP, goes to the Ministry of Education (MoE) every year, and is almost entirely spent on basic and secondary education. There has been notable progress in expanding ICT infrastructure in public schools as a result of the Jordan Education Initiative, the School Learning Broadband Project, and the deployment of computers in schools.

Creativity and Innovation

The ability of the educational system to develop and nurture creativity and innovation among learners will be a cornerstone of an educational system that contributes to the development of a knowledge economy in Jordan. To do this, the educational system must itself be capable of nurturing an environment that encourages individuals to think in creative ways, innovate to solve problems, and capture what is learned and apply this within the wider system.

INTRODUCTION

The Strategy fits within the context of the philosophy, objectives, and policies stated in the Hashemite Kingdom of Jordan's *Education Act of 1994*. In Chapter Two, Articles 3, 4, and 5 are statements of the intellectual, national, and social bases for the philosophy and policies of Jordan's educational system.

The philosophy of the Jordanian education system is grounded in the primacy of divine faith and on a strong belief in human values, rights, and freedoms. Several key influences have contributed toward this philosophy, foremost of which are the Great Arab Revolution, Arab-Islamic Civilization, and The Jordanian Constitution. In this context, the general goals of education highlight the preparation of citizens who believe in God and who are loyal to their country and to their King.

The National Education Strategy is the culmination of an intensive period of debate on the importance of human resource development to the future of Jordan and a growing consensus on the nature of a nationally integrated social and economic reform program, a key component of which is education.

The prime inspiration has been HM King Abdullah II, who has emphasized the importance of an internationally competitive and domestically vibrant economy, supported by a concentrated effort in human resource development that supports evolution toward regional leadership through a knowledge-based economy.

The overall approach to education in Jordan is to transform programs and practices for teaching and learning supported by reform of the management of the general education system in order to produce graduates with the orientation and skills necessary to be successful in a knowledge-based economy. This approach requires a thorough transformation process moving from a traditional and centralized system to one that is more distributed, collaborative, and attentive to both learning process and subject matter outcomes.

Critical Knowledge Economy Skills

Academic Skills

♦ **Communication skills**

  • Understanding and speaking the languages in which business is conducted

  • Effective writing and comprehension of charts, graphs, and other technical forms of displaying information

♦ **Thinking skills**

  • Thinking critically and logically to evaluate situations, solve problems, and make decisions

  • Understanding and solving mathematical problems and using the results

  • Using technology, instruments, tools, and information systems effectively

  • Ability to apply specialized knowledge from various fields such as skilled trades and technology

Personal Management Skills

♦ **Positive attitudes and behaviors**

  • Self-esteem, honesty, initiative

♦ **Responsibility**

  • Setting goals and priorities

  • Planning and managing time

  • Accountability for actions taken

♦ **Adaptability**

  • Identifying and suggesting new and creative ideas for doing things differently

  • Maintaining a positive attitude toward change

♦ **Teamwork**

  • Using a team approach to problem solving

  • Understanding and contributing to an employer's goals

  • Planning and making decisions with others

Vision
Provide all people with lifelong learning experiences relevant to their current and future needs.

Mission
Create and administer an educational system based on 'Excellence'.

One: THE VISION AND MISSION FOR NATIONAL EDUCATION

The national Vision and Mission for Education, developed and endorsed in late 2002, states the desired direction for general education in the country. Two major consultative documents helped shape the national vision and set directions for educational reform initiatives spanning kindergarten to lifelong continuing education. The first of these was the Jordan Vision 2020 model produced in 2000 that emphasized the need for education to respond to economic development initiatives in the productive sector. The second was the proceedings of the 2002 Vision Forum for the Future of Education that articulated both a national reform strategy and practical reform programs for the Higher Education, General Education, and Technical Vocational Training Sub-Sectors. The overall strategy proposed by the Forum was endorsed by the Economic Consultative Council (ECC) in October 2002.

The national development strategy and the Forum results were consolidated into specific development plans. The governing plan is the Social and Economic Transformation Plan articulated by the Ministry of Planning in 2003. For the Ministry of Education, there are three relevant blueprints. The first is the General Education Plan 2003-8 that translates all of the governing vision statements and planning documents into a Ministry-wide five-year plan. The second is the Education Reform for Knowledge Economy (ERfKE I) Program, currently being implemented by the Ministry with support from the World Bank and a consortium of other funder and donor agencies. The third is the Jordan Education Initiative (JEI), a public-private partnership under the leadership of the World Economic Forum that aims to provide Jordan with a model for developing e-learning resources and ICT deployment that supports educational reform.

Vision

The Hashemite Kingdom of Jordan has the quality competitive human resource systems that provide all people with lifelong learning experiences relevant to their current and future needs in order to respond to and stimulate sustained economic development through an educated population and a skilled workforce.

Mission

To create and administer an educational system based on 'Excellence', energized by its human resources, dedicated to high standards, social values, and a healthy spirit of competition, which contributes to the nation's wealth in a global 'Knowledge Economy.'

Key Principles

- The philosophy of the Jordanian education system is based upon the Jordanian constitution, the Islamic Arab civilization, the principles of the Great Arab Revolt, and Jordanian National Experience.

- Jordanian education must be responsive to both current and future needs and link to social and economic development of the country.

- A quality education system maintains high ethical values, promotes excellence, and focuses on the needs of the learner.

- A quality education system enables universal access to educational opportunity, equality in the provision of services, and to the tools of modern information and communication technology.

- A quality education system provides the best in teaching and learning and promotes high levels of student success as measured by a system of performance indicators based on standards embedded in learning outcomes.

- Life-long learning opportunities for all Jordanians will enable them to keep up with rapid change in the challenges of citizenship and the structure of the economy.

- Jordan will develop the human capacity to undertake rapid economic development through effective linkages and coordination between the education system, the higher education and training systems, and business and industry.

- Economic and educational research and collaboration with global and regional partners is necessary to improve human resource decision-making by government, educators, and industry.

- Promotion of a culture of experimentation, innovation, and responsiveness to the community at the institutional delivery level of the educational system will support effective implementation of desired changes.

- Meaningful consultation among all elements of society, particularly those directly affected by the educational system, will ensure that there is a shared understanding of the direction the educational system is embarking upon – contributing to a collective effort to implement the required changes.

- The Vision and Mission must be consistently and firmly integrated into the development of policy and decision-making and must inform all levels of educational planning.

Strategies

To promote the understanding and use of the Vision and Mission statements, the Ministry will:

- Ensure that the Vision and Mission statements are discussed, understood, and validated with a broad-base of key stakeholders to achieve a shared understanding of and commitment to them and that consensus is built for the goals and priorities of general education.

- Use the Vision and Mission to guide plans, efforts and investments in the reform and improvement of the educational system.

- Regularly update and align the Vision and Mission statements with the requirements of the economy and society and the context within which the general education system operates.

- Encourage, recognize, and reward innovation at the level of the learner, teacher, school, directorate and Ministry.

- Design and implement mechanisms to enable learners, teachers, principals, and educational managers to access, share, and utilize a wide range of information on creative and innovative learning and management approaches.

- Assess and capture best practices and lessons learned from individual innovation and apply these for system-wide benefits.

- Promote gender mainstreaming in all policies, programs, and practices.

Two: GOVERNANCE, MANAGEMENT, AND LEADERSHIP

The Ministry of Education will manage the education system by appropriately delegating authority and responsibility, facilitating cooperative partnerships with local communities and the private sector, and by being informed by current and reliable information about the state of the system. This distributed leadership approach will move the emphasis toward the monitoring of the quality of performance and away from the monitoring of task completion.

The governance, leadership, and management of the future educational system will be significantly different from that of the current system. Decision-making will be devolved to more appropriate levels to enhance performance and quality of the system. Management and administrative structures and functions will be guided by the Vision and Mission and by the analysis of data and information regarding how well the system is functioning. Proactive leadership at the most senior levels is a key component for successful management. However, leadership and innovation at all levels of the organization will be encouraged and supported.

The school is the pivotal organizational element in the educational system and an increased level of decision-making authority will be devolved to the school level with increased support for the principalship. Schools led by effective school leaders with sound plans and actions to improve learner and school performance will enable Jordan to achieve continuously higher levels of learning success. Devolution of decision-making requires transparency of process and clear Ministry expectations for responsibility and accountability to support ongoing improvement in performance of the educational system.

Key Principles

- Visible and pervasive leadership from MoE senior management is critical for the success of educational reform supported by the commitment to and ownership of educational change plans and strategies by the Ministry of Education's Directorates.

- The key role of the MoE is to manage knowledge and innovation at a strategic and policy making level.

- The key role of field directorates and schools is to manage operations at the local level.

- The primary component of the education system is the school and the key educational leader is the principal.

- Those who are most affected by decisions are the best placed to make those decisions.

- Transparency in decision-making throughout the educational system will improve accountability and the quality of decisions and actions.

- All employees of the system are potentially capable of making significant contributions to Ministry and school improvement.

- Preparation through training for change and recognition of positive and productive performance will increase the effectiveness of organizational re-structuring.

Strategies

To promote good governance, management, and leadership the Ministry of Education will:

- Continuously rethink and define the roles of those who govern, lead, and manage the educational system and assess and upgrade their knowledge, skills, and attitudes.

- Set performance standards throughout the system and recognize effective performance at all levels of the system, particularly the performance of teachers and administration.

- Develop gender sensitive techniques to identify, develop, support and empower leaders of schools, projects and teams.

- Deliver leadership training for school administrators, field directorate staff, and central Ministry staff to support the new organizational structures at all levels within a framework of gender equality.

- Delegate, devolve, and decentralize decision-making in order to ensure transparency and closeness to those affected by decisions.

- Develop and use information systems that provide accurate, timely, and appropriate information and analysis to inform decision-making.

- Construct plans and budgets annually based on objective analyses of evidence, management information, performance indicators, and cost-benefit analysis.

Three: THE LEARNER

All learners, regardless of gender, ethnicity, or economic status will have universal access to educational opportunity and in which there is equity in the provision of services and the tools of modern information and communication technology.

Learners within the present general educational system are defined primarily with respect to age and level of attainment (compulsory Grade 10). However, the new vision for education leading to a knowledge-based economy broadens this definition to include early childhood education, those who have not completed formal basic education, and the need for lifelong learning.

While the Ministry is committed to providing programs for gifted learners, learners-at-risk, learners with physical, emotional or mental difficulties, learners in small remote communities, and learners with different cultural and religious backgrounds, it recognizes the challenge in doing so with limited financial resources.

Key Principles

- Learners have different abilities; learn in different ways, and at different rates. They bring unique characteristics to the learning process. It is the task of the educational system to assist each learner to reach his/her full potential.

- Some learners are more disadvantaged than others and require special strategies and programs to attain the essential learning outcomes.

- Early childhood education generates greater likelihood of success in the early grades for the individual learner and thus social and economic benefits for society.
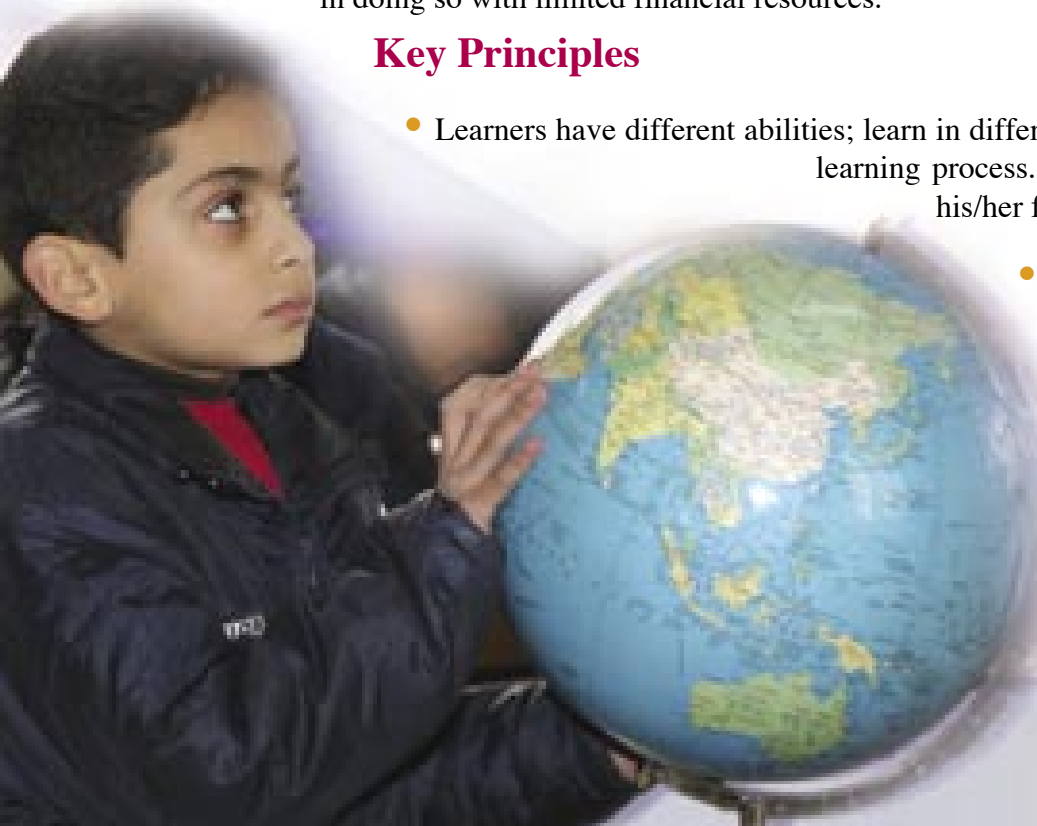
Strategies

In order to promote access and equity in the delivery of education to all learners, the Ministry will:

- Deliver low-cost, high-quality, educational delivery systems that will enable all learners to achieve the essential learning outcomes using a variety of methods and resources including ICT.

- Expand quality early childhood education starting with Kindergarten II, particularly for poor areas as a means of upgrading the children's readiness for education.

- Design and implement processes that will prioritize the distribution of financial resources to provide equity of educational opportunities for all.

- Make provision for students with special needs, including those with physical or mental difficulties as well as gifted students through diagnostic testing, specialized programs, and resources for support.

The Jordan Education Initiative

JEI is a public-private partnership launched in June 2003 with the support of the World Economic Forum, and is being marketed as a mechanism for enabling and accelerating social and economic development across the region. The JEI is designed to improve education through the effective use of ICT and to demonstrate how ICT enables new systems, and benefits schools and students. The Initiative supports the deployment of e-learning materials in subjects such as Mathematics, Science, Arabic Language, ICT, and English as a Foreign Language in 100 Discovery Schools.

Four: CURRICULUM AND ASSESSMENT

The curriculum embodies the core values and beliefs of Jordanians as well as the vision for the future of the society.

The curriculum is at the center of the educational system since it expresses what is to be learned by students, and curriculum renewal is a core element of Jordan's educational change strategy. All other educational and management processes are directly linked to and supportive of curriculum reform. The curriculum embodies the core values and beliefs of Jordanians as well as the vision for the future of the society. Therefore, changes to curriculum, assessment, and resources will be reflective of national and cultural goals that are translated into knowledge, skills, and attitudes a learner must acquire at the school level. New curriculum will also be supported by appropriate teacher practice in instruction and assessment, and supported by the best and most appropriate resources for learning. The essential impact of Jordan's attempt to improve education systems will be the impact on student achievement and the correlation between that achievement in schools and subsequent achievement in post-secondary education and the workplace.

The Ministry of Education will determine the content, activities, experiences, and assessment information that will best enable students to achieve a comprehensive set of measurable learning outcomes. It will do this in consultation and collaboration with a wide variety of stakeholders in Jordanian society including community leaders, parents, business, and higher education. The *General Framework for Curriculum and Assessment (2003)* organizes the essential learning outcomes and provides guidance in the development of the core curriculum, aids integration across curriculum areas, assists in ensuring overall comprehensiveness and congruency of the curriculum, and informs assessment approaches.

Core learning outcomes address a learner's intellectual, emotional, and physical development and are sensitive to the need to prepare each student for citizenship, parenthood, higher education, and the workplace. Timely, consistent, valid, and reliable information on the achievement of the outcomes, which is the central output of the education system, are needed for a host of reporting, management, planning, quality assurance, and policy making activities. All of these are necessary to improve the system's performance, efficiency, and productivity.

Effective curriculum planning and development, quality improvements in curriculum, teaching and learning, targeted resource allocation, teacher training, and personnel policies are all dependent on accurate and reliable

knowledge of student learning. The data that are required for all these important activities can best be obtained through a well-structured and reliable learning assessment system that is reflective of national needs and suitable for international comparison.

Key Principles

- The aim of education as expressed throughout the curriculum is to produce well-rounded individuals capable of reaching their potential intellectually, physically, and emotionally.

- The curriculum prepares students for life after school and includes life, employability, and citizenship skills, and preparation for post-secondary education.

- The curriculum is integrated horizontally across subject/skill areas and is vertically seamless.

- Learning processes (learning how to learn) are more important than subject content for future participation in a knowledge-based economy.

- The student takes increasing responsibility for his/her own learning and assessment of progress over time and through successive grades.

- The assessment of learning informs the design of instruction and provides continuous information on performance to the student.

- The curriculum supports the acquisition of Knowledge Economy skills in communication, management of information, use of numbers, critical thinking, creativity and innovation, problem solving, personal management, and teamwork.

- The acquisition of higher order skills – analysis, synthesis, evaluation, and application is part of the essential learning outcomes and serves as the basis for assessment strategies.

- The use of technology will support the acquisition of essential learning outcomes

The essential impact of Jordan's attempt to improve education systems will be the impact on student achievement and the correlation between that achievement in schools and subsequent achievement in post-secondary education and the workplace.

Strategies

In order to use the curriculum to its maximum effect, the Ministry will:

- Conduct broad-based, regular, and ongoing consultation with key stakeholders on curriculum reform efforts, proposed essential learning outcomes, and curriculum and learning assessment frameworks.

- Ensure that the learning outcomes and core curriculum are derived from the *General Framework for Curriculum and Assessment* and are aligned with the Vision and Mission statements and national goals of the educational system.

- Enable students, teachers, and other individuals and agencies access and utilize a wide range of content and learning approaches in achieving essential and desired learning outcomes.

- Ensure appropriate assessment of students' achievement of learning outcomes, including provision of feedback to the student, the teacher, and the educational system for the purposes of improving learning in accordance with international assessment criteria and processes. National assessments will test a broad array of intellectual skills, including higher order thinking and problem solving skills, and all curricula will be referenced to standards.

  - Reform curriculum to balance traditional subject matter with learning process outcomes that make effective use of ICT and that engender knowledge creation and management.

  - Ensure a range of extra-curricular activities are available to students, including sports, music, culture, citizenship, and the arts dependent on the local circumstances of the school.

  - Revise vocational programs and courses in order to fit current and projected needs of the labour market and the national vocational training system.

  - Emphasize national moral and religious education and Pan Arab culture as well as requirements for mathematics, science, and the applied disciplines that are aligned with international standards and the marketplace.

  - Emphasize on gender roles and their impact on the national sustainable development.

Five: SUPPORT FOR LEARNING IN SCHOOLS

The learning outcomes and methods of instruction determine the human and material resources needed to produce effective learning. Resources and support for learning include materials, experiences, equipment and technology, and teachers, administrators, and support staff.

The teacher is the primary facilitator and manager of individual learning within the reformed educational system.

The central challenge for the educational system is to provide a maximum level of resources and support for learning within a tight fiscal environment. Creative solutions will always be needed to ensure the most efficient provision of resources and support for learning is utilized. Information and communications technology can provide some relatively low cost means of supplying learning resources and support for both teachers and students.

The teacher is the primary facilitator and manager of individual learning within the reformed educational system. The Ministry of Education recognizes that the quality of the teaching staff and the changing role of the teacher are critical to the success of the educational reform program. Rather than a provider of knowledge, the teacher is becoming a facilitator and assessor of learning who carefully manages the progress of students towards the achievement of the desired learning outcomes. Teachers will be expected to use a wide variety of learning resources and instructional strategies supported by a learning management system for assessment and reporting of student performance.

The changing role for teachers requires new knowledge, skills, attitudes, and teacher preparation and training will occupy a higher priority within the investments of the educational system. Teachers will not only be able to perform their new roles but will be recognized for performing their new roles with excellence.

Key Principles

- The general and specific learning outcomes determine the type and quality of learning resources to be provided.

- Student learning and teacher success are enhanced when teachers and students have access to a variety of learning resources including e-learning resources.

- Learning is more relevant when teachers and supervisors are encouraged to contribute to the development of learning resources through collaborative activities.

- The progressive use of information and communications technology will improve the efficient and effective facilitation and management of learning.

- Curriculum implementation and student achievement will be supported by teacher preparation, training, coaching/mentoring and supervision, and sustainable professional development activities.

- Standards that recognize the professional nature of teaching will help to develop teachers as learning facilitators rather than transmitters of knowledge.

- Nationally accepted standards of practice will be the basis for training and professional growth programs for teachers, supervisors, and principals.

- Training programs that allow teachers to immediately use and apply their new knowledge and skills in a classroom setting improves teaching practice.

Strategies

In order to maximize the use of aspects of support for learning, the Ministry will:

- Review, analyze, and consolidate all resource and support requirements to ensure successful curriculum implementation.

- Enable students and teachers to access all approved MoE learning resources and develop and share supplementary learning materials.

- Set quality levels and standards for learning resources acquisition and deployment.

- Adopt international standards as the criteria for the application and use of ICT as a tool, and as resources for learning.

- Connect all schools to a high-speed, broadband learning network to provide increased, low cost access to electronic learning resources within a cost effective financial framework.

- Develop teacher selection processes for use by the school principal in collaboration with field directorate staff based on standard criteria that identify the most suitable candidates for particular positions.

- Promote teachers, principals, and supervisors based upon demonstrations of competence on standards of practice.

- Continually assess training programs against the results that are expected in teaching performance and based on the results, revise accordingly.

- Review and develop a new teacher preparation program based upon standards of practice in coordination with the Ministry of Higher Education and Scientific Research and universities.

- Provide opportunities for more capable teachers to share experiences and coach, guide, and mentor other teachers.

Six: THE LEARNING ENVIRONMENT

The learning environment consists of school buildings, equipment, and surrounding areas. It also includes the social-psychological elements that create a place that is friendly, supportive, safe, and that promotes active and collaborative learning. The provision of effective environments for learning is a primary investment in the future of the country and students, who learn in environments that support learning, will be more able to contribute to society in the future. The most effective learning environments address the intellectual, physical and social well-being of students both individually and in groups.

As important as the provision of adequate facilities is, there is an equal importance on ensuring that students attend school. There is a need for the Ministry to provide encouragement to all students at the basic level to attend school through school feeding programs targeted to poorer areas and through various forms of after-school and extra-curricular activities.

Key Principles

- For students to learn, school facilities must meet minimum standards of quality including safety and cleanliness.

- Class size, timing of classes, and space per student have an impact on students' learning.

- Current users of existing learning environments can provide valuable information, insights, and support for the design and maintenance of new learning environments.

- Local community involvement in decisions concerning the design and improvements in the learning environment will strengthen local commitment and contribution to the establishment of positive places for learning.

- The principal, as the on-site educational leader, has a leading role in ensuring the creation and maintenance of positive learning environments.

Strategies

To promote the best in learning environments, the Ministry will:

- Conduct ongoing research and development on effective gender sensitive learning environments, analyze the research for application to the Jordanian context, and develop and deliver training programs for employees with key responsibilities for buildings and maintaining effective learning environments.

- Expand Early Childhood Education, starting with Kindergarten II, particularly for disadvantaged populations in rural and remote areas.

- Engage students, teachers, principals, and the community in contributing to the development, implementation, and maintenance of effective, safe, caring, and healthy learning environments.

- Allocate financial resources to priority learning environment issues (i.e. unsafe, unsanitary, and unhealthy situations).

- Provide students with access to a basic school that is no more than 4km from their homes, to a secondary school that is no more than 6km away, and provide appropriate alternatives for students outside those distances.

- Implement quality assurance standards and audit procedures to ensure the regular preventive maintenance of all learning environments.

- Eliminate double shift and rental schools as well as reduce the number of small schools (less than 400 students) through a program of rationalization and consolidation over the next ten years.

- Monitor improvements and progress for each school through an evaluation cycle that assesses the quality of the learning environment and operations.

- Develop and implement a long-term plan to fund, maintain, refurbish, and replace the information/communications equipment currently being supplied to schools.

- Develop and implement guidelines and standards for school facilities and resources such as libraries, science and computer laboratories, and equipment, textbooks, and other learning materials.

- Develop and implement a plan with specific strategies to ensure full basic education enrolment, increase the enrolment at the secondary level, and respond to the issue of school dropouts.

Indicators of System Performance

The Ministry will:

- Generate appropriate statistical indicators of performance from the data gathered from the school system.

- Develop and refine policy based upon nationally gathered school-level data according to commonly agreed upon indicators.

- Gather, analyse, and report on results with regard to each indicator.

- Prepare medium and long-term plans for the educational system based upon detailed analysis of indicators, which include curriculum implementation, student performance, international comparisons, regional and socio-economic disparities, and educational trends.

Seven: FISCAL RESPONSIBILITY AND ACCOUNTABILITY

Improvement in the quality of education must be achieved at a cost that is affordable and sustainable. Considerable capital and recurrent investments are required to fund the growth of the education system as well as the costs for the major re-structuring of the entire system. However, the government has limited financial resources for expanding or improving education. Beyond the financial arrangements made with external sources to fund major aspects of education reform, Jordan must address the long-term financial implications of a reformed educational system, particularly a system that is seeking to invest heavily in technology to facilitate and support learning. Currently, the educational system is being stretched to do more with limited additional resources. Considerable challenges exist in the need to not only provide new facilities but also to increase their efficiency to purchase computers and new furniture.

Key Principles

- Basic compulsory education provided at no cost to families and children is fundamental because the social and economic benefit to the country of an educated workforce is critical to its survival and growth.

- Government signals the importance of education through its allocation of the share of public spending on general education.

- To achieve affordability, all resources need to be used as effectively and as efficiently as possible through a sound process of regular planning and budgeting.

- The most educationally sound method of delivering education services is to ensure that the majority of education funds will be spent in classrooms.

- Partnerships with local communities, non-governmental organizations and agencies, and the private sector can assist in reducing the financial burden of public education.

- Efficiency improvements can be made at the school level, such as rationalizing small schools and making better use of school buildings.

Strategies

To promote efficiency and effectiveness, the Ministry will:

- Prioritize current expenditures according to the policy and strategic objectives required to achieve the goals and objectives of the education reform.

- Analyze current and proposed reform projects for initial purchase, maintenance, recurring costs, replacement costs, and support costs to guide decisions on budget expenditures.

- Monitor and review expenditures to assess progress towards strategic goals and feed results back to the planning and budgeting cycle to inform future planning decisions.

- Design and implement educational delivery, support, and management systems that are of high quality, and are cost efficient, sustainable, and effective.

- Develop expenditure proposals that will result in cost reductions.

- Evaluate a variety of ICT options with consideration to both overall student learning effectiveness and affordability, and make fiscally responsible decisions based on carefully assessed data.

- Explore prospects for sharing the financial burden of the educational system with others who have a stake in the education of the country's youth.

Eight: PARTNERSHIPS AND LINKAGES

Understanding and ownership of public education is critical in any society that is seeking to transform itself into a knowledge economy through education reform. The Ministry will seek and use opportunities to engage stakeholders, partners, and civil society in the debate about education reform in general and specific major initiatives within the reform process. There are many potential values and benefits of partnerships in expanding and enhancing key areas of reform, such as development of curricula, training of teachers, production and implementation of learning resources, and connectivity of schools.

The process of education reform is complex and challenging. In particular, comprehensive change in all areas of education over a short period of time demands a high level of resource application. The increase in the quality required cannot be delivered and sustained by the Ministry of Education on its own. Beyond the investments being made by the Government of Jordan and supplemented by significant funds from other sources, there is a need to explore means for building partnerships and linkages with other ministries; the community at large; national and international organizations and agencies; and the local, regional and international business community to provide added value and impact. Effective partnerships will enhance the success of the reform effort in terms of both quality and sustainability.

Key Principles

- Partnerships between public schools and parents, families, and local communities are important to the success of any major educational reform.

- Expansion of opportunities for life-long learning is dependent upon cooperation and partnership with other ministries and national and international agencies.

- Partnerships between the Ministry and local and international businesses will provide opportunities for mutual benefit and support.

- Regional partnerships at various levels provide the arena for debate and determination of further action on major educational themes and issues, such as literacy, access, gender equality, and social inclusion.

Strategies

To promote partnerships and linkages, the Ministry will:

- Train and support school leaders to develop initiatives at the local level to increase community participation in the life of their schools.

- Evaluate the benefits of developing schools as community resource centers of knowledge and other activities.

- Institute a partnership process at the community level that engages students, parents, teachers, and school managers along with social and business leaders, and employers.

- Develop and maintain a process for national communication and consultation on reform directions and activities with stakeholders, partners, and civil society at the national level.

- Develop a framework to determine the objectives and priorities for stakeholder support and participation in public education.

- Review community outreach systems and practices to facilitate an extensive level of contacts and coordination with civil society, business, industry, and commerce.

- Work with the Ministry of Higher Education and Scientific Research to facilitate a smooth transition for students into higher education and ensure that national participation targets for higher education are met.

- Establish partnership initiatives through the Ministry of Higher Education and Scientific Research with the universities on the professional preparation of teachers.

- Work with the Ministry of Labour to promote new vocational pathways to provide graduates with the skills and competencies required by a changing labour market.

- Encourage partnerships with the private and voluntary sectors and NGOs, in delivering secondary education with an emphasis on vocational education and programs for severely disadvantaged children.

- Align and integrate public-private partnerships within the national education reform program to eliminate gaps in effort and promote comprehensive services to schools and the community.

- Explore and develop further partnerships with national organizations, countries in the region, and regional and international organizations as well as agencies to further the cause of quality education for all in Jordan and contribute to regional educational, social, and economic development.

Challenges to Educational Change in Jordan

The challenges to effective reform to education include the need to:

- Move from a centralized system, with little local empowerment to one with significant responsibility at the local level for principals and teachers;

- Create a greater match between the content currently taught at schools and the skills needed in the knowledge economy since the Jordanian curriculum focuses primarily on subject matter content, rather than the skills for a knowledge economy;

- Adopt teaching practices that favour critical thinking and problem solving rather than rote learning and passive retention of content;

- Institute teacher training at the local level that is team oriented, experiential, activity based, explorative in nature, and focused on practical application of principles rather than the current lecture-based methodology that is oriented towards large group instruction in a central place;

- Widen vocational and business gender sensitive programming to meet current labor market demands and reduce the number of narrow occupational specializations.

- Reduce the number of unsafe and overcrowded public schools that have a lack of appropriate and adequate learning resources;

- Provide equal opportunity to early childhood education (ECE) for lower income households;

- Build capacity in the system to address gender issues in curriculum, instruction, learning and assessment, to provide equality of opportunity for both girls and boys.

EXPECTED RESULTS

EARLY CHILDHOOD EDUCATION

- Expanding Kindergarten enrolment, particularly for disadvantaged populations and in poor areas, as a means for increasing the learning readiness of children for the new education approaches and ensuring increased access from areas of persistent poverty.

- Implementing new national curriculum for Kindergarten education.

- Developing ECE learning outcomes and standards based upon international best practices.

- Standardizing ECE teacher competencies leading to higher general standards of delivery.

- Providing extensive teacher training for ECE teachers, principals, and supervisors.

- Improving overall access to safe, uncrowded, and properly equipped KGs through a program of publicly funded construction, renovation, and furnishing of new facilities.

BASIC AND SECONDARY EDUCATION

Highlights

- Reforming all curricula from Grades 1-12.

- Creating an emphasis on Knowledge Economy skills for future learning and employment.

- Implementing the use of new assessment methods and reporting mechanisms to promote learning.

- Increasing the quality of teacher training consistent with international standards.

- Providing a greater amount and a wider range of resources to support learning.

- Shifting the focus from the acquisition of knowledge towards the demonstration of competence, especially in such areas as problem solving and critical thinking.

- Making wider use of ICT to support learning, teaching, and administration.

- Acknowledging that students learn individually as well as in groups and in different ways and at different rates.

- Making accommodation for student differences and learning needs within fiscal constraints.

- Encouraging differentiation for students with special needs, as well as gifted students, and students likely to drop out.

- Providing more responsibility at the school level to create closer linkages to the community.

- Developing clearer linkages to the world of work and preparation for the workplace.

- Developing new and improved school facilities and resources.

TECHNICAL/VOCATIONAL EDUCATION

Highlights

- Reforming gender sensitive programs and plans to respond to labour market requirements and changes in technology.

- Creating practical linkages between national and sector HRD plans, training, and labour market needs.

- Developing the competencies and knowledge of teachers and students in workplace safety.

- Making students aware of vocational opportunities in a wider variety of fields without limitation by the cultural sterotyping of work.

- Enabling students to select appropriate vocational streams by providing them with accurate information and removing structural barriers to student choice of programming.

- Increasing the desire of students to enroll in vocational education.

- Creating an effective partnership between the educational system and business in order to increase private sector contributions to education and training.

- Maximizing the availability and use of vocational facilities by private sector and local communities.

- Engaging business in plans and strategies to train teachers in vocational programs to industry standards.

- Developing agreements for on-site training and twinning initiatives between vocational programs and the private sector.

HIGHER EDUCATION

Highlights

- Establishing specific linkages between the school system and the universities regarding the professional qualification and training of teachers.

- Encouraging more practical oriented research into teaching and learning with direct applicability to the Jordanian education system.

- Developing structural linkages between secondary and post-secondary programs.

- Rationalizing secondary programming so that students can choose programs based on interest and aptitude rather than aptitude alone.

- Reforming entrance criteria for college, university, and vocational programs to align with levels of student achievement on the exit outcomes of secondary education.

LIFE-LONG LEARNING/NON-FORMAL EDUCATION

Highlights

- Developing literacy programming as part of the formal and non-formal education system.

- Encouraging the private sector to expand provision of literacy and cultural centers offering gender equitable training opportunities for employment, language, development, reinforcement of formal education, and agricultural, cultural as well as health education.

- Providing textbooks, learning resources, and updated curriculum for non-formal education.

- Designing and implementing programs of support for learners to increase the likelihood that they will remain in school (e.g. school feeding programs, after-school programs, extra-curricular, and school-to-work transition programs).

- Providing programs aimed at dropouts to attract them back to formal education or provide marketable skills through non-formal programs.

CONCLUSION

Achieving HM King Abdullah's ambitious vision for the future of Jordan requires that government and society work together for the benefit of the country's children. Education is the bedrock of human resource development and a driving force for Jordan's future. *The National Education Strategy* is the expression of the reformed education system gathered through extensive input from all aspects of the education system and society. The Ministry of Education will actively use the Strategy to develop policies, plans, and budgets for education in order to realize the future stated in the Vision and Mission statements. The Ministry will also work with its partners to keep the Strategy itself under constant review to ensure that it continues to improve the quality of education in producing graduates with the orientation and skills necessary to be successful in a knowledge-based economy.